

# 与Microsoft Exchange现场部署部署的单个收件箱同步问题

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## 简介

本文在同步问题提供信息被看到在Cisco Unity Connection (CUC)和Microsoft Exchange现场部署部署之间。

## [先决条件](#)

### [要求](#)

思科建议您有CUC知识。

### [使用的组件](#)

本文档不限于特定的软件和硬件版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

## 问题

有同步问题的三种类型：

- 没有同步

- 从两边(对Exchange服务器的CUC的延迟的同步反之亦然)
- 延迟的同步从Exchange服务器到CUC

## 故障排除

此部分提供信息关于怎样排除故障三个问题。因为排除故障问题的方法是相同的，前两个问题被结合到一个部分。

### 延迟或在CUC和Exchange之间的没有同步

可能没有的多种原因或延迟在CUC和Exchange之间的同步。在此方案中，请检查在CUC和Exchange服务器之间的通信故障通过CLI或由日志集通过实时监控工具(RTMT)。

#### RTMT

选择Trace &记录中央印制厂>收集的文件。选择连接邮箱同步日志并且继续。

#### 根

在CUC (/var/log/active/cuc)通过CLI：

```
[root@uchbu-aricent-vm163 log]# ls -ltr | grep MbxSync
-rw-rw-r-- 1 cumbxsync      cuservice      37223 Jun  5 09:18 diag_CuMbxSync_00000086.uc
-rw-rw-r-- 1 cumbxsync      cuservice      37223 Jun  5 09:18 diag_CuMbxSync_00000087.uc
-rw-rw-r-- 1 cumbxsync      cuservice      37223 Jun  5 09:19 diag_CuMbxSync_00000088.uc
-rw-rw-r-- 1 cumbxsync      cuservice      37223 Jun  5 09:19 diag_CuMbxSync_00000089.uc
-rw-rw-r-- 1 cumbxsync      cuservice      36919 Jun  5 09:20 diag_CuMbxSync_00000090.uc
```

为了查看文件，回车cat <filename>或者vi <filename>，其中<filename>是diag\_CuMbxSync\_xxxxxxx.uc。

#### Admin CLI

日志可能通过Admin CLI也查看，但是相当困难。

为了列出文件，回车文件列表activelog /cuc/diag\_CuMbxSync \*请选派反向。

为了查看文件，回车文件视图activelog /cuc/diag\_CuMbxSync\_xxxxxxx.uc xxxxxxxx是文件号的地方。

为了转接文件到一个安全FTP (SFTP)服务器，回车文件获得activelog /cuc/diag\_CuMbxSync \*。

检查最新的CuMbxSync日志所有HTTP失败或警告。默认情况下因为错误或警告在跟踪写入，没有需要这时启用跟踪。

HTTP失败可能从CUC终止(间歇地或完全)消息传送操作同步到Exchange服务器反之亦然。如果HTTP失败在日志看到，则下一步是排除故障和调整这些问题。

[Unity Connection单个收件箱故障排除TechNote](#)文档在CuMbxSync日志看到的多种错误提供若干信息。

如果没有错误/失败CuMbxSync日志的，则请启用CsEws和CuMbxSync简单跟踪-所有级别。选择

Cisco Unity Connection维护性> Trace >微Trace。点击在用户的统一消息帐户页的Reset选项并且再次收集日志。请与进一步协助的Cisco技术支持中心(TAC)联系。

## 延迟同步从Exchange服务器到CUC

Exchange通信到在端口7080的CUC服务器。此部分提供步骤为了排除故障问题。

1. 保证端口7080是开放的，并且CUC在此端口侦听。 Admin

### CLI

```
admin:show open ports regexp 7080

Executing.. please wait.
jetty      14655          jetty 117u IPv6      117863      0t0  TCP *:7080 (LISTEN)
admin:
```

