

知 iMC EIA结合友商设备做Portal认证ios终端接入无线不能自动弹出认证页面的分析

Portal Radius iMC 姜娜 2021-02-27 发表

组网及说明

iMC EIA服务器---中间设备---认证设备--认证终端

问题描述

iMC结合友商设备做portal认证，Android终端连入无线后自动调出浏览器弹出认证页面，ios终端接入无线后无法自动弹出认证页面。

过程分析

通过在iMC EIA服务器上抓包分析，iOS终端接入无线wifi后会给portal服务器发送的请求中有captivenetwork support这个字段，iMC EIA判定有这个字段的话，会判定为非法请求，会先回应，然后直接结束TCP连接，也就是抓包中的FIN报文。之所以回应后，在结束TCP连接，是因为这个参数主要是控制频繁发送这种http请求，因此第一次的http请求会先回应，然后终止。

The image shows a Wireshark capture of network traffic. The main pane displays a list of packets. Packet 89 is highlighted, showing an HTTP GET request for /portal. Packet 90 is the corresponding response, which is a TCP FIN packet. The packet details pane for packet 89 shows the request method as GET, the request URI as /portal, and the user-agent as CaptiveNetworkSupport-40.1.wspv/v. The packet details pane for packet 90 shows the source port as 64460 and the destination port as 8080.

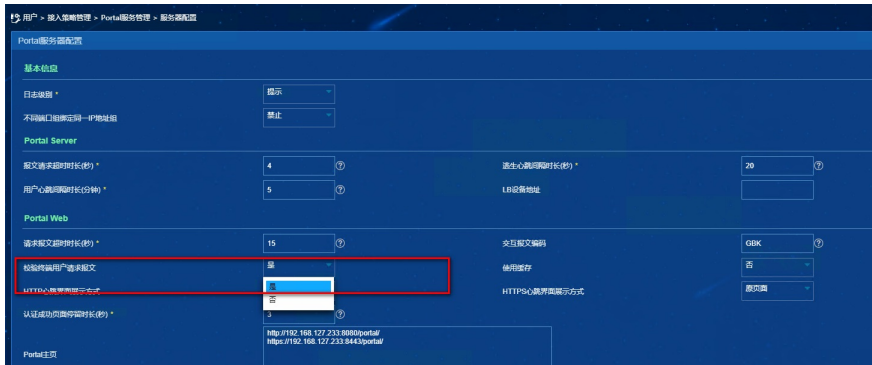
```
pcap_node0_content1_20210203115037447618.cap [Wireshark 1.6.21.6.2.ZDC-0.5 (SVN Rev 38842 from /releases/wireshark-1.6.2)]
File: ipaddr=... Expression: Clear Apply
Filter: ip.addr==...
No. Time Source Destination Protocol Length Info
79 2021-02-03 19:50:54.238923 ... .. TCP 70 64459 > http [ACK] Seq=1 Ack=1 Win=6533 Len=0 MSS=1460 Win=64 Tsval=16895687 Tsecr=0 SACK_PERM=1
80 2021-02-03 19:50:54.248170 ... .. TCP 70 64459 > http [ACK] Seq=1 Ack=1 Win=131712 Len=0 Tsval=16895673 Tsecr=16895687
81 2021-02-03 19:50:54.253288 ... .. HTTP 202 GET /hotspot-detect.html HTTP/1.0
82 2021-02-03 19:50:54.251626 ... .. HTTP 226 HTTP/1.0 302 Moved Temporarily
83 2021-02-03 19:50:54.269476 ... .. TCP 70 64459 > http [ACK] Seq=12 Ack=170 Win=111584 Len=0 Tsval=168956787 Tsecr=16895687
84 2021-02-03 19:50:54.269676 ... .. TCP 70 64459 > http [FIN, ACK] Seq=12 Ack=170 Win=111584 Len=0 Tsval=168956789 Tsecr=16895687
85 2021-02-03 19:50:54.270384 ... .. TCP 60 http > 64459 [ACK] Seq=170 Ack=133 Win=111584 Len=0
86 2021-02-03 19:50:54.272406 ... .. TCP 82 http-alt > 64460 [FIN] Seq=0 Win=6533 Len=0 MSS=1460 Win=64 Tsval=168956791 Tsecr=0 SACK_PERM=1
87 2021-02-03 19:50:54.272823 ... .. TCP 78 http-alt > 64460 [FIN, ACK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1460 Win=156 SACK_PERM=1 Tsval=17277589
88 2021-02-03 19:50:54.274651 ... .. TCP 20 64460 > http-alt [ACK] Seq=1 Ack=1 Win=131712 Len=0 Tsval=168956808 Tsecr=17277589
89 2021-02-03 19:50:54.282910 ... .. HTTP 190 GET /portal HTTP/1.0
90 2021-02-03 19:50:54.281559 ... .. HTTP 240 HTTP/1.0 300 Forbidden
91 2021-02-03 19:50:54.281663 ... .. TCP 70 http-alt > 64460 [FIN, ACK] Seq=121 Ack=121 Win=6650 Len=0 Tsval=17277590 Tsecr=168956808
92 2021-02-03 19:50:54.290683 ... .. TCP 70 64460 > http-alt [ACK] Seq=121 Ack=142 Win=111584 Len=0 Tsval=168956818 Tsecr=17277590
93 2021-02-03 19:50:54.290682 ... .. TCP 70 64460 > http-alt [ACK] Seq=121 Ack=142 Win=111584 Len=0 Tsval=168956818 Tsecr=17277590
94 2021-02-03 19:50:54.299397 ... .. TCP 70 64460 > http-alt [FIN, ACK] Seq=121 Ack=142 Win=111584 Len=0 Tsval=168956819 Tsecr=17277590
95 2021-02-03 19:50:54.299389 ... .. TCP 62 64460 > http-alt [FIN] Seq=0 Win=6533 Len=0 MSS=1460 Win=64 Tsval=168956820 Tsecr=0 SACK_PERM=1

# Frame 89: 190 bytes on wire (6320 bits), 190 bytes captured (6320 bits) on interface 0
# Ethernet II (VLAN tagged), Src: ... , Dst: ...
# Internet Protocol Version 4, Src: ... , Dst: ...
# Transmission Control Protocol, Src Port: 64460 (64460), Dst Port: http-alt (8080), Seq: 1, Ack: 1, Len: 120
# Hypertext Transfer Protocol
# GET /portal HTTP/1.0
# Expert info (Chat/sequence): GET /portal HTTP/1.0(r/v/n)
Request Method: GET
Request URI: /portal
Request Version: HTTP/1.0
Host: ...:8080/v/n
Connection: close/v/n
User-Agent: CaptiveNetworkSupport-40.1.wspv/v/n
Full request URI: http://...:8080/portal1
```

解决方法

在iMC EIA界面，用户--接入策略管理--Portal服务管理--服务器配置的页签下，校验终端用户请求报文选择为否后，再测试iOS终端接入wifi可以正常弹出认证页面。或者修改iMC安装目录/imc/portal/conf目录下的portalweb_userAgent.conf中的内容，把CaptiveNetworkSupport内容去掉后保存。

校验终端用户请求报文：选择是否校验终端用户HTTP请求的报文头。如果校验报文头，则可以丢弃由插件发起的HTTP请求报文，减轻Portal Web压力。



方法二：iMC安装目录/imc/portal/conf目录下的portalweb_userAgent.conf中的内容CaptiveNetworkSupport去掉。

