

Technische opmerking over CTI Manager Call Flow voor Jabber-desktopbeheeraanvraag

Inhoud

[Inleiding](#)

[Voorwaarden](#)

[Vereisten](#)

[Gebruikte componenten](#)

[CTI-berichten voor Jabber-desktopcontrole](#)

[Gerelateerde informatie](#)

Inleiding

Dit document beschrijft de gedetailleerde Call Flow voor een succesvolle Computer Telephony Integration (CTI) Manager verificatie voor Jabber-desktopclients

Voorwaarden

Vereisten

Cisco raadt kennis van de volgende onderwerpen aan:

- Lichtgewicht Directory Access Protocol (LDAP)
- Computer Telephony Integration (CTI)

Gebruikte componenten

De informatie in dit document is gebaseerd op deze softwareversies:

- Cisco Jabber voor Windows 11.5
- Cisco Unified Communications Manager (CUCM) 10.5(2) en hoger

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk levend is, zorg er dan voor dat u de mogelijke impact van om het even welke opdracht begrijpt.

CTI-berichten voor Jabber-desktopcontrole

Verzekert dat de dienstlogs van CTI Manager zijn ingesteld op Debug level, reproduceren het probleem, dan verzamel logbestanden via opdrachtregel of Real Time Monitoring Tool (RTMT). Volg hier de stappen om CTI-verificatie te controleren

Stap 1. Het Open Aanvraag van de leverancier van de Jabber-client wordt ontvangen door de CTI

Manager-service.

```
00895255.002 |08:59:16.944 |AppInfo |[CTI-APP] [CTIHandler::processIncomingMessage] CTI
ProviderOpenRequest ( seq#=2 provider=UCProvider login=wwhite heartbeat=60 timer=10 priority=0
lightWeightProviderOpen=0 AuthType=0 RequestOldFetch=0 EncryptedSSODataSize=0)
00895256.000 |08:59:16.944 |SdlSig |CtiProviderOpenReq |init_complete_await_provopen
|CTIHandler(1,200,22,7) |CTIHandler(1,200,22,7) |1,200,13,8.3*** |[R:N-H:0,N:0,L:0,V:0,Z:0,D:0]
Async Response=2 ProviderName=UCProvider ClientVersion=UCProvider LoginId=wwhite ApplName=Shibui
ServerHeartbeat=60 CMAssignedAppId=1234 PluginName=Cisco JTAPI LightWeightProviderOpen=0 Auth
Style=0 RequestOldFetch=0
00895256.001 |08:59:16.944 |AppInfo |SSOTOKEN =
00895256.002 |08:59:16.944 |AppInfo |CQBEBUILDER::BuildQbeMessage(): objectID=2
00895256.003 |08:59:16.944 |AppInfo |CTIHandler::OutputQbeMessage: TcpHand=[1:200:13:8]
QbePref={0x0xf74b346c,0x70} pQbeMsg=0x0xf74b3474 qbeMsgSize=0x70 tmpLen=0x78 msgSize_=0x78
```

Stap 2. De Open Response van de provider wordt naar Jabber-client verzonden.

```
00895256.004 |08:59:16.944 |AppInfo |[CTI-APP] [CTIHandler::OutputCtiMessage ] CTI
ProviderOpenResponse (seq#=2) provider id=16777223 FIPMode = 0
```

Stap 3. Het proces van de authenticatie van de eindgebruiker wordt gestart.

```
00895260.000 |08:59:17.057 |SdlSig |CtiProceedWithAppLogin |init_complete_await_auth
|CTIHandler(1,200,22,7) |CtiManager(1,200,21,1) |1,200,13,8.3*** |[R:L-H:0,N:0,L:0,V:0,Z:0,D:0]
00895261.000 |08:59:17.058 |SdlSig |CtiLoginCheckReq |ready |Directory(1,200,23,1)
|CTIHandler(1,200,22,7) |1,200,13,8.3*** |[T:N-H:0,N:0,L:0,V:0,Z:0,D:0] Login=wwhite Seq#=2
Auth Style=0 3rd Party Certificate=0 mOcsUrl= mIssuerName= EncryptedSingleSignOnData Size=0
00895261.001 |08:59:17.058 |AppInfo |CtiLoginCheckReq:authenticateByUserName
```

Stap 4. Belangrijke decryptie vindt plaats en moet succesvol zijn voordat de authenticatie wordt geprobeerd.

```
00895261.002 |08:59:17.058 |AppInfo |CCMASymmetricEncryption::DecryptText Enter
00895261.003 |08:59:17.067 |AppInfo |CCMASymmetricEncryption::DecryptText Exit
00895261.004 |08:59:17.067 |AppInfo |Decrypted Key Status success - [52]
00895261.005 |08:59:17.067 |AppInfo |Nonce =cc64fd13-d4e1-43bc-808f-f051f7c945d0
00895261.006 |08:59:17.067 |AppInfo |Nonce validation success
00895261.007 |08:59:17.067 |AppInfo |CCMSymmetricEncryption::DecryptText:enter
00895261.008 |08:59:17.067 |AppInfo |CCMEncryption::DecryptText (Exit) (Success)
00895261.009 |08:59:17.067 |AppInfo |Decrypted Password Status success - [8]
```