### 根

```
[root@ucbu-aricent-vm163 ~]#
[root@ucbu-aricent-vm163 ~]# netstat -ano|grep 7080
tcp        0      0 :::7080                :::*                  LISTEN
[root@ucbu-aricent-vm163 ~]#
[root@ucbu-aricent-vm163 ~]#
[root@ucbu-aricent-vm163 ~]# lsof -i -P | grep :7080
jetty      19481          jetty 120u IPv6      123391      TCP *:7080 (LISTEN)
[root@ucbu-aricent-vm163 ~]#
```

2. 收集网络捕捉在Exchange服务器和CUC服务器为了确认Exchange服务器发送跳船通知，并且CUC接收这些跳船通知。在CUC CLI中，回车使用网络捕捉文件SIBTrace计数100000大小全部。在Exchange，请下载并运行Wireshark。在CUC捕获，您应该看到在端口7080 (用于的端口的此数据包模式接收通知)

Time	Source	Destination	Protocol	Length	Info
1422 2014-06-29 08:25:44.298924	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=0a37681c-8202
1426 2014-06-29 08:25:44.305976	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1556 2014-06-29 08:25:44.813027	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=e6df8718-1a94
1559 2014-06-29 08:25:44.821625	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1560 2014-06-29 08:25:44.829751	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=4bca8b5d-8a78
1563 2014-06-29 08:25:44.831264	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1575 2014-06-29 08:25:44.885286	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=f9c1661a-5a37
1578 2014-06-29 08:25:44.966111	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1593 2014-06-29 08:25:45.767927	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=c3bebe03-0ca7
1596 2014-06-29 08:25:45.783798	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1638 2014-06-29 08:25:46.607312	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=11b56ef5-045c
1641 2014-06-29 08:25:46.610888	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1644 2014-06-29 08:25:46.638317	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=c2280daa-854c
1647 2014-06-29 08:25:46.640719	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1657 2014-06-29 08:25:46.750081	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=88c58ed5-d417
1660 2014-06-29 08:25:46.769839	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
1670 2014-06-29 08:25:47.543860	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=bd3fcb0d-0d3c

确认(在用屏幕截图突出显示的IP地址帮助下)通知从Exchange服务器发送到CUC和不到一些代理服务器。如果在端口7080看不到同一个模式(或请看不到在端口7080)的所有流量，请检查与Exchange服务器团队。从Exchange的通知到CUC能是两个类型：keep-alive通知消息操作通知keep-alive信息从Exchange传送到CUC。这是示例keep-alive通知消息

