

Configure and Troubleshoot TCS Live streaming and Video on Demand with VBrick DME and VBrick Rev

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Introduction

This document describes the steps to configure and troubleshoot Cisco Telepresence Content Server (TCS) Live Streaming and Video on Demand (VoD) integration with VBrick Distributed Media Engine (DME) server and VBrick Rev server. VBrick integration with TCS has been added from version s6.2.1 and up.

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Prerequisites

Requirements

- Cisco TCS s6.2.1 and above
- VBrick DME
- VBrick Rev (required for VoD integration)

Caution: Cisco TCS s7.2 and above is required for FTP over SSL (FTPS) VoD configuration

Components Used

The information on this document is based on these software and hardware versions:

1. TCS 7.2
2. VBrick DME 3.15.0 RHEL7
3. VBrick Rev 7.14 (for VoD integration)

The information in this document was created from the devices in a specific lab environment. All of the devices used in here started with cleared (default) configurations. If your network is live, make sure that you understand the potential impact of any command.

Background Information

There are two types of integration that can be configured:

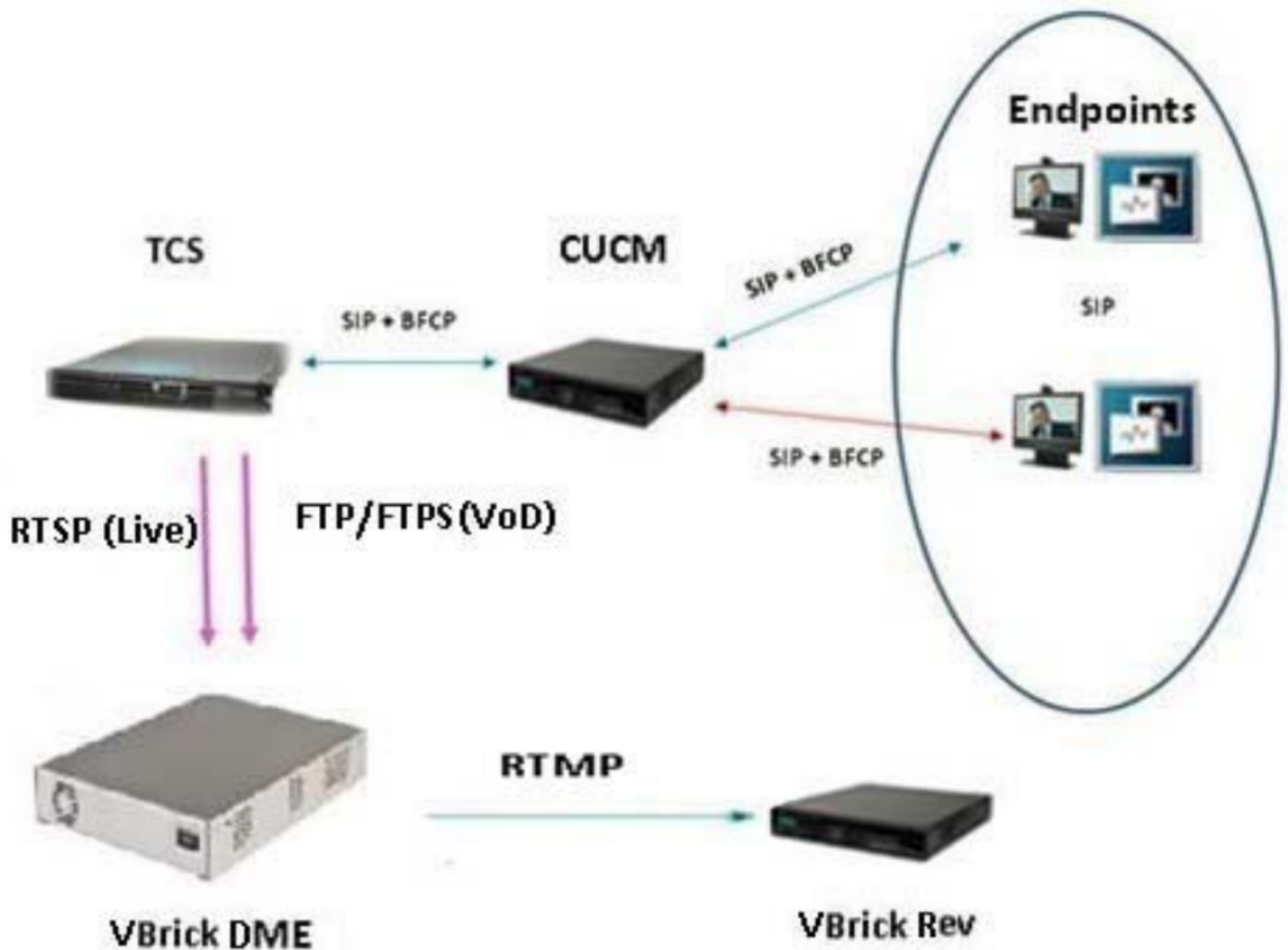
1. Live Streaming (Webcast) and
2. VoD

Live Streaming integration with VBrick DME allow users to watch any live streamed TCS conference anywhere inside the network from different devices, additionally when VBrick Rev is used along VBrick DME this extends this capability for viewing from outside the network for every VBrick Rev authorized user.

VoD integration with VBrick DME and VBrick Rev allow VBrick Rev authorized users to watch any submitted recording created by TCS anywhere inside and outside the network from different devices.

Configure

Network Diagram



Configurations

1. Live Streaming (Webcast) Integration.

1a Add VBrick Live Server Configuration.

In TCS web interface go to Management > Recording setup > Media server configurations and click on the '+ Add VBrick Live Server Configuration' link:

View Recordings

Management

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Media server configurations

<input type="checkbox"/>	Description	Server type	Server address
<input type="checkbox"/>	Local IIS Web Server Edit	Web Server	(local)
<input type="checkbox"/>	vBrick Live Edit	VBrick Live Server	10.88.246.108
<input type="checkbox"/>	vBrick VoD Edit	VBrick VoD Server	10.88.246.108

Delete selected

- + Add Windows Media streaming server configuration
- + Add QuickTime or Darwin streaming server configuration
- + Add Wowza Media Server for Flash configuration
- + Add VBrick Live Server Configuration
- + Add VBrick VoD server configuration
- + Add Cisco Video Streamer configuration
- + Add Media Experience Engine 3500 server configuration
- + Add Show and Share server configuration
- + Add Podcast Producer server configuration
- + Add iTunes U server configuration

Cisco TelePresence Content Server v7.2 Build 4349

Fill in the fields for the Media server configuration:

Name	Name to identify the media server
Server address	IP or FQDN of Vbrick DME
RTSP Port	Multi-Protocol Server RTSP port number configured in Vbrick. Default is 5544.
User name	Stream Input Authentication User Name configured in Vbrick. Default username is 'broadcast'
Password	Stream Input Authentication Password configured in Vbrick. Default password is 'broadcast'
Password confirm	Confirm the password
Static Stream Name	The name with you will identify the stream in the network. If this is not filled TCS will append a random name for the stream when created. Even when the web interface suggests this is optional, it is strongly recommended to configure it. Also if Vbrick Rev is used along with VBrick DME then configuration of this field is mandatory.

