

Cisco版本的4.1.3 WAAS故障排除指南及以后

章节：排除MAPI AO故障

此条款描述如何排除MAPI AO故障。

指南

主要

了解

初步

排除

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MAPI加速器

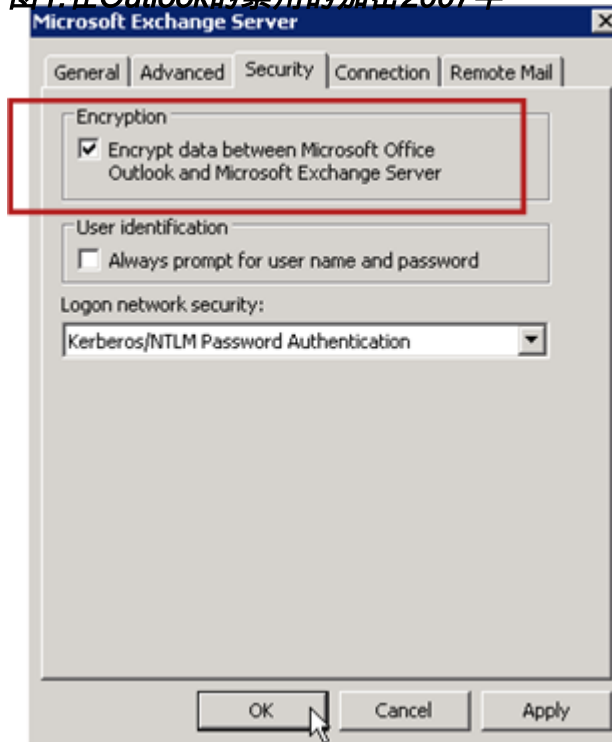
MAPI加速器优化微软奥特卢克Exchange电子邮件数据流。Exchange使用EMSMDDB协议，在MS-RPC被分层堆积，反过来使用TCP或HTTP (不支持)作为低级传输。

MAPI AO通过被缓存的和noncached模式数据流的2007个客户端支持Microsoft Outlook 2000。使用信息验证(签字)或加密MAPI AO没有加速的安全连接。从更老的客户端递交这样连接和连接与通用的AO TFO最优化的。另外，Outlook不支持Web访问(OWA)和交换交换连接。

Note:默认情况下微软奥特卢克2007有被启用的加密。您必须禁用加密受益于MAPI应用程序加速器。在Outlook，请选择Tools>电子邮件帐户，选择视图或更改现有的电子邮件帐户和其次然后点击。选择交换帐户，然后点击更改。点击更多设置，然后点击安全选项。如图1所显示，不选定在Microsoft Office Outlook和Microsoft Exchange服务器复选框之间的加密数据。

或者，通过使用[组策略](#)，您能禁用Exchange服务器的所有用户的加密。

图1. 在Outlook的禁用的加密2007年



在以下情况下，MAPI AO不处理连接：

- 加密的连接(被递交对通用的AO)
- 不支持的客户端(被递交对通用的AO)
- 不可恢复的解析错误。客户端和服务端之间的所有TCP连接是断开的。当客户端重新连接

时，递交所有连接与通用的AO。

- 当超载时，客户端尝试设立在连接的一个新的关联组WAE。
- 客户端建立连接，当超载时WAE，并且MAPI被预留的连接资源不是可用的。

Outlook客户端和服务端在会话上呼应一个组被呼叫的TCP连接关联组。在关联组内，对象访问能在所有连接间跨过，并且连接动态地创建并且发布当必要时。客户端能同时有超过一个关联组开放对不同的服务器或同一个服务器。(公共文件夹在从邮件存储的不同的服务器配置。)

重要的是在关联组内的所有MAPI连接在分组和数据中心通过同一个对WAEs。如果在关联组内的一些连接不通过这些的MAPI AO WAEs，MAPI AO不会看到在那些连接和连接执行的处理说“退出”关联组。为此，在形成一个高性能的组的逐次地集群的轴向WAEs不应该配置MAPI AO。

