



Debug Output and CTA Logs

This appendix provides sample output from debugging and CTA logs and includes the following sections:

- [Admission Control Session Debug Output](#)
- [debug eou events Output](#)
- [EOU State Machine Debug Output](#)
- [CTA Logging Output](#)

Admission Control Session Debug Output

The following shows debug output during a successful admission control session and during the clearing of that session.

```
nac1751#show debug
eou:
  EAPoUDP Session Creation debugging is on
  EAPoUDP Session Destroy debugging is on
  EAPoUDP Session Removal from Hash Table debugging is on
  EAPoUDP Session Addition to Hash Table debugging is on
nac1751#
May 13 13:20:32: eou-obj_create:EOU Init Validation for idb= FastEthernet0/0 src_mac=
0010.a401.efa4 src_ip= 172.30.40.16
May 13 13:20:32: eou-obj_create:172.30.40.16: EAPoUDP Session Created
May 13 13:20:32: eou-obj_link:172.30.40.16: EAPoUDP Session added to Hash table
nac1751#clear eou all
nac1751#
May 13 13:20:56: eou-obj_destroy:(172.30.40.16): Session Timedout
May 13 13:20:56: eou-obj_unlink:172.30.40.16: EAPoUDP Session removed from hash table
May 13 13:20:56: eou-obj_destroy:172.30.40.16: Session Destroyed
nac1751#
```

debug eou events Output

The **debug eou events** command shows the timers being reset during successful communication between a client with CTA and a NAD.

EOU logging has also be enabled in this trace to show when the host is validated. These informational messages begin with EOU-6.

```

nac1751#deb eou events
Events debugging is on
nac1751#
May 13 13:27:35: eou-ev:129.128.203.192: msg = 33(eventEouCreateSession)
May 13 13:27:35: %EOU-6-SESSION: IP=172.30.40.16| HOST=DETECTED| Interface=FastEthernet0/0
May 13 13:27:35: eou-ev:172.30.40.16: msg = 3(eventEouStartHello)
May 13 13:27:35: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:35: eou-ev:eou_send_hello_request: Send Hello Request host= 172.30.40.1
eou_port= 5566 (hex)
May 13 13:27:36: %EOU-6-CTA: IP=172.30.40.16| CiscoTrustAgent=DETECTED
May 13 13:27:36: eou-ev:172.30.40.16: msg = 21(eventEouEapStart)
May 13 13:27:36: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:36: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:36: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:37: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:37: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:37: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:37: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:37: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:37: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:37: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:38: eou-ev:Starting AAA timer 60(172.30.40.16)
May 13 13:27:38: %EOU-6-POLICY: IP=172.30.40.16| TOKEN=healthy
May 13 13:27:38: %EOU-6-POLICY: IP=172.30.40.16| ACLNAME=#Cisco Secure
ACSACL#-IP-healthy-40a00ae9
May 13 13:27:38: %EOU-6-POSTURE: IP=172.30.40.16| HOST=AUTHORIZED|
Interface=FastEthernet0/0
May 13 13:27:38: eou-ev:Starting Retransmit timer 3(172.30.40.16)
May 13 13:27:38: %EOU-6-AUTHTYPE: IP=172.30.40.16| AuthType=EAP
May 13 13:27:38: eou-ev:Starting Revalidate timer 1800(172.30.40.16)
May 13 13:27:38: eou-ev:Starting Status Query timer 300(172.30.40.16)
nac1751#

```

EOU State Machine Debug Output

The debug of the EOU state machine shown below is a trace of the different messages that are exchanged between the CTA and NAD during a successful posture validation session.

```

nac1751#deb eou sm
EAPoUDP State Machine Events debugging is on
nac1751#
May 13 13:29:36: eou_auth 172.30.40.16: during state eou_authenticated, got event
4(eouAbort)
May 13 13:29:36: @@@ eou_auth 172.30.40.16: eou_authenticated -> eou_abort
May 13 13:29:36: %EOU-6-SESSION: IP=172.30.40.16| HOST=REMOVED| Interface=FastEthernet0/0
nac1751#
nac1751#
May 13 13:29:45: eou_auth 172.30.40.16: initial state eou_initialize has enter
May 13 13:29:45: %EOU-6-SESSION: IP=172.30.40.16| HOST=DETECTED| Interface=FastEthernet0/0
May 13 13:29:45: eou_auth 172.30.40.16: during state eou_initialize, got event
1(eouCheckProfile)
May 13 13:29:45: @@@ eou_auth 172.30.40.16: eou_initialize -> eou_initialize