View RecordingsManagement

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfigurationHelp

Media Server Configuration: VBrick Server

SaveReturn

Media server configuration added.
 RTSP test successful to server vbrickdme.chrruiz.lab.
The server is a VBrick Server.

Server settings

NamevBrick Live 2
Server addressvbrickdme.chrruiz.lab

Live unicast streaming settings

Server Settings

RTSP Port5544
User namebroadcast
Password*****
Password confirm*****
Static Stream Name (optional)LiveTCS2

SaveReturn

Media server configuration added.
 RTSP test successful to server vbrickdme.chrruiz.lab.
The server is a VBrick Server.

Cisco TelePresence Content Server v7.2 Build 4349

If the connection is succesful to VBrick DME you will receive the following confirmation message:
" RTSP test successful to server 'Your DME IP address or hostname'. The server is a VBrick Server.":

1b Add Template to use with VBrick Live streaming:

In TCS web interface go to Management > Recording setup > Templates and click on the '+ Add template' link:

View RecordingsManagement

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfigurationHelp

Templates

<input type="checkbox"/>	Name	
<input type="checkbox"/>	vBrick Live Template	Edit
<input type="checkbox"/>	VBrick VoD Template	Edit
<input type="checkbox"/>	Windows Media Single On Demand Only	Edit
<input type="checkbox"/>	Windows Media Stacked On Demand Only	Edit

Delete selected

+ Add template

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Fill and select in the fields for the VBrick Live template configuration:

Name	Name to identify the Vbrick Live Template.
Choose how you want to make	Check the 'Viewable in the Content Server web interface' option only.

any recordings made with this template available and edit your options below:

Outputs to view in the Content Server web interface > Outputs to view in the Content Server web interface

Outputs to view in the Content Server web interface > On demand

Outputs to view in the Content Server web interface > On demand media server configuration settings

Outputs to view in the Content Server web interface > Live Stream

Select one of your choice according to your recording and streaming needs

Formats: Select 'MPEG-4 for Flash' format (Required as Vbrick will only work with it) Optional to choose additional format type(s) as long as 'MPEG-4 for Flash' format is selected too. Sizes: Select one of your choice according to your recording and streaming needs.

MPEG-4 for Flash will be automatically selected and the Windows Media Center and MPEG-4 for QuickTime will be grayed out when you select the 'MPEG-4 for Flash' format above. 'Optimize for motion' checkbox is optional.

Enable Live Stream. Format: Confirm MPEG-4 for Flash is selected. Sizes: Choose one of your choice. Re-transcode realtime movies: Optional. Media server configuration: Confirm your media server configuration for Vbrick is selected.

Click on the 'Save' button to save configuration.

View Recordings

Management

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Edit template

Save | Return

Template added.

Template

Name
VBrick Live 2 Template

Choose how you want to make any recordings made with this template available and edit your options below:

☒ Viewable in the Content Server web interface
Choose options

☐ Downloadable for portable devices (Pod and Zune)

☐ Downloadable for general purpose

☐ Distributed to Media Experience Engine 3500, VBrick, Show and Share, Podcast Producer or iTunes U

Outputs to view in the Content Server web interface

Outputs to view in the Content Server web interface

Switching

Joined

Stacked

Picture in picture

☐ Force 16:9

On demand

Formats

Windows Media
MPEG-4 for QuickTime
MPEG-4 for Flash

Sizes (choose up to 2)

Audio only
Small
Medium
Large

Maximum target bit rates (kbps)

Small: 250
Medium: 800
Large: Maximum

On demand media server configuration settings

Windows Media
Local IRS Web Server

MPEG-4 for QuickTime
Local IRS Web Server

MPEG-4 for Flash
Local IRS Web Server

Optimize for motion
☐

☒ Live stream

Format
MPEG-4 for Flash

Size
Large

Re-transcode realtime movies
☐

Live media server configuration settings

Media server configuration
vBrick Live

Summary

Outputs to view in the Content Server web interface

Live stream - Single video MPEG-4 for Flash Large
1 - On demand - Single video MPEG-4 for Flash Large

Outputs to download for portable devices

No outputs

Outputs to download for general purpose

No outputs

Outputs for distribution to Media Experience Engine 3500, Show and Share,VBrick, Podcast Producer or iTunes U

No outputs

Save | Return

Template added.

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1c Add Recording Alias to use with VBrick Live streaming:

View RecordingsManagement

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfiguration

Help

Recording aliases

<input type="checkbox"/>	Name	H.323 ID	E.164 alias	SIP address (URI)	Owner
<input type="checkbox"/>	Default OnDemand only Edit	82OnDemand42A34B5A			CHRRUIZ-TCS72Administrator
<input type="checkbox"/>	vBrick Live Rec Alias Edit	8277	8766	vbrick.live	CHRRUIZ-TCS72Administrator
<input type="checkbox"/>	VBrick VoD Rec Alias Edit	8299	8788	vbrick.vod	dme

Delete selected

+ Add recording alias

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Fill and select in the fields for the VBrick Live recording alias configuration:

Recording alias	Name': Name to identify the Vbrick Recording alias. 'Personal recording alias owner': Choose the user that will have editing permissions for this recordings.
Dialing Properties	According to the dial plan in your video network. Enter the H.323 and/or SIP dialing information.
Recording settings	In template, please select the Vbrick Live Template created in 1b. All other settings in this section can be left in default or customized according to your needs.
Default recording information	Can be left blank or customized according to your needs.
Default recording permissions	Can left the default settings or customized them as necessary.

Click on the 'Save' button to save configuration.

View Recordings

Management

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TC572Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Add recording alias

Save Return

Recording alias

Name
VBrick Live 2 Rec Alias

Recording alias type
Personal System

Personal recording alias owner
System Administrator (CHRRUIZ-TC572Administrator)

Dialing properties

Enter at least one of the following:

H.323 ID
8211

E.164 alias
8722

SIP address (URI)
vbrick.live

SIP display name
VBrick Live 2

Recording settings

Template
VBrick Live 2 Template
Edit or Add

Template outputs
Live stream
- Switching MPEG-4 for Flash Large
On demand
- Switching MPEG-4 for Flash Large (Live transcoded)

Call configuration
System Call Configuration
Edit or Add

Show countdown before recording

Email is disabled in Site Settings so it is not possible to receive email when a recording has been created using this recording alias.

Default recording information

Name

Description

Speaker

Location

Copyright

Keywords

Category
-- No category selected --
Edit or Add

Default recording permissions

Who can view this recording

☒ Automatically publish finished recordings

☐ Allow access to all authenticated users

☒ Allow access to only these authenticated groups and users:

Add groups or users by entering all or part of the name or display name.