Time	Source	Destination	Protocol	Length	Info
22 2014-06-29 08:10:55.247508	173.37.183.83	10.93.132.92	TCP	66	41984 > wspowerid [seq=1] seq=0 [fin=8192 Len=0 MSS=1432 ws=256 sack_perm
23 2014-06-29 08:10:55.247541	10.93.132.92	173.37.183.83	TCP	66	wspowerid > 41984 [SYN, ACK] seq=0 Ack=1 win=14600 Len=0 MSS=1460 SACK
24 2014-06-29 08:10:55.310282	173.37.183.83	10.93.132.92	TCP	60	41984 > wspowerid [ACK] seq=1 Ack=1 win=131584 Len=0
25 2014-06-29 08:10:55.311495	173.37.183.83	10.93.132.92	TCP	385	[TCP segment of a reassembled PDU]
26 2014-06-29 08:10:55.311521	10.93.132.92	173.37.183.83	TCP	54	wspowerid > 41984 [ack] seq=1 Ack=322 win=15744 Len=0
30 2014-06-29 08:10:55.374463	173.37.183.83	10.93.132.92	HTTP/1.1	1143	POST /NotificationService/services/NotificationService?id=24180221-2401
31 2014-06-29 08:10:55.374478	10.93.132.92	173.37.183.83	TCP	54	wspowerid > 41984 [ACK] seq=1 Ack=1421 win=17920 Len=0
32 2014-06-29 08:10:55.379307	10.93.132.92	173.37.183.83	TCP	54	FIN, seq=0 of a reassembled PDU]
33 2014-06-29 08:10:55.379520	10.93.132.92	173.37.183.83	HTTP/1.1	54	HTTP/1.1 200 OK
34 2014-06-29 08:10:55.442377	173.37.183.83	10.93.132.92	TCP	60	41984 > wspowerid [ACK] seq=142 Ack=491 win=131072 Len=0
35 2014-06-29 08:10:55.442632	173.37.183.83	10.93.132.92	TCP	60	41984 > wspowerid [FIN, ACK] seq=1421 Ack=491 win=131072 Len=0
36 2014-06-29 08:10:55.442654	10.93.132.92	173.37.183.83	TCP	54	wspowerid > 41984 [ACK] seq=401 Ack=1422 win=17920 Len=0

```
POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1
Content-Type: text/xml; charset=utf-8
Accept: text/xml
SOAPAction: http://schemas.microsoft.com/exchange/services/2006/messages/sendnotification
Host: 10.93.132.92:7090
Content-Length: 1089
Connection: close

<?xml version="1.0" encoding="utf-8"?><soap11:Envelope xmlns:soap11="http://schemas.xmlsoap.org/soap/
Envelope/"><soap11:Header><RequestServerVersion xmlns="http://schemas.microsoft.com/exchange/services/2006/messages"
xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types" /></
soap11:Header><soap11:Body><SendNotification xmlns:t="http://schemas.microsoft.com/exchange/services/2006/types" xmlns:m="http://
schemas.microsoft.com/exchange/services/2006/messages"><ResponseMessages><SendNotificationResponse>
ResponseCode="Success"><ResponseCode>None</
ResponseCode><Notification><SubscriptionId>PQB4834UMKXQWOS1AXN10V51B20QAAAAEWIZKDF9S0qqIT9yKMLKqny0sNKKKYDE //
t:SubscriptionId><PreviousWatermark>AQAAAAH1Tasq1J1t/q9pnqFFGFAl'sAAAAAAAAE-</t:PreviousWatermark><MoreEvents><StatusEvent><StatusEvent><t:Watermark>AQAAAAH1Tasq1J1t/q9pnqFFGFAl'sAAAAAAAAE-</t:Watermark></t:StatusEvent></m:Notification></
m:SendNotificationResponse></ResponseMessages></SendNotification></soap11:Body></soap11:Envelope>HTTP/1.1 200 OK

Date: Sun, 29 Jun 2014 15:10:35 GMT
Content-Type: text/xml; charset=UTF-8
Connection: close
Server: Jetty(8.1.14.v20131031)

<?xml version="1.0" encoding="UTF-8"?><soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/
Envelope/"><soapenv:Body><ns2:SendNotificationResult xmlns:ns2="http://schemas.microsoft.com/exchange/services/2006/
messages"><ns2:SubscriptionStatus>OK</ns2:SubscriptionStatus></ns2:SendNotificationResult></soapenv:Body></soapenv:Envelope>
```