```

```
May 13 13:29:45: eou_auth 172.30.40.16: during state eou_initialize, got event
3(eouStartHello)
May 13 13:29:45: @@@ eou_auth 172.30.40.16: eou_initialize -> eou_hello
May 13 13:29:45: eou_auth 172.30.40.16: during state eou_hello, got event
5(eouHelloResponse)
May 13 13:29:45: @@@ eou_auth 172.30.40.16: eou_hello -> eou_client
May 13 13:29:45: %EOU-6-CTA: IP=172.30.40.16| CiscoTrustAgent=DETECTED
May 13 13:29:45: eou_auth 172.30.40.16: during state eou_client, got event
12(eouEapStart)
May 13 13:29:45: @@@ eou_auth 172.30.40.16: eou_client -> eou_client
May 13 13:29:45: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:45: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:45: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:45: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:46: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:46: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:47: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:47: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:47: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:47: eou_auth 172.30.40.16: during state eou_server, got event
13(eouEapRequest)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_server -> eou_client
May 13 13:29:47: eou_auth 172.30.40.16: during state eou_client, got event
14(eouEapResponse)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_client -> eou_server
May 13 13:29:47: %EOU-6-POLICY: IP=172.30.40.16| TOKEN=healthy
May 13 13:29:47: %EOU-6-POLICY: IP=172.30.40.16| ACLNAME=#Cisco Secure
ACSACL#-IP-healthy-40a00ae9
```

```

May 13 13:29:47: %EOU-6-POSTURE: IP=172.30.40.16| HOST=AUTHORIZED|
Interface=FastEthernet0/0
May 13 13:29:47:      eou_auth 172.30.40.16: during state eou_server, got event
15(eouEapSuccess)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_server -> eou_authenticated
May 13 13:29:47: %EOU-6-AUTHTYPE: IP=172.30.40.16| AuthType=EAP
May 13 13:29:47:      eou_auth 172.30.40.16: during state eou_authenticated, got event
7(eouResultAck)
May 13 13:29:47: @@@ eou_auth 172.30.40.16: eou_authenticated -> eou_authenticated

```

CTA Logging Output

To start CTA logging, run the **ctalogd enable** command from the CLI in the directory where CTA is installed. After executing this command, **ctalogd** writes a trace of its current activity into the following directory:

C:\Documents and Settings\All Users\Application Data\Cisco Systems\CiscoTrustAgent\Logs

The following shows a trace from a successful posture validation session:

```

Cisco Trust Agent Version 1.0.48.0
Copyright © 2003 Cisco Systems, Inc. All Rights Reserved. Trust Agent Type(s):
Windows, WinNT Running on: 5.1.2600

1      17:33:33.27905/21/2004Sev=Info/4PADaemon/0x6300000D
Ctad service stopped

2      17:33:34.48005/21/2004Sev=Info/6NetTrans/0x63100003
EAPoUDP configuration: local address=0.0.0.0, local port=0x5566, support Max 8 sessions,
session idle timeout 3600 seconds

3      17:33:35.51205/21/2004Sev=Info/4PADaemon/0x6300000E
Ctad service started

4      17:33:52.24605/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

5      17:33:52.25605/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet dump:0012000801D116DA000000080010004A38B9EC1

6      17:33:52.28605/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet
dump:8012001801D116DAA38B9EC18003000CA38B9EC12433048F7E24FE25800100043061E4CE

7      17:33:52.29605/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

8      17:33:52.31605/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet
dump:0013001901D116DB3061E4CE8003000CA38B9EC12433048F7E24FE25800200050101000501

9      17:33:52.33605/21/2004Sev=Info/4NetTrans/0x6310000E
EAPoUDP Session 1 created for NAD 172.30.40.1, total session count: 1

10     17:33:52.35605/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet dump:8013000901D116DBA38B9EC1800200050201000501

11     17:33:52.37605/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

12     17:33:52.39605/21/2004Sev=PktDump/13NetTrans/0x63100006