Check access list

Password (optional)

Who can edit this recording

These groups and users can edit the recording:

Add groups or users by entering all or part of the name or display name.

Check access list

Save Return

If configuring Live Streaming (Webcast) Integration only, you are done. You can skip the following steps all the way to our 'Verify' section so you can begin testing this integration. If you are configuring VoD (Video on Demand) too, please follow to the next steps.

2. VBrick VoD (Video on Demand) integration.

2a. Add VBrick VoD server configuration.

In TCS web interface go to Management > Recording setup > Media server configurations and click on the '+ Add VBrick VoD server configuration' link:

View RecordingsManagement

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfigurationHelp

Media server configurations

	Description	Server type	Server address
<input type="checkbox"/>	Local IIS Web Server Edit	Web Server	(local)
<input type="checkbox"/>	vBrick Live Edit	VBrick Live Server	10.88.246.108
<input type="checkbox"/>	vBrick Live 2 Edit	VBrick Live Server	vbrickdme.chrruiz.lab
<input type="checkbox"/>	vBrick VoD Edit	VBrick VoD Server	10.88.246.108

Delete selected

+ Add Windows Media streaming server configuration

+ Add QuickTime or Darwin streaming server configuration

+ Add Wowza Media Server for Flash configuration

+ Add VBrick Live Server Configuration

+ Add VBrick VoD server configuration

+ Add Cisco Video Streamer configuration

+ Add Media Experience Engine 3500 server configuration

+ Add Show and Share server configuration

+ Add Podcast Producer server configuration

+ Add iTunes U server configuration

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There are two options to configure the VoD media server: You can configure it to connect via FTP or FTPS (Secure FTP using SSL).

FTP configuration.

- To configure it to use FTP, fill in the fields for the Media server configuration like below:

Name	Name to identify the Vbrick VoD media server
Server address	IP or FQDN of Vbrick DME
File Transfer Protocol	Choose FTP
Command Port	Field disabled when FTP is chosen
User name	Admin user for Vbrick DME server. Default is 'admin'
Password	Password for the admin user in Vbrick DME server. Default is 'admin'
Password confirm	Confirm password set in the previous field.

Before saving the configuration you can use 'Test FTP' button to confirm you reach the server and that admin credentials are correct, if you get a green checkmark with the message: 'FTP test successful to server YourDMEServer:21' then you are good to save the media server configuration:

View Recordings
Management
CHRRUIZ TCS 7.2 for vBrick
System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Media server configuration: VBrick server

Save Return

Media server configuration added.
 FTP test successful to server vbrickdme.chrruiz.lab:21.

Server settings

Name VBrick VoD 2
Server address vbrickdme.chrruiz.lab

FTP/FTPS settings

File Transfer Protocol ☒ FTP ☐ FTPS
Command Port
User name admin
Password
Password confirm
Test FTPS
 FTP test successful to server vbrickdme.chrruiz.lab:21.

Save Return

Media server configuration added.
 FTP test successful to server vbrickdme.chrruiz.lab:21.

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FTPS Configuration:

- To configure it to use FTPS (Secure FTP using SSL), fill in the fields for the Media server configuration like below, please note that this option is available only in TCS s7.2 and up:

Name	Name to identify the Vbrick VoD media server
Server address	IP or FQDN of Vbrick DME
File Transfer Protocol	Choose FTPS
Command Port	This needs to match with the 'FTP Command Port' configured in Vbrick DME web interface: System Configuration > Ports.
User name	Admin user for Vbrick DME server. Default is 'admin'
Password	Password for the admin user in Vbrick DME server. Default is 'admin'
Password confirm	Confirm password set in the previous field.

Before saving the configuration you can use 'Test FTPS' button to confirm you reach the server and that admin credentials are correct, if you get a green checkmark with the message: 'FTPS test successful to server YourDMEServer:YourCommandPortNumber' then you are good to save the media server configuration:

View RecordingsManagement

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfigurationHelp

Media server configuration: VBrick server

SaveSave asReturn

Media server configuration updated.

FTP test successful to server vbrickdme.chrruiz.lab:35.

Server settings

NameVBrick VoD FTPS

Server addressvbrickdme.chrruiz.lab

FTP/FTPS settings

File Transfer ProtocolFTPFTPS

Command Port35

User nameadmin

Password

Password confirm

Test FTPS

FTP test successful to server vbrickdme.chrruiz.lab:35.

SaveSave asReturn

Media server configuration updated.

FTP test successful to server vbrickdme.chrruiz.lab:35.

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Note: In order for FTPS to work VBrick DME server has to have FTPS enabled, command port configured different from default 21 and SSL certificate uploaded.

Enable FTPS in VBrick DME using the web interface under System Configuration > Security:

Configuration Menu

Home

System Configuration

- General
- Network
- Ports
- Security
- SSL Certificate
- Streaming
- Caching
- SNMP
- SAN/iSCSI Setup
- Manage Configuration
- Activate Feature
- Rev Interface

Input Configuration

Output Configuration

User Configuration

SAP Configuration

Logging

Monitor and Logs

Maintenance

Diagnostics

Log Out

Help

VB

DME

VBAdminadmin

vbrickdme.chrruiz.lab

System Configuration --> Security

External VBAdminHTTPS Only

SSH ShellEnabled

External FTP ServerEnabled

External FTP Server ModeFTPS TLS Forced

SNMP ServerEnabled

SNMP Server ModeSNMPv1, SNMPv2, and SNMPv3

RTMP ServerEnabled

RTMP Announce ReceiverEnabled

Flash Server AuthenticationEnabled

Use HTTPs to BrowserEnabled

Cache Manager UtilityEnabled

Apply

Revert

Default

Specify a different port for FTPS to work under System Configuration > Ports:

Configuration Menu

- Home
- System Configuration
 - General
 - Network
 - Ports
 - Security
 - SSL Certificate
 - Streaming
 - Caching
 - SNMP
 - SAN/iSCSI Setup
 - Manage Configuration
 - Activate Feature
 - Rev Interface
- Input Configuration
- Output Configuration
- User Configuration
- SAP Configuration
- Logging
- Monitor and Logs
- Maintenance
- Diagnostics
- Log Out
- Help

VB

BRICK

DME

VBAAdmin

admin

vbrickdme.chrruiz.lab

System Configuration --> Ports

RTSP Server Port	554
RTMP Server Port	1935
RTMPS Server Port	4443
Multi-Protocol Server RTSP port	5544
VBAAdmin Server Port	8181
Secure VBAAdmin Server Port	8383
Conversion Input Port Start	64879
HTTP Server Port	80
HTTPS Server Port	443
HTTP Streaming Tunneling Port	8080
HTTP Caching ICP Port (starting port of 8 consecutive ports)	3130
SIP Port	5060
FTP Data Port	20
FTP Command Port	35

Apply

Revert

Default

Upload a SSL certificate to the VBrick server under System Configuration > SSL Certificates, for detailed information on how to upload and sign your certificate, please refer to VBrick documentation: [VBrick Admin Guide](#).