的MAPI连接的症状退出他们的WAE关联组是Outlook错误症状例如复制消息或Outlook停止回应。

在TFO超载状态时，一个现有的关联组的新连接通过将通过和退出MAPI AO，因此MAPI AO事先预留一定数量的连接资源使超载状态减到最小的影响。欲了解更详细的信息关于后备的MAPI连接和他们的影响对设备超载，请参阅部分“[MAPI应用程序加速器被保留的连接对超载影响](#)”在排除超载状态条款故障上。

验证一般AO配置和状态用显示加速器并且显示许可证命令，正如[排除应用程序加速度](#)条款故障所描述。企业许可证对于MAPI加速器操作是必需的，并且EPM应用程序加速器一定是启用的。

其次，通过使用显示加速器mapi命令，如图2.所显示，请验证状态特定对MAPI AO。您要发现MAPI AO是启用的，运行和注册，并且连接限制显示。如果设置状态是启用的，但是操作状态被关闭，指示一个许可证问题。

验证MAPI加速器状态的图2.

```
WAE674# sh accelerator mapi
```

Accelerator	Licensed	Config State	Operational State
mapi	Yes	Enabled	Running

MAPI:

Accelerator Config Item	Mode	Value
Read optimization	User	enabled
Write optimization	User	enabled

Policy Engine Config Item

State	Value
Registered	Use Policy
Default Action	6000
Connection Limit	5990
Effective Limit	5.0 seconds
Keepalive timeout	

AO admin and operational state

Enabled Optimizations

- Registered state indicates AO is healthy
- Displays connection limit

请使用show statistics加速器epm命令验证EPM AO是工作。检查总被处理的连接、总数请求成功分析和总回应成功分析计数器增加，当客户端开始。

请使用show running-config命令验证适当配置MAPI和EPM数据流策略。您要发现加速电子邮件和消息传送应用程序动作和您的mapi要发现被定义的MSEndPortMapper分类符和数据流策略，如下：

```
WAE674# sh run | include mapi
map adaptor EPM mapi
name Email-and-Messaging All action optimize full accelerate mapi
```

```
WAE674# sh run | begin MS-EndPointMapper
...skipping
classifier MS-EndPointMapper
match dst port eq 135
exit
```

```
WAE674# sh run | include MS-EndPointMapper
classifier MS-EndPortMapper
name Other classifier MS-EndPortMapper action optimize DRE no compression none accelerate
MS-port-mapper
```

请使用dynamic命令显示策略引擎的应用程序验证动态匹配规则存在，如下：

- 寻找与用户ID的一个规则：EPM和映射名字：uuida4f1db00-ca47-1067-b31f-00dd010662da。
- 流字段指示激活连接总数与交换业务的。
- 对于每个MAPI客户端您应该看到与用户ID的一个分开的条目：MAPI。

请使用show statistics连接优化的mapi命令检查WAAS设备建立被最优化的MAPI连接。验证“M”出现于MAPI连接的Accel列，表明使用了MAPI AO，如下：

```
WAE674# show stat conn opt mapi
```

```
Current Active Optimized Flows:                2
Current Active Optimized TCP Plus Flows:       1
Current Active Optimized TCP Only Flows:       1
Current Active Optimized TCP Preposition Flows: 0
Current Active Auto-Discovery Flows:           0
Current Reserved Flows:                        12          <----- Added in 4.1.5
Current Active Pass-Through Flows:             0
Historical Flows:                              161
```

D:DRE,L:LZ,T:TCP Optimization RR:Total Reduction Ratio
A:AOIM,C:CIFS,E:EPM,G:GENERIC,H:HTTP,M:MAPI,N:NFS,S:SSL,V:VIDEO

```
ConnID Source IP:Port Dest IP:Port PeerID Accel RR
342 10.56.94.101:4506 10.10.100.100:1456 0:1a:64:d3:2f:b8 TMDL 61.0% <-----Look for
"M"
```

Note:在版本4.1.5，当前后备的流计数器在输出中被添加了。此计数器是指后备的MAPI连接资源的数量在当前是未使用的WAE的，但是为将来MAPI连接留出了。欲了解更详细的信息关于后备的MAPI连接和他们的影响对设备超载，请参阅部分[“MAPI应用程序加速器被保留的连接对超载影响”](#)在排除超载状态条款故障上。

