

# **CFRM Record and Replay Trial**

## For Datadog

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## Legal Statement

Bottomline Technologies Cyber Fraud and Risk Management

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## I. Pre-requisites

### Datadog Agent:

1. Run from shell: `DD_API_KEY=1234 DD_SITE="datadoghq.com" bash -c "$(curl -L https://s3.amazonaws.com/dd-agent/scripts/install_script_agent7.sh)"`
2. Edit: `/etc/datadog-agent/datadog.yaml`
  - a. `logs_enabled: true`
3. Create directory: `/etc/datadog-agent/conf.d/Bottomline.d`
4. Create file named `conf.yaml` with contents below with your details for path, service, and source:

`logs:`

`- type: file`

`path: "/myDrive/logs/myapp.log"`

`service: "mainframe"`

`source: "bottomline"`

5. Restart agent by running the following from shell:
  - a. `systemctl stop datadog-agent`
  - b. `systemctl start datadog-agent`

### Create a Database:

Supported DBs: Postgres or Oracle – See CFRM Product Overview Guide for production supported databases and versions.

1. Note the connection details: name, location, port, username, password

## II. Bottomline Installation

### Install Enterprise Manager:

EM is used to manage configurations from a Windows Desktop.

1. Click CFRM-version.exe located in the Enterprise Manager for Windows folder
  - a. Click Next to start install
  - b. Select install folder and click Next
  - c. Unselect Server, leaving only Enterprise Manager (not Web-Start) and Click Next
  - d. Click through agree and next buttons to complete

## Install CFRM Record and Replay Trial:

### Option 1 - Container Based:

1. Run from shell in `/myDrive`: `tar -zxvf archive-bottomline-trial.tar.gz ./`
2. Copy your license file as `license.xml` file to the `/myDrive/Server/license` folder
3. `docker run -d --name rr-trial /`  
`-v /myDrive/Server/license:/opt/cfrm/Server/license /`  
`-v /myDrive/Server/servers/testcfirmsvc:/opt/cfrm/Server/servers/cfirmsvc /`  
`-v /myDrive/Queues:/Queues /`  
`-v /myDrive/logs:/var/myapp/logs /`  
`-p 2345:2345 /`  
`-p 8023:8023 /`  
`nbk96f1/cfrm:latest`

### Notes:

- cfirmsvc mapping: makes service changes persistent outside container. Files from archive contain the trial implementation and sample of screen mappings
- logs mapping: are where the JSON user events will be written on the server for the datadog agent
- queues mapping: an example on how to make the queues outside the container (not used). It is also possible to use a message queue service as recommended for production.
- Port 2345 mapping: this is the port Enterprise Manager will use to configure and administrate Record and Replay
- Port 8023 mapping: this is the web viewer port for Replay via http or https

### Option 2 - Linux install files:

1. Install Pre-requisites: OpenJDK
  - a. Note: Libpcap is not needed unless capturing network traffic from a network card. Please refer to Record and Replay Configuration guide for this if needed.
2. Copy `install.sh` and `CFRM-<version>-<build>.tar.gz` to the linux server install director
3. Run from shell: `chmod -R 777 .*`
4. Run from shell: `./install.sh`
5. Complete the install by following the prompts, select No to starting the container now.
6. Copy the contents of the `archive-bottomline-trial.gz` to the appropriate directories in the install folders.
7. Run from shell in the install directory: `./smCLI.sh start all`

Note: See Record and Replay Configuration Guide for additional install and configuration options if needed.

## Setup CFRM Record and Replay Trial:

1. Open Enterprise Manager
2. Right Click in Services box and select Add Server

- a. Enter address of docker container or server where installed and 2345 for port and click OK
3. Right click BacklogWriter and select Open
4. Click Modify next to Database Connection
5. Select Database type on General Tab
6. Click Database Properties tab and [enter connection Information](#), click OK
7. Click Synchronize Schema and then click OK to save
8. Right click on BacklogWriter and click Start Service
9. Right click on Viewer and click Start Service
10. Select the Implementation Tab
11. Navigate to Common/replay/replay\_url Right Click and select Open
12. Update the IP/Port (default port is 8023) in the URL string for your CFRM container details and select OK
13. Right Click on dc\_3270 and select Deploy Entity and click Next
14. Select Yes to restart the Data Channel after deploying and click Finish

Note: you can change the logger for where the JSON files are written if needed by modifying the EventsToExternalSystem configuration entity in Enterprise Manager by right clicking on the service under the Administration tab and selecting Show Configuration Entities which will allow you to modify this object.

## Load sample recordings from Enterprise Manager:

- Method 1: Provided sample recordings mainframe traffic
  1. From the administration tab, Right Click dc\_3270 and select Load Recordings
  2. Select the folder where the recordings were downloaded from the Sample Recording Files folder and select Finish
- Method 2: Your PCAP from a tcpdump of user sessions from your mainframe
  1. From the administration tab, Right Click sensor\_3270 and select Open
  2. Select the Capture Device tab
  3. Select CaptureDevice\_PCAP and click Modify
  4. Select the Device Properties tab
  5. Update the Path field with the file name and location of your PCAP file and select OK
  6. Right Click the sensor\_3270 and select Start Service
  7. Right Click the sensor\_3270 and select Stop Service

## Validate Recordings Processed Successfully:

In addition to seeing the user events in the log, you can check that the recordings processed successfully and replay these from Enterprise Manager by following the instructions below.

1. Select the Investigation tab
2. Right Click on Reports and select New -> Event Viewer Report
3. Click Finish
4. Update the "In the last" field to last 20 Years and click Execute Query
5. Right Click any recording to Replay

## Integration with Existing Bottomline Record and Replay:

Integration between Datadog and Bottomline leverages the Datadog agent custom log feature which can be setup using the instruction in the pre-requisite section of this guide for setting up the Datadog agent. For the JSON message creation in the logs from Record and Replay we have provided an IER file in the [Integrations folder](#) to import in the Implementation tab of Enterprise Manager: "Repository\_3270\_JSON\_UserEvent\_<version>.ier.zip".

1. In the Implementation tab of Enterprise Manager Right Click on the repository and select Import
2. Select the provided IER file and follow the prompts to import
3. Update the replay URL: Right Click on Common/replay/replay\_url and select Open
4. Update the IP/Port (default port is 8023) in the URL string for your CFRM container details and select OK
5. The dc\_3270/events folder contains sample events that can be used to generate the JSON messages or can be copied into your Data Channel to create these messages for sending to Datadog.

Note: you can change the logger for where the JSON files are written if needed by modifying the EventsToExternalSystem configuration entity in Enterprise Manager by right clicking on the service under the Administration tab and selecting Show Configuration Entities which will allow you to modify this object.