Configuration Menu

- Home
- System Configuration
 - General
 - Network
 - Ports
 - Security
 - SSL Certificate
 - Streaming
 - Caching
 - SNMP
 - SAN/iSCSI Setup
 - Manage Configuration
 - Activate Feature
 - Rev Interface
- Input Configuration
- Output Configuration
- User Configuration
- SAP Configuration
- Logging
- Monitor and Logs
- Maintenance
- Diagnostics
- Log Out
- Help

BRICK

DME

VBAAdmin
admin

vbrickdme.chrruiz.lab

System Configuration --> SSL Certificates

Currently Installed Certificates

Certificate:
Data:
Version: 3 (0x2)
Serial Number:
2c:00:00:00:18:64:de:6e:f0:1d:88:0b:58:00:00:00:00:18

Create a Certificate Request

This section will help you create a CSR (Certificate Signing Request). A CSR is a block of encoded data generated by your web server that contains all the necessary information about your domain and organization. It will be encrypted by a Private Key that will be automatically created. Please review your internal security procedures and necessary field contents before beginning this process.

Country

Mexico

State (or Province)

CDMX

City

BJ

Company or (Organization)

Mex TP

Department

TAC

Fully Qualified Domain Name

vbrickdme.chrruiz.lab

Contact Email Address

vbrick@chrruiz.lab

Generate Certificate Request to use with CA

OR

Generate and Install a Self-Signed CERT

```

-----BEGIN CERTIFICATE REQUEST-----
MIIC0TCCAbkCAQAwYsxCzAJBgNVBAYTAk1YMQ0wCwYDVQQIDARDRE1YMQswCQYD
VQQHDAJCSjEPMA0GA1UECgwGTWV4IFRQMwYwCgYDVQQLDANUQUxHjAcBgNVBAMH
FXZicmlja2RtZS5jaHJydW16Lm1hYjEhMB8GCSqGSIb3DQEJARYSdmJyaWNRQGN0
cnJ1aXoubGFiMII0IjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAstT53rC
SzaQVHaTBUnyur7BIBG2pvDXj2I++G7fp4XsgjUiQ03CayvLMrH+isXiShK3oLQv
TOJH9q9GHYurziimYQu00Fcp+zpQ5JpyeHJxFlqG97a7+q/NUBP1NaVsDu0ZpzJ9
yMaHJTIGFitUWJ3cC9sLM0saq9Fk2JQEDilx0RhpStyixHQE/Gzi24rHapMR4ZDU

```

Once you click "Generate Certificate Request to use with CA" above, a copy of your encoded CSR will be generated. Do not modify the text. Copy and use this signed CSR (including the textual header and footer) to purchase a certificate at a CA (Certification Authority). Please choose a well-known CA to ensure that fielded browsers will have their root certificates installed. Please review the installed certificates in your target browsers and OSes.

Install a New Certificate

If you have recently received a certificate from your CA, please paste the PEM based contents (including the header and footer) into the text box below. Do not edit any of the text.

PEM Includes Key

Enabled

Verify and Install New Certificate

Note: This server will first attempt to verify your certificate. Only valid certificates will be installed. Please review the installed certificates, at the top of this page, after every new install.

2b. Add Template to use with VBrick VoD:

In TCS web interface go to Management > Recording setup > Templates and click on the '+ Add template' link:

View Recordings

Management

CHRRUIZ TCS 7.2 for vBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Templates

<input type="checkbox"/>	Name
<input type="checkbox"/>	VBrick Live 2 Template Edit
<input type="checkbox"/>	VBrick Live Template Edit
<input type="checkbox"/>	VBrick VoD FTP Template Edit
<input type="checkbox"/>	Windows Media Single On Demand Only Edit
<input type="checkbox"/>	Windows Media Stacked On Demand Only Edit

Delete selected

+ Add template

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Fill and select in the fields for the VBrick Live template configuration:

Name

Choose how you want to make any recordings made with this template available and edit your options below:

Outputs for distribution to Media Experience Engine 3500, Show and Share,VBrick, Podcast Producer or iTunes U

Name to identify the Vbrick VoD Template.

Check the 'Distributed to Media Experience Engine 3500, VBrick, S and Share, Podcast Producer or iTunes U' option only.

For the outputs select one of your choice according to your recording and streaming needs, then select the Vbrick checkbox, choose the 'Media server configuration' created for Vbrick VoD in the previous Select a size for the streaming.

Click on the 'Save' button to save configuration.

[Edit template](#)

Save Return

✓ Template added.

Template

Name

Choose how you want to make any recordings made with this template available and edit your options below:

☐ Viewable in the Content Server web interface

☐ Downloadable for portable devices (iPod and Zune)

☐ Downloadable for general purpose

☒ Distributed to Media Experience Engine 3500, VBrick, Show and Share, Podcast Producer or iTunes U [Choose options](#)

Outputs for distribution to Media Experience Engine 3500, Show and Share, VBrick, Podcast Producer or iTunes U

Switching ☒ Joined ☐ Stacked ☐ Picture in picture ☐
☐ Force 16:9

☐ Media Experience Engine 3500
Media server configuration: No media server configuration configured

☒ VBrick
Media server configuration: VBrick VoD FTPS
Size: Large **The SAM Account Name will be written into the media file and shared to VBrick system**

☐ Show and Share
Media server configuration: No media server configuration configured
Size: Large

☐ Podcast Producer
Media server configuration: No media server configuration configured

☐ iTunes U
Media server configuration: No media server configuration configured
Size: Medium
Add audio only output ☐

Summary
Outputs to view in the Content Server web interface ⓘ
No outputs
Outputs to download for portable devices ⓘ
No outputs
Outputs to download for general purpose ⓘ
No outputs
Outputs for distribution to Media Experience Engine 3600, Show and Share, VBrick, Podcast Producer or iTunes U ⓘ
1 - VBrick - Single video MPEG-4 for Flash Large

Save Return

✓ Template added.

2c. Add Recording Alias to use with VBrick VoD:

View RecordingsManagement

CHRRUIZ TCS 7.2 for VBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfiguration

Help

Recording aliases

<input type="checkbox"/>	Name ▲	H.323 ID	E.164 alias	SIP address (URI)	Owner
<input type="checkbox"/>	Default OnDemand only Edit	82OnDemand42A34B5A			CHRRUIZ-TCS72Administrator
<input type="checkbox"/>	VBrick Live 2 Rec Alias Edit	8211	8722	vbrick.live2	CHRRUIZ-TCS72Administrator
<input type="checkbox"/>	VBrick Live Rec Alias Edit	8277	8766	vbrick.live	CHRRUIZ-TCS72Administrator
<input type="checkbox"/>	VBrick VoD FTP Rec Alias Edit	8299	8788	vbrick.vodftp	dme

Delete selected

+ Add recording alias

Cisco TelePresence Content Server v7.2 Build 4349

Fill and select in the fields for the VBrick VoD recording alias configuration:

Recording alias	Name': Name to identify the Vbrick VoD Recording alias. 'Personal recording alias owner': The user selected here needs to match exactly with a user that exists in VBrick Rev server.
Dialing Properties	According to the dial plan in your video network. Enter the H.323 and/or SIP dialing information.
Recording settings	In template, please select the Vbrick VoD Template created in 2b. All other settings in this section can be left in default or customized according to your needs.
Default recording information	Can be left blank or customized according to your needs.
Default recording permissions	Can left the default settings or customized them as necessary.