如果观察到与“TGDLD”的连接在Accel列，这些连接增加了与通用的AO并且被最了优化与仅传输最优化。如果这些是您期望由MAPI AO处理的连接，可能这是因为他们是被加密的MAPI连接。要检查被请求了被加密的MAPI连接的数量，请使用show statistics加速器mapi命令如下：

```
wae# sh stat accel mapi
```

```
MAPI:
Global Statistics
-----
```

```

Time Accelerator was started: Thu Nov 5 19:45:19 2009
Time Statistics were Last Reset/Cleared: Thu Nov 5 19:45:19 2009
Total Handled Connections: 8615
Total Optimized Connections: 8614
Total Connections Handed-off with Compression Policies Unchanged: 0
Total Dropped Connections: 1
Current Active Connections: 20
Current Pending Connections: 0
Maximum Active Connections: 512
Number of Synch Get Buffer Requests: 1052
Minimum Synch Get Buffer Size (bytes): 31680
Maximum Synch Get Buffer Size (bytes): 31680
Average Synch Get Buffer Size (bytes): 31680
Number of Read Stream Requests: 3844
Minimum Read Stream Buffer Size (bytes): 19
Maximum Read Stream Buffer Size (bytes): 31744
Average Read Stream Buffer Size (bytes): 14556
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 1172480
Average Accumulated Read Ahead Data Size (bytes): 594385
Local Response Count: 20827
Average Local Response Time (usec): 250895
Remote Response Count: 70486
Average Remote Response Time (usec): 277036
Current 2000 Accelerated Sessions: 0
Current 2003 Accelerated Sessions: 1
Current 2007 Accelerated Sessions: 0
Secured Connections: 1 <-----
Encrypted connections
Lower than 2000 Sessions: 0
Higher than 2007 Sessions: 0

```

您能找到客户端的IP地址要求在Syslog的被加密的MAPI连接通过搜索消息类似以下：

```
wae# sh stat accel mapi
```

```

MAPI:
Global Statistics
-----
Time Accelerator was started: Thu Nov 5 19:45:19 2009
Time Statistics were Last Reset/Cleared: Thu Nov 5 19:45:19 2009
Total Handled Connections: 8615
Total Optimized Connections: 8614
Total Connections Handed-off with Compression Policies Unchanged: 0
Total Dropped Connections: 1
Current Active Connections: 20
Current Pending Connections: 0
Maximum Active Connections: 512
Number of Synch Get Buffer Requests: 1052
Minimum Synch Get Buffer Size (bytes): 31680
Maximum Synch Get Buffer Size (bytes): 31680
Average Synch Get Buffer Size (bytes): 31680
Number of Read Stream Requests: 3844
Minimum Read Stream Buffer Size (bytes): 19
Maximum Read Stream Buffer Size (bytes): 31744
Average Read Stream Buffer Size (bytes): 14556
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 1172480
Average Accumulated Read Ahead Data Size (bytes): 594385
Local Response Count: 20827
Average Local Response Time (usec): 250895

```

```

Remote Response Count:                70486
Average Remote Response Time (usec):  277036
Current 2000 Accelerated Sessions:    0
Current 2003 Accelerated Sessions:    1
Current 2007 Accelerated Sessions:    0
Secured Connections:                  1          <-----
Encrypted connections
Lower than 2000 Sessions:             0
Higher than 2007 Sessions:            0

```

通过使用show statistics连接优化的mapi detail命令如下，您能查看MAPI连接统计：

```

WAE674# show stat conn opt mapi detail
Connection Id:          1830
Peer Id:               00:14:5e:84:24:5f
Connection Type:      EXTERNAL CLIENT
Start Time:           Thu Jun 25 06:32:27 2009
Source IP Address:    10.10.10.10
Source Port Number:   3774
Destination IP Address: 10.10.100.101
Destination Port Number: 1146
Application Name:     Email-and-Messaging          <-----Should see
Email-and-Messaging
Classifier Name:      **Map Default**
Map Name:             uuida4f1db00-ca47-1067-b31f-00dd010662da  <-----Should see this
UUID
Directed Mode:       FALSE
Preposition Flow:    FALSE
Policy Details:
  Configured:        TCP_OPTIMIZE + DRE + LZ
  Derived:           TCP_OPTIMIZE + DRE + LZ
  Peer:              TCP_OPTIMIZE + DRE + LZ
  Negotiated:        TCP_OPTIMIZE + DRE + LZ
  Applied:           TCP_OPTIMIZE + DRE + LZ
Accelerator Details:
  Configured:        MAPI          <-----Should see MAPI
configured
  Derived:           MAPI
  Applied:           MAPI          <-----Should see MAPI
applied
  Hist:             None

```

	Original	Optimized
Bytes Read:	4612	1973
Bytes Written:	4086	2096

...

