RTSP-interleaved stream capture from dump file

- · Setting a custom name for captured streams
- RTSP connection redirection testing
- · RTSP authentication testing

For debugging purpose, WCS includes the utility to capture RTSP stream from file obtained by tcpdump or any other IP packets dump collection tool. Then, the stream is published via RTSP, emulating IP camera. In its turn, WSC can capture RTSP stream from this "camera". The feature is useful when RTSP-source itself is not accessible, but there are dump files of stream from that source. The utility works with RTSP interleaved session files only.

To launch utility the following parameters must be set:

- · a directory containing dump files on server
- a port to listen RTSP incoming connections
- a source port for the stream dumped
- · a condition to handle dropped packets

Launch example:

java -Dcom.flashphoner.fms.AppHome=/usr/local/FlashphonerWebCallServer -cp /usr/local/FlashphonerWebCallServer
/lib/wcs-core.jar:/usr/local/FlashphonerWebCallServer/lib/* com.flashphoner.tools.rtsp.RtspPcapServer /usr/local
/FlashphonerWebCallServer/pcaps 3554 2554 true

Where

/usr/local/FlashphonerWebCallServer/pcaps - directory on server 3554- port on which IP camera will be emulated 2554- source port for dump file (real IP camera) true- ignore packets dropped while collecting dump file.

If WCS is launched on this server, the second parameter port number should be out of ranges used by WCS.

If source port is set to 0

java -Dcom.flashphoner.fms.AppHome=/usr/local/FlashphonerWebCallServer -cp /usr/local/FlashphonerWebCallServer
/lib/wcs-core.jar:/usr/local/FlashphonerWebCallServer/lib/* com.flashphoner.tools.rtsp.RtspPcapServer /usr/local
/FlashphonerWebCallServer/pcaps 3554 0 true

the utility will try to detect all RTSP streams in all the dumps found, and list them to the standard output (see below).

The utility prints all information to stdout. For example, if there is one file log.pcap in/usr/local/FlashphonerWebCallServer/pcaps directory, the following will be printed to console:

```
04:35:20,721 INFO RtspPcapServer - Starting
04:35:22,244 INFO RtspPcapServer - Available sources:
04:35:22,245 INFO RtspPcapServer - Source{path=/usr/local/FlashphonerWebCallServer/pcaps/log.pcap,
pcap=io.pkts.Pcap@5a39699c, stream=RTSPStream{config=8, data=22052, streamName='live1.sdp'}}
04:35:22,245 INFO RtspPcapServer - Starting PCAP RTSP server
04:35:22,407 INFO RtspPcapServer - Listening PCAP RTSP on address /0.0.0.0 port 3554
```

The RTSP stream name exposed by utility will be set to RTSP stream name from the dump, or RTSP URI from the dump encoded as base64.

In this case, stream can be captured from address

```
rtsp://hostname:3554/livel.sdp
```

where hostname is server name with utility running.

If the directory contains a number of dump files, the stream names should not be the same, only one of such streams will be captured.

Setting a custom name for captured streams

Since build 5.2.1794 it to possible to set a custom name prefix for RTSP streams captured from a dump file

```
rtsp_pcap_server_custom_stream_name=source
```

An index number starting from 0 will be added to the prefix. In this case all the RTSP streams captured from the dump file using the command

 $\label{local-plash-phoner-webCallServer-cp-usr-local-plash-phoner-webCallServer-cp-usr-local-plash-phoner-webCallServer-cp-usr-local-plash-phoner-webCallServer-lib-plash-phoner-core. \\ \label{local-plash-phoner-webCallServer-lib-plash-phoner-webCallServer-lib-plash-phoner-webCallServer-plash-phoner-web-callServer-plash-phoner-webCallServer-plash-phoner-web-callServer-pl$

will be available by the following URLs

```
rtsp://hostname:3554/source0
rtsp://hostname:3554/source1
...
```

where hostname is a server name where the utility is running.

RTSP connection redirection testing

To test RTSP connection redirection using IP camera emulator, it is necessary to set the method in flashphoner.properties file, in response on which 302 Moved Temporarily should be returned, for example

```
rtsp_pcap_server_redirect_method=OPTIONS
```

and IP camera address to which RTSP connection should be redirected, for example

```
rtsp_pcap_server_handler_redirect_url=rtsp://yourcamera:1935/live/sys3.stream
```

Then, run RTSP dump file capture utility and connect to stream from dump file as described above. RTSP connection will be redirected to address defined

RTSP authentication testing

Since build5.2.1002it is possible to test RTSPdigest authentication. To do this, the additional parameter must be set when launching the utility:

 $\label{local-plash-phoner-webCallServer-cp-usr-local-plash-phoner-webCallServer-cp-usr-local-plash-phoner-webCallServer-cp-usr-local-plash-phoner-webCallServer-lib/* com.flash-phoner-tools.rtsp.RtspPcapServer-usr-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-phoner-webCallServer-pcaps-3554-0-true-local-plash-pcaps-3554-0-true-local-plash-pcaps-3554-0-true-local-plash-pcaps-3554-0-true-pcap$

Wher

- · login user name to login
- password passwird
- SHA-256,MD5 authentication algorithms list

In this case, all the streams exposed by the utility must be played by URI like

rtsp://login:password@hostname:3554/streamName