Note: If the user chosen as the Personal recording alias owner does not match exactly with a user with all 'Media' assigned roles that exists in VBrick Rev Server, the VoD integration will not work. This user will be the uploader of the video to Rev and needs to be recognized by it.

Please refer to the Troubleshoot section of this document for detailed information on how to: Create a user in TCS that matches an existing user in Rev and/or how to create a user in Rev that matches exactly our user selected in TCS.

Click on the 'Save' button to save configuration.

View Recordings

Management

CHRRUIZ TCS 7.2 for VBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Edit recording alias

Save Return

Recording alias added.

Recording alias

Name
VBrick VoD FTPS Rec Alias

Personal recording alias owner
Rev User (revuser)

Dialing properties

Enter at least one of the following:

H.323 ID
6233

E.164 alias
8744

SIP address (URI)
vbrick.vod@ps

SIP display name
VBrick VoD FTPS

Recording settings

Template
VBrick VoD FTPS Template
Edit or Add

Template outputs
Distribution
- VBrick Switching MPEG-4 for Flash Large

Call configuration
System Call Configuration
Edit or Add

Show countdown before recording
☐

Email is disabled in Site Settings so it is not possible to receive email when a recording has been created using this recording alias.

Default recording information

Name
VBrick VoD FTPS Channel

Description

Speaker

Location

Copyright

Keywords

Category
General
Edit or Add

Default recording permissions

Who can view this recording

☒ Automatically publish finished recordings

☒ Allow access to all authenticated users

☐ Allow access to only these authenticated groups and users:

Add groups or users by entering all or part of the name or display name.
Check access list

Password (optional)

Who can edit this recording

These groups and users can edit the recording:
revuser

Add groups or users by entering all or part of the name or display name.
Check access list

Save Return

Recording alias added.

If all these settings have been configured please proceed to the 'Verify' section of this document.

Verify

Use this section in order to confirm that your configuration works properly.

VBrick Live Streaming: To verify this is working correctly, please verify the following:

When connecting a call to the Live Streaming Recording SIP or H.323 alias in TCS, you should see the recording taking place in TCS web interface in the 'View Recordings' tab:

View Recordings Management CHRRUIZ TCS 7.2 for VBrick System Administrator (CHRRUIZ-TCS72Administrator) Log out Select language

All recordings

6 recordings.

Sort by: Newest | Oldest

VBrick Live 2 Channel
May 1 2017 - 11:33:27 AM

VBrick VoD Rec Alias
21 Apr 17 8:25 PM
Apr 21 2017 - 8:25:10 PM
1 hour and 56 minutes

vBrick Live Rec Alias
21 Apr 17 6:50 PM
Apr 21 2017 - 6:50:56 PM
22 minutes

vBrick Live recording alias
20 Apr 17 7:53 AM
Apr 20 2017 - 7:53:54 AM
24 minutes

vBrick Live recording alias
19 Apr 17 9:25 PM
Apr 19 2017 - 9:25:03 PM
26 minutes

VBrick VoD 19 Apr 17
8:00 PM
Apr 19 2017 - 8:00:58 PM
25 minutes

In the VBrick DME server web interface go to Monitor and Logs > Multi-Protocol Connections, if the streaming is going successfully from TCS to DME, you should see all the details of the stream in there:

Configuration Menu

- Home
- System Configuration
- Input Configuration
- Output Configuration
- User Configuration
- SAP Configuration
- Logging
- Monitor and Logs
 - System Usage
 - Multi-Protocol Connections
 - RTP Connections
 - Relay Status
- Access History
- Error Log
- Upgrade Log
- User Login Log
- Upload Log
- Maintenance
- Diagnostics
- Log Out
- Help

VBRICK DME VBAdmin admin vbrickdme.chrruiz.lab

Monitor --> Multi-Protocol Connections

all entries Page Refresh Interval: Never

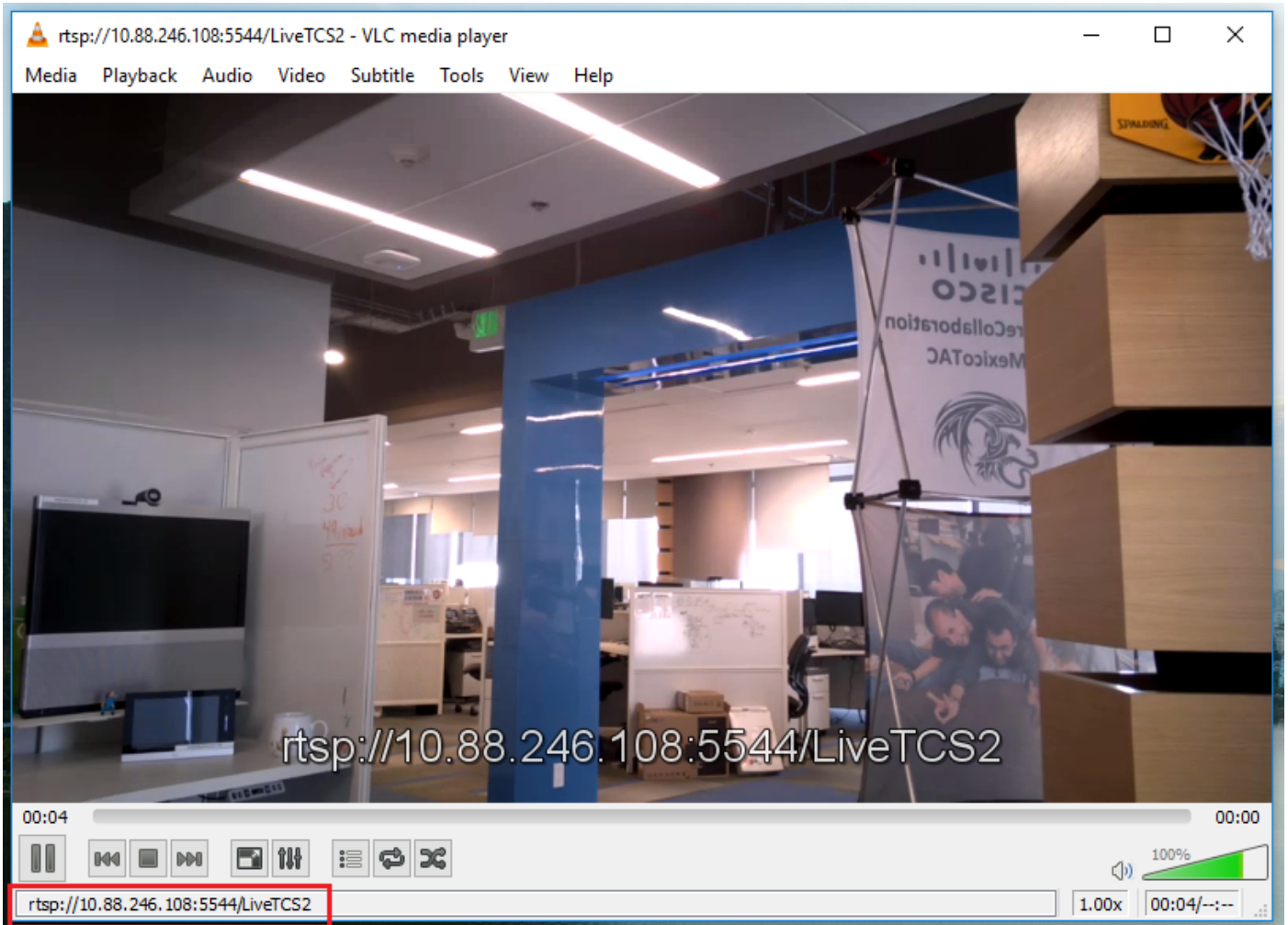
Connected Multi-Protocol Streams Mon, 1. May 2017 11:38:20