本地和远程回应计数，并且平均响应时间在此输出中显示：

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read:                46123985
Total Bytes Written:             40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0

```

Maximum Synch Get Buffer Size (bytes):	0	
Average Synch Get Buffer Size (bytes):	0	
Number of Read Stream Requests:	0	
Minimum Read Stream Buffer Size (bytes):	0	
Maximum Read Stream Buffer Size (bytes):	0	
Average Read Stream Buffer Size (bytes):	0	
Minimum Accumulated Read Ahead Data Size (bytes):	0	
Maximum Accumulated Read Ahead Data Size (bytes):	0	
Average Accumulated Read Ahead Data Size (bytes):	0	
Local Response Count:	0	<-----
-		
Average Local Response Time (usec):	0	<-----
-		
Remote Response Count:	19	<-----
-		
Average Remote Response Time (usec):	89005	<-----
-		
. . .		

被加密的MAPI加速度

摘要

自WAAS 5.0.1 MAPI加速器能当前加速被加密的MAPI数据流。默认情况下此功能在5.0.3版本将被启用。然而，按顺序请顺利地加速那里被加密的MAPI数据流是需求的编号在WAAS和Microsoft AD环境里。此指南将帮助您验证和排除eMAPI功能故障。

功能信息

默认情况下eMAPI在5.0.3将被启用，并且请要求以下顺利地加速加密的数据流。

- 1) 在所有核心WAEs必须初始化CMS安全的存储和开门
- 2) WAEs一定能解决Exchange服务器和Kerberos KDC (激活目录控制器)的FQDN
- 3) WAE的时钟必须同步与KDC
- 4) 在路径的所有WAEs必须启用SSL安全acclerator、的广域网和eMAPI从Outlook到Exchange
- 5) 在路径的WAEs必须有正确的policy-map配置
- 6) 核心WAE必须有一个或更多被加密的服务域被配置的Identities (用户或计算机帐户)
- 7) 如果使用计算机帐户必须加入此WAE到AD域。
- 8) 然后与机器或用户帐户用例，需要产生那些对象在激活目录里特定权限。“复制目录更改”，并且“复制目录更改”必须两个所有设置准许。

推荐的方式执行此是通过一个通用安全组(即请分配权限到组然后添加在加密服务和用户名指定的WAAS设备到此组)。请参阅附加的指南关于AD配置和WAAS CM GUI屏幕画面。

故障排除方法

Step1 -验证加密服务身份配置和关键检索成功

当诊断命令(下面的第2步)时验证加密服务的存在不验证键检索是否将是成功的。因此我们不通过运行diagnostic命令的那知道适当的权限是否在激活目录里产生了对象(机器或用户帐户)。

什么需要汇总执行配置和验证加密服务将成功关键检索

用户帐户：

1. 创建AD用户
2. 创建AD组，并且“复制目录的集更改”，并且“复制目录更改所有”准许
3. 添加用户到创建的组
4. 定义用户帐户域身份在加密服务中
5. 运行获得关键诊断的cli

窗口域诊断加密服务GET KEY <exchange服务器FQDN> <域名>

注意您应该使用在服务器配置的实际/实际交换服务器名可能而不是的NLB/VIP类型FQDN解决到多个Exchange服务器。

6. 如果关键检索工作-执行

成功示例：

```
pdi-7541-dc#windows-domain诊断加密服务GET KEY pdidc-exchange1.pdidc.cisco.com  
pdidc.cisco.com
```

SPN pdidc-exchange1.pdidc.cisco.com，域名：pdidc.cisco.com

关键检索进展中。