Stap 5. Gebruikersnaam wordt opgehaald en gebruikt voor authenticatie samen met het wachtwoord.

```
00895261.010 |08:59:17.067 |AppInfo |AuthenticationImpl::login:enter
00895261.011 |08:59:17.067 |AppInfo |AuthenticationImpl::retrieveCredential:enter
00895261.012 |08:59:17.067 |AppInfo |userid is wwhite
00895261.013 |08:59:17.067 |AppInfo |AuthenticationImpl::login - no encryptedpassword
Credential, look for password
00895261.014 |08:59:17.067 |AppInfo |AuthenticationImpl::login (Auth with password. Calling
authenticateUserWithPassword)
00895261.015 |08:59:17.067 |AppInfo |authenticationDB:authenticateUserWithPassword():enter
00895261.016 |08:59:17.067 |AppInfo |Credential Length is: 8
```

Stap 6. CTI Manager controleert het Credentials beleid van de gebruiker.

```

00895261.021 |08:59:17.113 |AppInfo |userType is: 1
00895261.022 |08:59:17.113 |AppInfo |timeOfLockout is: 0
00895261.023 |08:59:17.113 |AppInfo |timeHackedLockout is: 0
00895261.024 |08:59:17.113 |AppInfo |hackCount is: 0
00895261.025 |08:59:17.113 |AppInfo |daysToExpiry is: 0
00895261.026 |08:59:17.113 |AppInfo |doesNotExpire is: 0
00895261.027 |08:59:17.113 |AppInfo |useExpiryWarning is: 0
00895261.028 |08:59:17.113 |AppInfo |isInactive is: 0
00895261.029 |08:59:17.113 |AppInfo |userMustChange is: 0
00895261.030 |08:59:17.113 |AppInfo |endUserStatus is: 1
00895261.031 |08:59:17.113 |AppInfo |imsInfo is: 1
00895261.032 |08:59:17.113 |AppInfo |lastSuccessfulLoginTime is: 1455049675
00895261.033 |08:59:17.148 |AppInfo |XXXXXX Check 1

```

Stap 7. De CTI-verificatie voor de eindgebruiker gaat verder.

```

00895261.034 |08:59:17.149 |AppInfo |authenticationDB::login (Authenticating using LDAP)
00895261.035 |08:59:17.149 |AppInfo |
|authenticationLDAP.cpp::authenticateUserWithPassword():enter
00895261.036 |08:59:17.149 |AppInfo |LDAP userid is 'wwhite'
00895261.037 |08:59:17.149 |AppInfo |
|authenticationUtils::escapeLDAPSpecialCharsForFilter():enter
00895261.038 |08:59:17.149 |AppInfo |
After Escaping for LDAP special Characters for Filter = wwhite

```

Stap 8. De CTI Manager-service probeert nu verbinding te maken met LDAP voordat de verificatie wordt geprobeerd.

```

00895261.040 |08:59:17.149 |AppInfo |LDAP not initialized...connecting...
00895261.041 |08:59:17.149 |AppInfo |authenticationLDAP::connect():enter
00895261.042 |08:59:17.149 |AppInfo |authenticationLDAP::Authenticate():enter
00895261.043 |08:59:17.149 |AppInfo |Authenticating with SSL not enabled
(ldap://10.10.10.10:3268)

```

Stap 9. De poging om verbinding te maken is geslaagd met de servicekaart die in de configuratie van de LBP-verificatie is ingesteld.

```

00895261.044 |08:59:17.149 |AppInfo |LDAP initialize non-SSL Return Code (0)

```

Stap 10. Verificatie van het beheer is succesvol.

```

00895261.051 |08:59:17.158 |AppInfo |LDAP authentication bind SUCCESS for
Administrator@joshlab.net
00895261.052 |08:59:17.158 |AppInfo |Connection # (0): successful
00895261.053 |08:59:17.158 |AppInfo |Details ::
00895261.054 |08:59:17.158 |AppInfo |10.10.10.10 3268
00895261.055 |08:59:17.158 |AppInfo |-----
-----
00895261.056 |08:59:17.158 |AppInfo |Available Servers (1)
00895261.057 |08:59:17.158 |AppInfo |authenticationLDAP::Authenticate():exit(0)
00895261.058 |08:59:17.158 |AppInfo |Authentication of LDAP administrator successful.