Stream Type	IP Address	Port	Packets/Segments Sent	Packets/Segments Lost	Time Connected	Connected To
In RTP Active	10.88.246.185	5544	32318	0	4 min 50 sec	LiveTCS2

rtsp://10.88.246.108:5544/LiveTCS2 || rtsp://10.88.246.108:5544/ts/LiveTCS2 || rtmp://10.88.246.108:1935/live/LiveTCS2

Use any streamer player like VLC Player to catch the stream and test audio and video work

properly using the rtsp or rtmp links seen in VBrick web interface Monitor and Logs >Multi-Protocol Connections.



If any of these steps are not showing the correct behavior, please refer to the "Troubleshoot" section of this document to see possible causes and actions to correct them.

VBrick VoD: To verify this is working correctly, please verify the following:

After the recording has finished, go to TCS web interface and go to the 'Management' tab and verify the recording has finished transcoding, it is only after the recording has been transcoded entirely that it will begin to be uploaded to VBrick Rev server:

View Recordings

Management

CHRRUIZ TCS 7.2 for VBrick

System Administrator (CHRRUIZ-TCS72Administrator) Log out
Select language

Diagnostics
Recordings
Recording setup
Configuration
Help

Server overview

Return

Content Server status

Server mode

Online

Content Engine status

Current calls

Transcode Engine 1 status

Transcode Engine 2 status

Transcode Engine 3 status

Currently transcoding

Transcoding job list

- VBrick VoD FTPS Channel Edit | Manage outputs
(Switching MPEG-4 for Flash Large for VBrick)

Content Server information

IP Address

10.88.246.185

Device serial number

42A34B5A

Software version

Cisco TelePresence Content Server v7.2 Build 4349

Installed option keys

2 Live Broadcast (115361L2-1-2949D57D)
5 Recorded Calls (115361RS-1-94822240)

Server disk space

Path	Total disk space	Free disk space	Percentage free
C	49.9 GB	27.1 GB	54%
E	149 GB	145 GB	97%

Database location

Database data source

Local Content Server

Database name

TCSDbV3

Media storage location

To change the current media storage location, log in to the Content Server via remote desktop and run the TCS Wizard.

Media storage location

Local Content Server

Software option

Add option key

Add option key

Restart service

Restart service

Return

Cisco TelePresence Content Server v7.2 Build 4349

After the transcode job finishes in TCS, go to the VBrick DME server web interface and go to Monitor and Logs > Upload Log, if the upload goes smoothly you will see messages confirming the video ingest and upload have successfully completed to the Rev server:

Configuration Menu

- Home
- System Configuration
- Input Configuration
- Output Configuration
- User Configuration
- SAP Configuration
- Logging
- Monitor and Logs
 - System Usage
 - Multi-Protocol Connections
 - RTP Connections
 - Relay Status
- Access History
- Error Log
- Upgrade Log
- User Login Log
- Upload Log

Maintenance

Diagnostics

Log Out

Help

VRBRICK

DME

VBAAdmin

admin

vbrickdme.chrruiz.lab

Monitor --> Upload Log

05/01/17 12:16:30, .tcs_ingest/O149365887100-09108911fl.mp4, Detected new or changed file
05/01/17 12:16:30, .tcs_ingest/O149365887100-09108911fl.mp4, Starting Rev upload
05/01/17 12:16:31, .tcs_ingest/O149365887100-09108911fl.mp4, Uploading to
https://cisco.rev.vbrick.com/api/uploads/videos/
05/01/17 12:16:37, .tcs_ingest/O149365887100-09108911fl.mp4, File Ingested Successfully.
05/01/17 12:16:41, .tcs_ingest/O149365887100-09108911fl.mp4, Detected new or changed file
05/01/17 12:16:41, .tcs_ingest/O149365887100-09108911fl.json, Detected new or changed file
05/01/17 12:16:41, .tcs_ingest/O149365887100-09108911fl.mp4, Deleted
05/01/17 12:16:41, .tcs_ingest/O149365887100-09108911fl.json, Deleted
05/01/17 12:32:31, .tcs_ingest/ftpctest.txt, Detected new or changed file
05/01/17 12:32:31, .tcs_ingest/ftpctest.txt, Deleted
05/01/17 12:34:01, .tcs_ingest/O149365993100-62346885fl.mp4, Detected new or changed file
05/01/17 12:34:01, .tcs_ingest/O149365993100-62346885fl.mp4, Starting Rev upload
05/01/17 12:34:01, .tcs_ingest/O149365993100-62346885fl.mp4, Uploading to
https://cisco.rev.vbrick.com/api/uploads/videos/
05/01/17 12:34:05, .tcs_ingest/O149365993100-62346885fl.mp4, File Ingested Successfully.
05/01/17 12:34:11, .tcs_ingest/O149365993100-62346885fl.mp4, Detected new or changed file
05/01/17 12:34:11, .tcs_ingest/O149365993100-62346885fl.json, Detected new or changed file
05/01/17 12:34:11, .tcs_ingest/O149365993100-62346885fl.mp4, Deleted
05/01/17 12:34:11, .tcs_ingest/O149365993100-62346885fl.json, Deleted
05/01/17 12:44:31, .tcs_ingest/ftpctest.txt, Detected new or changed file
05/01/17 12:44:31, .tcs_ingest/ftpctest.txt, Deleted
05/01/17 12:48:01, .tcs_ingest/O149366075700-77361541fl.mp4, Detected new or changed file
05/01/17 12:48:01, .tcs_ingest/O149366075700-77361541fl.mp4, Starting Rev upload
05/01/17 12:48:02, .tcs_ingest/O149366075700-77361541fl.mp4, Uploading to
https://cisco.rev.vbrick.com/api/uploads/videos/
05/01/17 12:48:07, .tcs_ingest/O149366075700-77361541fl.mp4, File Ingested Successfully.
05/01/17 12:48:12, .tcs_ingest/O149366075700-77361541fl.mp4, Detected new or changed file
05/01/17 12:48:12, .tcs_ingest/O149366075700-77361541fl.json, Detected new or changed file
05/01/17 12:48:12, .tcs_ingest/O149366075700-77361541fl.mp4, Deleted
05/01/17 12:48:12, .tcs_ingest/O149366075700-77361541fl.json, Deleted