```
pdi-7541-dc#windows-domain诊断加密服务GET KEY pdidc-exchange1.pdidc.cisco.com  
pdidc.cisco.com
```

SPN pdidc-exchange1.pdidc.cisco.com，域名：pdidc.cisco.com

pdidc-exchange1.pdidc.cisco.com的键位于内存键高速缓冲存储器

计算机帐户

1. 加入核心WAE设备对AD域
2. create “复制目录的AD组和集更改”，并且“复制目录更改所有”准许
3. 添加计算机帐户组队创建
4. 配置加密服务使用计算机帐户
5. 某时产生获得组策略适用于被加入的机器或从AD强制组策略的应用程序。gpupdate /force。
6. 运行获得关键诊断的cli

窗口域诊断加密服务GET KEY <exchange服务器FQDN> <域名>

注意您应该使用在服务器配置的实际/实际交换服务器名可能而不是的NLB/VIP类型FQDN解决到多

个Exchange服务器。

7. 如果关键检索工作-执行

在Encryption服务和AD设置的欲了解更详细的信息和屏幕画面请参阅附加的指南。

第2步-在5.0.3新diagnostic命令引入检查某些必需的设置。

-accelerator mapi验证加密设置

- 1.CLI进行多种有效性检查。它输出的是能力汇总加速被加密的MAPI数据流作为边缘或核心。
- 2.Checks多种组件的状态/设置归因于为了加密服务能适当地运作。
- 3.When将输出什么失踪和修正它的CLI或动作。
- 4.It提供汇总作为边界设备和核心设备。可以是边缘和核心的设备应该有EMAPI可操作为边缘和核心。

下面从不正确地被配置的WAE的一输出示例: :

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

下面正确地配置的核心WAE的输出:

. . .
MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

第3步-请手工验证没有由diagnostic命令检查以上的WAE设置。

1) 上述命令，而被配置的NTP的存在的chekcs，它实际上不验证时代是同步的在WAE和KDC之间。是非常重要的时代是同步的在核心和KDC之间关键检索的能是成功的。

如果手工检查显示他们是不同步的简单方法强制WAE的时钟是同步的是ntpdata命令(ntpdata <KDC ip>)。然后请指向WAEs企业Ntp server。

2) 验证dnslookup在Exchange服务器的FQDN和KDCs的FQDN的所有WAEs成功

3) 验证class-map和策略映射在路径的所有WAEs正确地被配置。

pdi-7541-dc#sh class-map类型waas MAPI

Class-map类型waas任一匹配MAPI

匹配tcp目的地epm mapi (0流匹配)

pdi-7541-dc#show策略映射类型waas策略映射类型waas

WAAS-GLOBAL (6084690总数)

组MAPI (0流匹配)

优化充分加速mapi应用程序电子邮件和消息传送

4) 验证CMS安全的存储开门，并且初始化在所有WAEs “请显示cms安全的存储”

数据分析

除分析输出的diagnostic命令和指南以外请显示您可能需要查看sysreport的命令。

特别地您将要查看mapiao错误日志、SR错误日志(核心仅WAE)和wsao错误日志文件。

将有在每本日志的暗示根据将导致您原因连接丢弃通用的AO的方案。

因为这里参考是显示多种工作的组件的输出示例:

此输出是从SR错误日志并且显示计算机帐户加密服务身份的验证

Note:这只确认核心WAE加入了域，并且计算机帐户存在。

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

此输出再是从核心SR错误日志并且显示从KDC的成功的关键检索。

. . .
MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

此输出是从在边缘WAE的mapiao错误日志文件成功的eMAPI连接的

. . .
MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
```

```

Average Local Response Time (usec):          0          <-----
-
Remote Response Count:                      19          <-----
-
Average Remote Response Time (usec):        89005       <-----
-
. . .

