Your Mission: Use F-Response to access Amazon S3 Cloud Storage Buckets



Using F-Response to connect to Amazon S3 Storage Bucket and collect their contents



Disclaimer: The F-Response Connector and legacy Connector products (F-Response Email Connector, Cloud Connector, and Database Object Connector) provide access to 3rd party data sources via Application Programming Interfaces (APIs) and internal structures presented by the provider. 3rd party provided data sources by their very nature are volatile. The afore mentioned F-Response products provide "best effort" for accessing and interacting with those 3rd party data sources however service disruptions, API changes, provider errors, network errors, as well as other communications issues may result in errors or incomplete data access. F-Response always recommends secondary validation of any 3rd party data collection.

Step 1: Open Amazon S3 Credential Configuration Window

Open the F-Response Management Console and navigate to the Providers->Provider Credentials->Amazon Simple Storage Services (S3) menu item.

File	Providers	Deployment	Subjects	Targets	Im	iges Contair	ners Message	s V	iew Help	
Provi	Provi	der Settings			×	Subjects		x	Targets	
	Provi Add Dropk Goog Mice Micro Micro Micro Micro Office Office Office Racks	der Credentials Offline Email Ca oox le Drive For Bus le Drive For Cor le Mail (OAuthy Email soft Azure Blob soft Sharepoint 365 Smail 365 OneDrive F 365 Sharepoint e Email Cache rive For Consur pace CloudFiles	ache File iness isumers (2) Storage : 2013 (On F for Business ners	Premise)		Amazon Simp Box.com Dropbox Google Drive Google Drive Google Mail (Imap Email Microsoft Azu Microsoft Sha Office 365 Em Office 365 Sha OneDrive For Rackspace Clo	For Business For Business For Consumers OAuthv2) Irre Blob Storago Irepoint 2013 (C ail eDrive for Busin arepoint Consumers budFiles	rices(: ; Dn-Pr ness	S3) remise)	

F-Response Management Console

Step 2: Obtain Amazon S3 Credentials

Amazon S3 Storage Credentials are found on the Amazon AWS Console (see **aws.amazon.com**). The specific credentials required are available under the "**Security Credentials**" link under **My Account**, see below:



Amazon Web Services Main Page

Locate the **Access Credentials** section and record (copy/paste) **the Access Key ID**, then click "**Show**" to open a secondary window containing the **Secret Access Key**.

Access Credentials

There are three types of access credentials used to authenticate your requests to AWS services: (a) access keys, (b) X.509 certificates, and (c) key pairs. Each access credential type is explained below.

Access Keys	🗟 X.509 Certificates 🕅 k	(ey Pairs	
Use access keys to when your account Your Access Keys	make secure REST or Query p t is created — see your access s	protocol requests to any AWS ser key below.	rvice API. We create one for you
Created	Access Key ID	Secret Access Key	Status
August 19, 2010	agh423jka941dlt0438	Show	Active (Make Inactive)
Create a new Access	Key		

Amazon AWS Access Key and Secret Access Key

The preceding credentials (Access Key and Secret Key) must be entered in the corresponding fields in the **Configure Amazon S3 Credentials** dialog. The Description field is **not** optional and is used to provide a secondary human readable identifier for the credential set (Ex "Client X Account").

Description	Amz S3 Test Account	Add
WS Access Key		
AWS Secret Key		
		Remove

Configure S3 Credentials

Step 3: Scan and Enumerate Amazon S3 Buckets

Double click on the newly added Amazon S3 account under the Providers tree. This will scan the provider and result in a listing of available targets in the Targets window.

Providers ×	Targets			
Providers Amazon Simple Storage Services(S3) Amz S3 Test Account Box.com Dropbox Google Drive For Business Google Drive For Consumers	Name s3-standard s3-jumbo s3-jumbo s3-empty la robananas.today la robananas.today la robananas.today la robananas.today	Local Device	Last Status Processing - test751	^

1 F-Response Management Console

Step 4: Login and Mount one or more Amazon S3 Buckets

Double click on an individual target in the Targets window to begin the mounting process. Once attached the share will present a drive letter.

Active Targets			×
Name	Local Device	Source	
📕 s3-jumbo	E:\	Amz S3 Test Account	

Attached Volume

Step 5: Create Image of attached volume

Select the newly attached target and right click on it in the Local Device column. Use the "Create Image..." option to open the "Image" dialog to begin imaging the device.

Name	Local	Local Device Source					
<mark>a</mark> s3-jumbo	E:\	Create Open Open	e Image in Windows Explorer in Command Prompt				
		Open	in X-Ways Forensics				

Step 6: Complete Imaging Options...

Image Physical or V	irtual Device	×	We'll work through this window from
Source Type Format Image Source Image Name Image Path Hash	O Physical (Includes Unallocated Space) Image: Straight of the strai	×	the top down. First, the Source Type is set to Virtual (by default) to be able to create an image of the connected virtual device data.
Compression Examiner Name Case Number Evidence Number	None Joe Examiner #45682 001		Next you can select the image Format —you have a choice between E01 (Expert
Unique Description Notes	Suspect's Jumbo bucket from Amz S3 Full image of virtual device, contains Files only. Start Image	Cancel	Witness), VHD (Virtual Hard Disk), or Both . This option determines what the Imager will provide at the
			end of the

collection.

Image Source should be populated if we opened this window from Windows Explorer, just verify that the drive letter is correct from Step 1. For **Image Path** we need to choose our destination drive—this must be a physical drive attached to our examiner machine (we cannot image to a network share).

Next we can choose a **Hash** format and the **Compression** level if you wish to compress the resulting image file. The remaining fields are specific to your case and can be filled out accordingly. These fields will be included in the resulting log file for the image.

Once you have all your information entered simply click the **Start Image** button to begin the process.

Step 7: Review the Image

Once started the dialog will close and you'll be able to monitor the image using the Active Images. When the Image completes you will see it move to Completed Images.

Local Device Last Status	^	Active	Images	Completed Images
E:\		Name AmzS	Source \\X64	Last Status Initializing VHD
Virtual Device			×	
Physical (Includes Unallocated Space) Virtual (Files and Folder Contents Only) E01 ~				
AmzS3 JumboBucket		~		
M:\	1			
F-Response Imager	×)15	5MB		
F-Response Image started successfully.				

Imaging started and running...

Step 8: Review the Completed Image

Right click on the completed image to access the Image Path, Log, and File List. These logs and listings contain details about the image, the image itself, and a file listing of files collected.

Images		Destination (M:)	
Active Images	Completed Images	Name	
Name	Source	AmzS3_JumboBucket.bcfg	
AmzS3 JumboBucket	\\?\Volume(0000037	AmzS3_JumboBucket.E01	
New Image		AmzS3_JumboBucket.E02	
Stop Image		AmzS3_JumboBucket	
Remove Image		f-response-hash-AmzS3_JumboBucket	
Restart Physical Image			
Open Image Path			
Open Image Log			
Open Image FileList			
Refresh Images and Cont	ainers		

Reviewing the completed image.

Troubleshooting

I have valid S3 Credentials however I get no buckets returned, why?

Most likely your computer's clock is too far skewed from the current time. Your examiner machine's clock must be accurate to within 15 minutes of actual time. The time zone is un-important.