Reset Upload Log

After that go to the VBrick Rev server web interface to verify your video has uploaded correctly and that it plays correctly, remember that the video will show as inactive until it is activated for viewing.

rev

Media

Events

Search Media

+

chrruiz

All Videos

5 Videos

04:42

VRbrick VoD FTPS Channel

★★★★★

Rev User

May 1, 2017

03:25

VRbrick VoD FTP Channel

★★★★★

dme user

May 1, 2017

LIVE

Live Streaming from TCS

★★★★★

Christian Ruiz

Apr 21, 2017

LIVE

Live Streaming from CMS

★★★★★

Christian Ruiz

Apr 21, 2017

If any of these steps are not showing the correct behavior, please refer to the Troubleshoot section of this document to see possible causes and actions to correct them.

Troubleshoot

Packet captures from TCS and DME will help you in most of the issues related to communication.

TCS: Use Wireshark or similar in the Windows Server where TCS is installed to retrieve packet captures.

DME: Use the web interface in the Diagnostics > Trace Capture, press the 'Start capture' button. Press the 'Stop capture' button to stop the tracing. Press the 'Download trace file' to download the packet capture.

The screenshot shows the VBRICK VBAAdmin web interface. The left sidebar contains a 'Configuration Menu' with options: Home, System Configuration, Input Configuration, Output Configuration, User Configuration, SAP Configuration, Logging, Monitor and Logs, Maintenance, Diagnostics (selected), Log Out, and Help. The 'Diagnostics' menu is expanded, showing 'Ping Test', 'Trace Capture' (selected), and 'Traceroute Test'. The main content area is titled 'Diagnostics --> Trace Capture'. It features a 'Page Refresh Interval' dropdown set to 'Never'. Below this, there are input fields for 'Interface to capture from:' (set to 'eth0'), 'Capture file size(Mb):' (set to '50'), and 'Status:'. A 'Start Capture' button is present. Below the 'Start Capture' button, there is a dropdown for 'eth0.pcap', a 'Download Trace File' button, and a 'Delete Trace File' button.

Verify ports are configured correctly.

VBrick DME ports used for streaming and FTP(S) can be checked and configured in the DME server web interface under System Configuration > Ports:

The screenshot shows the VBRICK VBAAdmin web interface. The left sidebar contains a 'Configuration Menu' with options: Home, System Configuration (selected), General, Network, Ports, Security, SSL Certificate, Streaming, Caching, SNMP, SAN/iSCSI Setup, Manage Configuration, Activate Feature, Rev Interface, Input Configuration, Output Configuration, User Configuration, SAP Configuration, Logging, Monitor and Logs, Maintenance, Diagnostics, Log Out, and Help. The 'System Configuration' menu is expanded, showing 'General' (selected), 'Network', 'Ports', 'Security', 'SSL Certificate', 'Streaming', 'Caching', 'SNMP', 'SAN/iSCSI Setup', 'Manage Configuration', 'Activate Feature', 'Rev Interface', 'Input Configuration', 'Output Configuration', 'User Configuration', 'SAP Configuration', 'Logging', 'Monitor and Logs', 'Maintenance', 'Diagnostics', 'Log Out', and 'Help'. The main content area is titled 'System Configuration --> Ports'. It displays a list of ports and their values, with two rows highlighted by red boxes: 'Multi-Protocol Server RTSP port' (5544) and 'FTP Command Port' (35). The list includes: RTSP Server Port (554), RTMP Server Port (1935), RTMPS Server Port (4443), Multi-Protocol Server RTSP port (5544), VBAAdmin Server Port (8181), Secure VBAAdmin Server Port (8383), Conversion Input Port Start (64879), HTTP Server Port (80), HTTPS Server Port (443), HTTP Streaming Tunneling Port (8080), HTTP Caching ICP Port (starting port of 8 consecutive ports) (3130), SIP Port (5060), FTP Data Port (20), and FTP Command Port (35). At the bottom right, there are buttons for 'Apply', 'Revert', and 'Default'.

TCS Live Streaming to VBrick most common issues:

Media Server configuration issues:

Error message: "Failed to connect to server".

Cause: Wrong RTSP port.

Solution: Please check the 'Multi-Protocol Server RTSP port' configured in System Configuration > Ports in VBrick DME web interface is the same.

Error message: 'Authentication failed on RTSP announce to server'.

Cause: wrong username and/or password.

Solution: Please check the 'Stream Input Authentication User Name' in User Configuration --> Stream Input Authentication in VBrick DME web interface is the same.

Can't see the streaming from TCS in the DME web interface Logs >Multi-Protocol Connections:

Cause:Communication issues between TCS and DME.

Solution:

In TCS: Verify the recording is showing as active in the 'Recordings tab' (Red circle showing it is recording) Verify all TCS services are running correctly.

In DME: Verify in the web interface that the RTSP and RTMP services are showing True.

Configuration Menu

DME

VBAdmin
admin

vbrickdme.chruiz.lab

- Home
- ⊕ System Configuration
- ⊕ Input Configuration
- ⊕ Output Configuration
- ⊕ User Configuration
- ⊕ SAP Configuration
- ⊕ Logging
- ⊕ Monitor and Logs
- ⊕ Maintenance
- ⊕ Diagnostics
- Log Out
- Help

2

VBrick Distributed Media Engine (VBDME) Status

Status: Started Mon, 1. May 2017 13:53:59

Current Time On Server: Mon, 1. May 2017 16:05:57

Up Time: 2 hrs 11 min 58 sec

Application Code Revision: 3.15.0 rhel7 04/12/2017 08:02 AM Build(147)

RTMP Server Version: 3.15.0 Build 0009

OS Registration Number: OVA

RTP CPU Load: 0.07%

RTMP CPU Load: 0.07%

Total CPU Load: 2.20%

Current # of Connections: 1

Current Throughput: 1.39 Mbps

Multi Protocol Connections Count: 1

Multi Protocol Max Count: 100

RTP Connections Count: 0

RTP Connections Max Count: 100

Disk Usage System: Used: 1650 MB (32%), Available: 3551 MB (68%)