```

这是从同一TCP conneciton的mapiao错误日志WAE输出的对应的核心

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:      Thu Jun 25
06:32:27 2009
Total Bytes Read:                            46123985
Total Bytes Written:                        40864046
Number of Synch Get Buffer Requests:         0
Minimum Synch Get Buffer Size (bytes):       0
Maximum Synch Get Buffer Size (bytes):       0
Average Synch Get Buffer Size (bytes):       0
Number of Read Stream Requests:            0
Minimum Read Stream Buffer Size (bytes):     0
Maximum Read Stream Buffer Size (bytes):     0
Average Read Stream Buffer Size (bytes):     0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                      0          <-----
-
Average Local Response Time (usec):          0          <-----
-
Remote Response Count:                      19          <-----
-
Average Remote Response Time (usec):        89005       <-----
-
. . .

```

常见问题

下面导致eMAPI连接Hand-off对通用的AO的一些常见原因(TG)。

第1个问题：在核心配置的加密服务身份WAE没有在AD的正确权限。

SRerrolog的输出在核心WAE

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

解决方法1：参见配置指南并且验证在AD的对象有正确权限。“复制目录更改”，并且“复制目录更改”必须两个所有设置准许。

http://www.cisco.com/en/US/docs/app_ntwk_services/waas/waas/v511/configuration/guide/policy.html#wp1256547

第2个问题：有在尝试检索键从的核心WAE和KDC之间的时间反称性

SRerrolog的输出在核心WAE

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
```

```

Maximum Synch Get Buffer Size (bytes):          0
Average Synch Get Buffer Size (bytes):          0
Number of Read Stream Requests:                0
Minimum Read Stream Buffer Size (bytes):        0
Maximum Read Stream Buffer Size (bytes):        0
Average Read Stream Buffer Size (bytes):        0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                          0          <-----
-
Average Local Response Time (usec):            0          <-----
-
Remote Response Count:                        19          <-----
-
Average Remote Response Time (usec):           89005       <-----
-
. . .

```

解决方法2 : 请使用在所有WAEs (特别是核心)的ntpddate同步时钟与KDC。然后请指向企业Ntp server (preferably同KDC一样)。

问题 3 : 您为您的加密服务定义的域不匹配您的Exchange服务器的域。

SRerrolog的输出在核心WAE

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:          Thu Jun 25
06:32:27 2009
Total Bytes Read:                                46123985
Total Bytes Written:                             40864046
Number of Synch Get Buffer Requests:              0
Minimum Synch Get Buffer Size (bytes):            0
Maximum Synch Get Buffer Size (bytes):            0
Average Synch Get Buffer Size (bytes):            0
Number of Read Stream Requests:                  0
Minimum Read Stream Buffer Size (bytes):          0
Maximum Read Stream Buffer Size (bytes):          0
Average Read Stream Buffer Size (bytes):          0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                           0          <-----
-
Average Local Response Time (usec):              0          <-----
-
Remote Response Count:                           19          <-----
-
Average Remote Response Time (usec):             89005       <-----
-
. . .

```

解决方法3 : 如果您的核心WAE服务多个Exchange服务器用不同的域您必须配置Exchange服务器

驻留的每个域的一个加密服务身份。

注释，那里是子域的没有技术支持此时包括。因此，如果有myexchange.sub-domain.domain.com，加密服务身份必须在sub-domain.domain.com;它不可以在父域。

问题 4：如果WANSecure发生故障您的连接能失败到TG

因为广域网安全的铅锤发生了故障，eMAPI连接可以被移交给通用的AO。出故障的广域网安全的铅锤，因为cert验证失败。对等体cert验证失败，因为使用默认自己签署的对等体cert或cert合法地失败了OCSP检查。

核心WAE设置

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

这将导致以下mapiao错误日志和wsao错误日志条目：

这里暗示是第一突出显示的行“断开了超过四连续的倍”

在客户端WAE的Mapiao错误日志：

. . .
MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
. . .
```

在客户端WAE的Wsao错误日志 :

. . .
MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
```

```
-
Average Remote Response Time (usec):          89005          <-----
-
. . .
```

解决方法4 : 去除对等体cert验证从WAEs的配置并且重新启动在核心WAE的encryptpion服务。

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:      Thu Jun 25
06:32:27 2009
Total Bytes Read:                             46123985
Total Bytes Written:                          40864046
Number of Synch Get Buffer Requests:          0
Minimum Synch Get Buffer Size (bytes):        0
Maximum Synch Get Buffer Size (bytes):        0
Average Synch Get Buffer Size (bytes):        0
Number of Read Stream Requests:              0
Minimum Read Stream Buffer Size (bytes):      0
Maximum Read Stream Buffer Size (bytes):      0
Average Read Stream Buffer Size (bytes):      0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                        0          <-----
-
Average Local Response Time (usec):          0          <-----
-
Remote Response Count:                       19          <-----
-
Average Remote Response Time (usec):          89005          <-----
-
. . .
```