```

Stap 1. De dienst van de CTI Manager haalt LDAP informatie op en authentiek met de eindgebruikersaccount.

```

00895261.072 |08:59:17.164 |AppInfo |Retrieve the specified user entry:
(&(&(objectclass=user)(!(objectclass=Computer))(!(UserAccountControl:1.2.840.113556.1.4.803:=2))
)(sAMAccountName=wwhite))
00895261.073 |08:59:17.164 |AppInfo |LDAP Search for User base: 'OU=Breaking

```

Bad,DC=joshlab,DC=net'

```
00895261.074 |08:59:17.165 |AppInfo |LDAP Search complete. Code: 0
00895261.075 |08:59:17.165 |AppInfo |Get DN of entry.
00895261.076 |08:59:17.165 |AppInfo |Got DN: CN=Walter White,OU=Breaking Bad,DC=joshlab,DC=net
00895261.077 |08:59:17.165 |AppInfo |Attempt to authenticate DN: CN=Walter White,OU=Breaking
```

Bad,DC=joshlab,DC=net

```
00895261.078 |08:59:17.165 |AppInfo |authenticationLDAP::Authenticate():enter
00895261.079 |08:59:17.165 |AppInfo |Authenticating with SSL not enabled
(ldap://10.10.10.10:3268)
```

Stap 12. LDAP-verificatie voor de eindgebruiker is geslaagd.

```
00895261.087 |08:59:17.171 |AppInfo |LDAP authentication bind SUCCESS for CN=Walter
White,OU=Breaking Bad,DC=joshlab,DC=net
00895261.088 |08:59:17.171 |AppInfo |Connection # (0): successful
00895261.089 |08:59:17.171 |AppInfo |Details ::
00895261.090 |08:59:17.171 |AppInfo |10.10.10.10 3268
00895261.091 |08:59:17.171 |AppInfo |-----
-----
00895261.092 |08:59:17.171 |AppInfo |Available Servers (1)
00895261.093 |08:59:17.171 |AppInfo |authenticationLDAP::Authenticate():exit(0)
00895261.094 |08:59:17.171 |AppInfo |authenticationLDAP::authenticateUserWithPassword():Exit(0)
00895261.095 |08:59:17.171 |AppInfo |Successfully authenticated user: wwwhite
```

Stap 13. CTI Manager controleert de database om te verzekeren dat de eindgebruiker de juiste rechten heeft om toegang tot de telefoon toe te staan.

```
00895262.000 |08:59:17.171 |SdlSig |CtiLoginCheckRes |authenticating |CTIHandler(1,200,22,7)
|Directory(1,200,23,1) |1,200,13,8.3^*^* | [R:N-H:0,N:0,L:0,V:0,Z:0,D:0] Seq#=2 result=Success
LoginUserID= Expire days=4294967295
00895263.000 |08:59:17.172 |SdlSig |CtiUserSettingsReq |ready |CTIDbAccess(1,200,26,1)
|CTIHandler(1,200,22,7) |1,200,13,8.3^*^* | [T:H-H:0,N:0,L:0,V:0,Z:0,D:0] mUserId=wwwhite
00895263.001 |08:59:17.172 |AppInfo |DbAccess::ReadCtiUserSettingsReq
```

Stap 14. De toestemming van de gebruiker van CTI wordt bevestigd.

```
00895264.000 |08:59:17.172 |SdlSig |CtiUserSettingsRes |verifying |CTIHandler(1,200,22,7)
|CTIDbAccess(1,200,26,1) |1,200,13,8.3^*^* | [R:N-H:0,N:0,L:0,V:0,Z:0,D:0] SuperProvider =
Disabled CallParkRetrievalAllowed = Disabled ModifyCallingNumber = Disabled CTI Enabled =
Enabled CallMonitor=Disabled CallRecord=Disabled Userid = wwwhite result=0
00895264.001 |08:59:17.172 |AppInfo |[CTI-INFO] [CTIHandler::verifying_CtiUserSettingsRes]
mCtiUserSettings.mbSecurityEnabled=0
00895264.002 |08:59:17.172 |AppInfo |[CTI-INFO] [CTIHandler::verifying_CtiUserSettingsRes]
mListenPort=2748
00895264.003 |08:59:17.172 |AppInfo |[CTI-INFO] [CTIHandler::verifying_CtiUserSettingsRes] sent
providerSubscriptionRegNotify for user wwwhite
```