Disk Usage Content: Used: 25342 MB (25%), Available: 76975 MB (75%)

Disk Health: System:
Content:

iSCSI Usage: iSCSI Disabled

Disable Server

Tms-Zzz-Mx-Lab / 10.88.246.108
 3.15.0 RHEL7 04/12/2017 08:02 AM Build(147)
Server On for 2 hrs 11 min 22 Sec
 RTMP: True RTSP: True

Server is Running

Status: Normal

MPS 1
of 100
CPU: 0.17%

RTP 0
of 100
CPU: 0.07%

832 MB
used of 28527 MB
Normal

2.60 %
Total CPU
Normal

973.26 Kbps
Throughput
Normal

Countdown
 00:50 to
[Refresh](#)

True
True

If previous steps are ok then we have a communication issue between TCS and DME and it maybe an issue related to the network or a failure in one of the servers, take packet captures from TCS and DME to narrow down the issue, filter by their respective IP addresses. Verify communication is happening. i.e. TCS packet capture shows TCS sending packets to DME and DME packet capture shows no packets being received from TCS. In this example you will want to check if something in the network is blocking or preventing this communication to happen or if there is a major DME server failure. If you are not very familiar with packet captures, open a TAC case and provide both packet captures so an engineer can assist you in identifying the communication issue between TCS and DME.

Can't catch the Live streaming from a streaming player:

Verify the rtsp link is shown in the VBrick web interface under Monitor and Logs > Multi-Protocol Connections and not only the rtmp. If it is not showing follow the steps mentioned in "Can't see the streaming from TCS in the DME web interface Logs > Multi-Protocol Connections".

If TCS Live streaming details and links are shown in VBrick DME web interface under Monitor and Logs > Multi-Protocol Connections, then a deeper look needs to be taken on the network and VBrick DME server. Please open a case with VBrick support.

TCS VoD with VBrick most common issues:

Media server configuration issues:

Error message: "Failed to connect to FTP(S) server".

Cause: Wrong FTP(S) port.

Solution: Please check the 'FTP Command Port' number configured in 'System Configuration > Ports' in VBrick DME web interface is the same.

Error message: "User 'youruser' failed to log in to FTP(S) server..."

Cause: Wrong username and/or password.

Solution: Please check that your DME admin user and/or password are correct. If this credentials have been lost please contact VBrick support.

Not able to upload VoD from TCS to Rev Server,

Error message: "UploaderUserDoesNotExist UploaderUserDoesNotExist = { UserDoesNotExist = Unable to upload video. Please ensure that video is associated to a valid user..."

```
04/20/17 14:21:04, .tcs_ingest/0149271454700-30674761f1.mp4, Starting Rev upload
04/20/17 14:21:05, .tcs_ingest/0149263473800-58284370f1.mp4, UploaderUserDoesNotExist
UploaderUserDoesNotExist = { UserDoesNotExist = Unable to upload video. Please ensure that video
is associated to a valid user., Uploader = Administrator, accountId = 30dcd82e-ae13-4aae-b0a6-
fd8d0ed3b805 }
04/20/17 14:21:05, .tcs_ingest/0149263452400-34534979f1.mp4, UploaderUserDoesNotExist
UploaderUserDoesNotExist = { UserDoesNotExist = Unable to upload video. Please ensure that video
is associated to a valid user., Uploader = Administrator, accountId = 30dcd82e-ae13-4aae-b0a6-
fd8d0ed3b805 }
```

Cause: User configured as 'Personal recording alias owner' in the VBrick VoD recording alias in TCS does not match with a user that exists in VBrick Rev server.

Solution: Please create a user in TCS that matches a user with 'Media' rights in Rev server or create a user in Rev with 'Media' rights that matches TCS user configured as the 'Personal recording alias owner' in the recording alias for VBrick VoD.

How to create a user in TCS web interface:

Go to Configuration > Groups and users, in the 'Add users' section write down the username under the 'Creator role' window, remember this username needs to match the username in Rev server. Click the 'Add' button at the bottom of the page. The user will be created and will be available to chose from the drop down list in the 'Personal recording alias owner' configuration.

View RecordingsManagement

CHRRUIZ TCS 7.2 for VBrick

System Administrator (CHRRUIZ-TC572Administrator) Log out
Select language

DiagnosticsRecordingsRecording setupConfigurationHelp

Add groups or users

AddReturn

Add Groups

Groups cannot be added when the authentication mode is set to Local. Set the authentication mode to Domain or LDAP in Site Settings to be able to add groups.

Add Users

Add users in the format: MACHINENAMEuser.name:Display Name
The machine name and display name are optional.

Site manager role

Creator role
RevUser

Viewer role

AddReturn

Cisco TelePresence Content Server v7.2 Build 4349

How to create a user in VBrick Rev:

Creating a user in the Rev Server web interface: Go to Settings > Users > Users and click on the '+ Add User' button. Please verify that the username matches with the username in TCS (it is not case sensitive). Also, please check that the user has all the 'Media' roles assigned. Click the 'Create User' button to create the user. Please remember user will not be active until it hits the activation link after it is created.

The screenshot displays the VBrick Rev web interface for creating a new user. The top navigation bar includes the 'rev' logo, a home icon, and tabs for 'Media', 'Events', 'Search Media', and user profile 'chrruiz'. Below this, a secondary navigation bar shows 'Reports', 'Users' (selected), 'Devices', 'Media Settings', 'System Settings', and 'Accounts'. A green 'Active' status indicator is visible in the top right corner.

The main content area is titled 'REVUSER'. It features a form with the following fields:

- First Name: Rev
- Last Name: User
- Contact Email: revuser@chrruiz.lab
- Title: (empty)
- Phone Number: (empty)
- Preferred Language: English
- Username: RevUser

Buttons at the top right of the form include 'Cancel', 'Create & Add Another User', and 'Create User' (highlighted with a red box). A red box also highlights the 'Username' field.

Below the form is the 'ROLE ASSIGNMENT' section, which is divided into two columns:

- ASSIGNED ROLES:** Contains three roles with checkboxes: 'Media Admin' (checked), 'Media Contributor' (checked), and 'Media Viewer' (checked). This column is highlighted with a red box.
- AVAILABLE ROLES:** Contains two roles with radio buttons: 'Account Admin' and 'Event Admin'.

At the bottom of the interface is the 'GROUP ASSIGNMENT' section, which includes a search bar labeled 'Find Items' and a message stating 'No Items Assigned'. Navigation buttons at the bottom include '< Users', 'Cancel', and 'Save'.

Issues playing the video on VBrick Rev:

Error message: "Unable to process video" on VBrick Rev server web interface when trying to play the TCS VoD recording.

Solution: Please contact VBrick support for further troubleshooting as this may be related to the Rev services hosted in the cloud.