Exchange服务器发送此通知每五分钟(默认情况下)每个订阅的用户的。此通知由Exchange在CUC发送给Exchange网站服务(EWS)客户端(CUC在这种情况下)为了保留订阅运行。从Exchange服务器的通知接收在CUC服务器由跳船，在tbl\_ExSubscription表里解析通知并且更新数据。在tbl\_ExSubscription的示例条目

```
unitydyndb> select first 10 * from tbl_exsubscription;
subscriptionid          timestamputc            subscriberexternalserviceobjectid
-----
0a37d81e-bc62-47b3-a3d9-30b3c7384211 2014-06-29 16:00:45.775000 0b163c0f-74b5-4982-99c1-144cd23df0a4
4bca6b5d-6a79-41b7-ac1c-5cf3be3229a8 2014-06-29 16:00:46.351000 1fcd6b64d-3448-44a0-9833-74201579569f
e6df8710-1a9c-4df5-bfa9-3ad6f1f69fd1 2014-06-29 16:00:46.351000 2068ca60-110d-46c4-a202-8d52321df906
f9c1d61a-5a3f-477e-8cea-66ac8881c0f9 2014-06-29 16:00:46.475000 27acb13b-9f47-4cbe-aa06-00966e1adcf0
e3bebe03-0ca7-4cec-956c-6d1d1f1fea0e6 2014-06-29 16:00:47.256000 2cb8f61e-62b2-46cb-8fe4-97192131ce79
11b5def5-c45d-43b0-845b-12df8638f96c 2014-06-29 16:00:48.130000 2drdfdfdc-a94d-42a8-b0fc-c32fe3ce232e
c2280dea-654d-49c1-a68c-467bf486db56 2014-06-29 16:00:48.131000 304f6f0e-d2b3-43ad-bed4-0d658c0292c6
88c58ed5-d417-44f4-811c-aeb959e0374b 2014-06-29 16:00:48.223000 32ad581d-650b-4106-b758-4fa2825c5ef0
bd3fcb0d-0d3d-42ff-a95e-a1006a6c0f046 2014-06-29 16:00:49.019000 4c8b025d-81d2-4f62-a075-42f7d063b66f
a8cc85da-e03b-4718-b07a-6486a1ef8f59 2014-06-29 16:02:11.486000 4c9d3b84-5824-499d-83dc-e3258484af8f

unitydyndb>
```

同一信息可以通过Admin CLI查看。输入运行cuc dbquery unitydyndb挑选前10 \*从tbl\_exsubscription命令。tbl\_ExSubscription存储关于每邮箱订阅的信息注册与Exchange通过EWS。timestamputc (突出显示用上一个屏幕画面)是其中一列在此表里。它包含在指示的UTC时间的日期-时间时期通知的此订阅是从Exchange服务器的CUC接收的为时。CuMbxSync进程有过时的订阅的监视器每两分钟和执行所有过时的条目的一resubscription的一个线索。在示例日志，线索一套订阅条目把过时视为。这不是一个理想的案件(如果一切优良是，并且Exchange以适时的方式发送keep-alive通知)。此字段用于由CuMbxSync进程检测过时的订阅。用于的情况过滤过时的订阅是timestamputc < (CurrentTime - 15分钟)。即使没有用户在用户邮箱上的变化在Exchange侧，默认情况下Exchange服务器仍然发送每个用户的(Exchange服务器的用户通知)在五分钟内间隔。来自Exchange的keep-alive通知在‘连接跳船’日志能被看到。这些日志可以收集从RTMT (请选择Trace &记录中央印制厂>收集的文件>连接跳船并且继续)或通过根访问权限(/usr/local/jetty/logs)。

```
173.37.189.81 - - [29/Jun/2014:11:30:50] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
173.37.189.81 - - [29/Jun/2014:11:39:54] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
173.37.189.81 - - [29/Jun/2014:11:40:54] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
173.37.189.81 - - [29/Jun/2014:11:45:54] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
173.37.189.81 - - [29/Jun/2014:11:50:54] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
173.37.189.81 - - [29/Jun/2014:11:55:55] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
173.37.189.81 - - [29/Jun/2014:12:00:55] -0000 "POST /NotificationService/services/NotificationService?id=2348c723-2466-4fco-bda0-b9419fb0215e&pid=25672 HTTP/1.1" 200
343
```

此日志显示CUC发送的答复与Exchange服务器发送的keep-alive通知相应。如果keep-alive通知不到达在从Exchange的CUC订阅在每16分钟之后然后将被重预订(近似)，并且那时执行邮箱同步发生。这样行为的潜在原因能是这些中的一个：在Exchange服务器的代理配置在CUC的网络地址转换(NAT)配置在CUC和Exchange服务器之间的防火墙配置，等等涉及网络团队和Exchange团队为了获得此行为实际原因。如果CUC接收从Exchange服务器准时的通知

, 并且更新在CUC邮箱没有反射, 请与协助的TAC联系能排除故障问题。