问题 5 : 如果Outlook客户端使用NTLM连接将增加与通用的AO。

您将看到以下在客户端WAE的mapiao错误日志 :

```
. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:      Thu Jun 25
06:32:27 2009
Total Bytes Read:                             46123985
Total Bytes Written:                          40864046
Number of Synch Get Buffer Requests:          0
Minimum Synch Get Buffer Size (bytes):        0
Maximum Synch Get Buffer Size (bytes):        0
Average Synch Get Buffer Size (bytes):        0
Number of Read Stream Requests:              0
Minimum Read Stream Buffer Size (bytes):      0
```

```

Maximum Read Stream Buffer Size (bytes):          0
Average Read Stream Buffer Size (bytes):          0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                            0 <-----
-
Average Local Response Time (usec):              0 <-----
-
Remote Response Count:                          19 <-----
-
Average Remote Response Time (usec):             89005 <-----
. . .

```

解决方法5 : 用户在他们的Exchange环境里必须enable (event)/需要Kerberos认证。不支持NTLM (自5.1)

注意有召集回到NTLM的一划分为的Microsoft技术摘要，当使用时CAS。

Kerberos不作用的方案是特定的对Exchange 2010，并且在下列场景：

多Exchange客户端接入服务器(CAS)在组织/域。

使用所有方法-使用Microsoft的内置的客户端阵列功能或者第三方负荷平衡器，这些CAS服务器一起被集聚。

在以上的方案中，Kerberos不工作-，并且客户端后退对NTLM由default。我相信这归结于客户端必须AUTH到CAS服务器与邮箱服务器的事实，他们在早先Exchange版本执行。

在Exchange 2010 RTM，没有此的修正!在上述方案的Kerberos不会作用PRE交换2010-SP1。

在SP1中，Kerberos在这些环境里可以被启用，但是它是手动程序。请参阅条款这里：

<http://technet.microsoft.com/en-us/library/ff808313.aspx>

MAPI AO记录

- 以下日志文件为排除MAPI AO问题故障是可用的：
- 事务处理日志文件：/local1/logs/tfo/working.log (和/local1/logs/tfo/tfo_log_*.txt)

调试日志文件：/local1/errorlog/mapiao-errorlog.current (和mapiao-errorlog.*)

对于更加容易的调试，您应该首先设置ACL对一台主机限制信息包。

. . .

MAPI : 1830

```

Time Statistics were Last Reset/Cleared:          Thu Jun 25
06:32:27 2009
Total Bytes Read:                                46123985
Total Bytes Written:                             40864046
Number of Synch Get Buffer Requests:              0

```

```

Minimum Synch Get Buffer Size (bytes):          0
Maximum Synch Get Buffer Size (bytes):          0
Average Synch Get Buffer Size (bytes):          0
Number of Read Stream Requests:                0
Minimum Read Stream Buffer Size (bytes):        0
Maximum Read Stream Buffer Size (bytes):        0
Average Read Stream Buffer Size (bytes):        0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                          0          <-----
-
Average Local Response Time (usec):            0          <-----
-
Remote Response Count:                        19          <-----
-
Average Remote Response Time (usec):          89005        <-----
. . .

```

对enable (event)处理日志，请使用处理日志配置命令如下：

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:          Thu Jun 25
06:32:27 2009
Total Bytes Read:                               46123985
Total Bytes Written:                           40864046
Number of Synch Get Buffer Requests:             0
Minimum Synch Get Buffer Size (bytes):          0
Maximum Synch Get Buffer Size (bytes):          0
Average Synch Get Buffer Size (bytes):          0
Number of Read Stream Requests:                0
Minimum Read Stream Buffer Size (bytes):        0
Maximum Read Stream Buffer Size (bytes):        0
Average Read Stream Buffer Size (bytes):        0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                          0          <-----
-
Average Local Response Time (usec):            0          <-----
-
Remote Response Count:                        19          <-----
-
Average Remote Response Time (usec):          89005        <-----
. . .

```

您能查看事务处理日志文件的末端通过使用类型尾标命令如下：

. . .

MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
-
Remote Response Count: 19 <-----
-
Average Remote Response Time (usec): 89005 <-----
-
. . .
```

要设置和enable (event) MAPI AO的调试记录，使用以下命令。
NOTE:调试记录强化中央处理，并且能生成很多输出。明智地和稀少请使用它在生产环境。
您能enable (event)详细日志到磁盘如下：

. . .