Stap 15. CTI verstuurt dan een apparaat OpenApplication of the phone Jabber gaat controleren.

```
00895326.002 |08:59:17.335 |AppInfo |[CTI-APP] [CTIHandler::processIncomingMessage] CTI
DeviceOpenRequest ( seq#=4 device name=SEP001794625DE5 softkeys AppID=1234)
00895327.000 |08:59:17.335 |SdlSig |CtiDeviceOpenDeviceReq |ready |CTIHandler(1,200,22,7)
|CTIHandler(1,200,22,7) |1,200,13,8.5^14.48.68.203^SEP001794625DE5 | [R:N-
H:0,N:0,L:0,V:0,Z:0,D:0] AsyncResponse=4 DH=0|0 Name=SEP001794625DE5 Type=0 RisClass=0
TerminateMedia=5 RequestType=0 RtpDestination1|1 ApplnIpAddrMode=3 Filter
Bitmap=000100000000000000000000100000001001 AppLoginUserId=wwwhite AppIPAddr= ipAddrType=0
ipv4=10.10.10.100 ApplicationIDListCount = 1 ApplicationIds are 1234, mSoftKeyApplicationID =
1234 ProviderIDListCount = 1 ProviderIds are 16777223, IsCTIConnectionTLS = F
```

Stap 16. CTI Manager staat de verbinding toe en verstuurt de reactie ApparaatOpenApplication.

```

00895329.000 |08:59:17.339 |SdlSig |CtiDeviceOpenDeviceRes |ready |CTIHandler(1,200,22,7)
|CTIDeviceLineMgr(1,200,25,1) |1,200,13,8.5^10.10.10.100^SEP001794625DE5 |[R:N-
H:0,N:3,L:0,V:0,Z:0,D:0] mAsyncResponse = 4 DH=1|38 Name=SEP001794625DE5 Type=7
StationPid=(0,0,0,0) mOpenResult=0x0 mEncodingType=3 mRequestType=0 mDSSDeviceState = 0
00895329.001 |08:59:17.339 |AppInfo |CQBEBUILDER::BuildQbeMessage(): objectID=27
00895329.002 |08:59:17.340 |AppInfo |CTIHandler::OutputQbeMessage: TcpHand=[1:200:13:8]
QbePref={0x0xf74b346c,0x98} pQbeMsg=0x0xf74b3474 qbeMsgSize=0x98 tmpLen=0xa0 msgSize_=0xa0
00895329.003 |08:59:17.340 |AppInfo |[CTI-APP] [CTIHandler::OutputCtiMessage ] CTI
DeviceOpenResponse ( seq#=4 result=0 DH=1|38 deviceName=SEP001794625DE5 deviceType=7 deviceId=38
registrationAllowed=0 deviceLocale=1 protocol=1 deviceRestricted=0 altScript= Rollover=0 BIB=0
DNDOption=0 IpAddrMode=0 supportsFeat=0 Visiting=0)
00895330.000 |08:59:17.340 |AppInfo |-->RisCTIManagerAccess::DeviceOpenActivityy(...)
00895331.000 |08:59:17.340 |AppInfo |DeviceOpenActivity(): activity: 1, connID: 7, deviceName:
SEP001794625DE5, appID: wwwhite-10.10.10.100-58667, rtpaddr: , assocIpAddr: , mediaControl: 0,
deviceType: 7, reason: 0
00895332.000 |08:59:17.340 |AppInfo |<--RisCTIManagerAccess::DeviceOpenActivityy(...)

```

Step 17. Ten slotte is er het **ApparaatInService**-bericht dat de succesvolle voltooiing van de deskphone controle-aanvraag markeert.

```

00895336.003 |08:59:17.343 |AppInfo |[CTI-APP] [CTIHandler::OutputCtiMessage ] CTI
DeviceInServiceEvent ( DH=1|38 ) Encoding Type=3 Device locale=1 Alt Script= DNDStatus=0
DNDOption=0)
00895337.000 |08:59:17.344 |SdlSig |SdlDataInd |ready |CtiManager(1,200,21,1)
|SdlTCPConnection(1,200,13,8) |1,200,13,8.6^*** |*TraceFlagOverrode
00895337.001 |08:59:17.344 |AppInfo |CtiManager::ready_SdlDataInd(): ConnHandle=[1:200:13:8] TCP
message length=0x108
00895338.000 |08:59:17.344 |SdlSig |CtiQbeGenericMessage |ready |CTIHandler(1,200,22,7)
|CtiManager(1,200,21,1) |1,200,13,8.6^*** |*TraceFlagOverrode
00895338.001 |08:59:17.344 |AppInfo |CQBEPARSER::ParseQbeMessage: PDU#=37

```

Op dit moment is de Jabber-client in staat om deskphone te beheersen via CTI. Veelvoorkomende problemen kunnen worden gezien bij de authenticatie van de LGO en het proces van de eindgebruikerstoewijzing van de CTI-stammen.

Gerelateerde informatie

- [Jabber-configuratiegids](#)
- [Technische ondersteuning en documentatie – Cisco Systems](#)