```

```
EAPoUDP incoming packet dump:0013000A01D116DC3061E4CE80020006010400061921

13    17:33:52.43605/21/2004Sev=Info/5PEAP/0x63400009
PEAP module initialization success!

14    17:33:52.45605/21/2004Sev=Info/5PEAP/0x6340000B
PEAP processing begun

15    17:33:52.48605/21/2004Sev=Info/4EAPTLV/0x63500005
Begin EAP-TLV processing

16    17:33:52.86705/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet
dump:8013007401D116DCA38B9EC1800200700204007019810000006616030100610100005D030140AE9FF00E5
EBE99A7BDA6961FAB7047E35CB1EA474BD741DC4BE55E21EB1BF500003600390038003500160013000A0033003
2002F0007006600050004006300620061001500120009006500640060001400110008000600030100

17    17:33:52.88705/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

18    17:33:52.89705/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet
dump:001303F801D116DD3061E4CE800203F4010503F419C100000438160301002A02000026030140AE9FF1619
BF4AEB0A422758A3D36C3424810DA1D27E2ABC0C1E239DE47694E0000350016030103FB0B0003F70003F400020
7308202033082016CA003020102020203E9300D06092A864886F70D0101040500302F311C301A060355040A131
3436973636F2053797374656D732C20496E632E310F300D06035504031306537472657373301E170D303230383
0373132313335335A170D3438303832303035343533375A302F311C301A060355040A1313436973636F2053797
374656D732C20496E632E310F300D0603550403130653657276657230819F300D06092A864886F70D010101050
003818D0030818902818100DF2ED9651FDDC2EF13E7677710343D3CD68A3964AD0FF123E4249BE114757FE0DDC
123255E8D240878637D415A7C0A91299F1D4CCB4005EA80571A9F27C852D66EFFBEA02D04CC8AE2FBB50DE901C
54E7E00C24D2A897C01914ACE99204D2A44EFB7089A48A614BD8E3CE6B9C9A4C9C3DBD1396DAF1CD29A2259AA
47F86BC490203010001A32E302C300B0603551D0F0404030203A8301D0603551D250416301406082B060105050
7030106082B06010505070303300D06092A864886F70D0101040500038181003AB28DB0F38CC5BB172AD732ED2
4B1E10B8BFA68362378D7B8FD23D476D18C889C78F604A73C14039BEF60D28A78B95FB6012175FCE17EBC10483
E78D5A7A6BA98A4FD012149566642E212B29582755D0FAEE84883735CAF874EAF918E15CBF7DFEE8B22F3DF1
50339C4C8C8B293C760FD3CE873E443721C7760AD91C680530001E7308201E33082014CA003020102020100300
D06092A864886F70D0101040500302F311C301A060355040A1313436973636F2053797374656D732C20496E632
E310F300D06035504031306537472657373301E170D3032303830373131333830365A170D34383038323030353
03935305A302F311C301A060355040A1313436973636F2053797374656D732C20496E632E310F300D060355040
3130653747265737330819F300D06092A864886F70D010101050003818D0030818902818100B9FC383B95B5E14
08A7EC17FC775F509A2D8FD0AB700C18D470D8466030ED3835D5C147978DDA709A14D2A33512B78981EB092058
90DE918593436A30FA64B114334821F64541591F7205CD84DED4A49E5AD53D59E1735E8030D61C956126E6A6B1
219599F6FC5B82404367F14D7C6B2C20622207FC642AC10D145EA60BA6DFF0203010001A30F300D300B0603551
D0F0404030204300D06092A864886F70D010104050003818100A925307D87296963035BBD14C94E561E5CAC
A62B84AF28EEB9B1C90C2037A243E1F2DC89D584D157B8B697BA68A689E0BDA6C1EC6506F2B86876

19    17:33:52.91705/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet dump:8013000A01D116DDA38B9EC180020006020500061901

20    17:33:52.94705/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

21    17:33:52.96705/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet
dump:0013005801D116DE3061E4CE80020054010600541901559798BD604AC37AFC18CA64DB9BAA10172916C59
C2AB66370734BCED3ABD6DE00EF9249E1E982580E30B0E6D11E779A4FA71FD0A47843DA2DB32DFCC86E577873D
CE05DD316030100040E000000

22    17:33:53.02705/21/2004Sev=Info/5PEAP/0x6340000D