MAPI : 1830

```
Time Statistics were Last Reset/Cleared: Thu Jun 25
06:32:27 2009
Total Bytes Read: 46123985
Total Bytes Written: 40864046
Number of Synch Get Buffer Requests: 0
Minimum Synch Get Buffer Size (bytes): 0
Maximum Synch Get Buffer Size (bytes): 0
Average Synch Get Buffer Size (bytes): 0
Number of Read Stream Requests: 0
Minimum Read Stream Buffer Size (bytes): 0
Maximum Read Stream Buffer Size (bytes): 0
Average Read Stream Buffer Size (bytes): 0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count: 0 <-----
-
Average Local Response Time (usec): 0 <-----
```

```

-
Remote Response Count:                19                <-----
-
Average Remote Response Time (usec):   89005            <-----
-
. . .

```

您能enable (event)连接的调试记录在ACL如下：

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:           Thu Jun 25
06:32:27 2009
Total Bytes Read:                                46123985
Total Bytes Written:                             40864046
Number of Synch Get Buffer Requests:              0
Minimum Synch Get Buffer Size (bytes):            0
Maximum Synch Get Buffer Size (bytes):            0
Average Synch Get Buffer Size (bytes):            0
Number of Read Stream Requests:                  0
Minimum Read Stream Buffer Size (bytes):          0
Maximum Read Stream Buffer Size (bytes):          0
Average Read Stream Buffer Size (bytes):          0
Minimum Accumulated Read Ahead Data Size (bytes): 0
Maximum Accumulated Read Ahead Data Size (bytes): 0
Average Accumulated Read Ahead Data Size (bytes): 0
Local Response Count:                            0                <-----
-
Average Local Response Time (usec):              0                <-----
-
Remote Response Count:                           19                <-----
-
Average Remote Response Time (usec):            89005            <-----
-
. . .

```

MAPI AO调试的选项如下：

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:           Thu Jun 25
06:32:27 2009
Total Bytes Read:                                46123985
Total Bytes Written:                             40864046
Number of Synch Get Buffer Requests:              0
Minimum Synch Get Buffer Size (bytes):            0
Maximum Synch Get Buffer Size (bytes):            0
Average Synch Get Buffer Size (bytes):            0
Number of Read Stream Requests:                  0
Minimum Read Stream Buffer Size (bytes):          0
Maximum Read Stream Buffer Size (bytes):          0
Average Read Stream Buffer Size (bytes):          0

```

```

Minimum Accumulated Read Ahead Data Size (bytes):      0
Maximum Accumulated Read Ahead Data Size (bytes):      0
Average Accumulated Read Ahead Data Size (bytes):      0
Local Response Count:                                  0      <-----
-
Average Local Response Time (usec):                    0      <-----
-
Remote Response Count:                                 19      <-----
-
Average Remote Response Time (usec):                   89005  <-----
-
. . .

```

您能enable (event) MAPI连接的调试记录然后显示调试错误日志的末端如下：

```

. . .
MAPI : 1830

Time Statistics were Last Reset/Cleared:                Thu Jun 25
06:32:27 2009
Total Bytes Read:                                       46123985
Total Bytes Written:                                   40864046
Number of Synch Get Buffer Requests:                   0
Minimum Synch Get Buffer Size (bytes):                 0
Maximum Synch Get Buffer Size (bytes):                 0
Average Synch Get Buffer Size (bytes):                 0
Number of Read Stream Requests:                       0
Minimum Read Stream Buffer Size (bytes):               0
Maximum Read Stream Buffer Size (bytes):               0
Average Read Stream Buffer Size (bytes):               0
Minimum Accumulated Read Ahead Data Size (bytes):    0
Maximum Accumulated Read Ahead Data Size (bytes):    0
Average Accumulated Read Ahead Data Size (bytes):    0
Local Response Count:                                  0      <-----
-
Average Local Response Time (usec):                    0      <-----
-
Remote Response Count:                                 19      <-----
-
Average Remote Response Time (usec):                   89005  <-----
-
. . .

```