Server certificate (/O=Cisco Systems, Inc./CN=Server) has been validated by local CA
certificate (/O=Cisco Systems, Inc./CN=Stress).

23    17:33:53.04705/21/2004Sev=Info/5PEAP/0x6340000E
No rule configured for server certificate DN checking. Pass.
```

```

24      17:33:53.07705/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet
dump:801300D401D116DEA38B9EC1800200D0020600D01981000000C616030100861000008200808E6052D2AE3
311CFB4948DE8EB248DE17F72FEF1C91BDE8890E23CF8016C628A5DF72AA98E76A8D501CD645A2DA99BBBD1367
E2EFC0ED9DE9A1FCA34CEDF5200FA5DEAB49109E836A37BE92FE0E8142E6F28187C3502D6EFE9185D8BE219C17
2BBBECF21C25AB3F297DB2B43DE6B163DE91F090661B9455ABE4E4F33391CC6414030100010116030100300DA
3EB5AAC0586DDAD169105671402F1621DCA81F2BC13104D7ED9BF60D23BFC86C8DDFF2999B7400C273FD6F8396
804

25      17:33:53.09705/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

26      17:33:53.11705/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet
dump:0013004901D116DF3061E4CE800200450107004519810000003B140301000101160301003043E9AE8C424
49AF10E9F317BD58E8B5C3A76689CC6400C504ADE949AD213F964B372DDCC75446343DA3AB6015347B009

27      17:33:53.14705/21/2004Sev=Info/4PEAP/0x63400003
PEAP handshake success

28      17:33:53.16705/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet dump:8013000A01D116DFA38B9EC180020006020700061901

29      17:33:53.19705/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

30      17:33:53.21705/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet
dump:0013002F01D116E03061E4CE8002002B0108002B19011703010020B70E495379E4E87DF1A1E80AB0CDB04
CE95B6649C330EE19271456F4DA35D1E4

31      17:33:53.23705/21/2004Sev=Debug/7EAPTLV/0x63500003
EAP-TLV starts processing message type: EAP Identity request

32      17:33:53.28805/21/2004Sev=Info/6EAPTLV/0x63500002
EAP Identity: WILDERNE-TECRA8:John Dough

33      17:33:53.31805/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet
dump:8013004F01D116E0A38B9EC18002004B0208004B1901170301004014CAF0CB6A5200CA58E6442D8F1F5FA
A9487CE0EFC85D881F4A88BBB26BE7DC133DD57AA5533268C345BD49D0B00535711668A9BB53C0B563244BAC7
F08CD31

34      17:33:53.33805/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

35      17:33:53.36805/21/2004Sev=PktDump/13NetTrans/0x63100006
EAPoUDP incoming packet
dump:0013002F01D116E13061E4CE8002002B0109002B19011703010020F0A620F661F729277733A265E4A427E
AD3D94DF60EA748692FABEE073CFA3946

36      17:33:53.38805/21/2004Sev=Warning/3EAPTLV/0x63500005
Unexpected EAP type (0x6)

37      17:33:53.41805/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet
dump:8013002F01D116E1A38B9EC18002002B0209002B190117030100208E826C300AFE850AA6E8A6B73940F51
12B0B781E4D656BE4AFB6F71895EBC5B1

38      17:33:53.43805/21/2004Sev=Debug/7NetTrans/0x63100005
Received a packet from address 172.30.40.1, port 0x5566

39      17:33:53.46805/21/2004Sev=PktDump/13NetTrans/0x63100006

```


EAPoUDP incoming packet dump:0014000801D116E43061E4CE80020004030B0004

56 17:33:53.91805/21/2004Sev=Info/4PEAP/0x63400008
PEAP received a message of: EAP Success

57 17:33:53.93805/21/2004Sev=Info/5EAPTLV/0x63500004
Done with EAP-TLV processing

58 17:33:53.96905/21/2004Sev=Info/5PEAP/0x6340000C
PEAP processing finished

59 17:33:53.98905/21/2004Sev=Info/5PEAP/0x6340000A
PEAP module deinitialized

60 17:33:54.01905/21/2004Sev=PktDump/13NetTrans/0x63100007
EAPoUDP outgoing packet dump:8014000001D116E4A38B9EC1