

# 为 Windows RADIUS认证配置使用Cisco Secure ACS 的VPN 3000集中器PPTP

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## [Introduction](#)

Cisco VPN 3000 Concentrator支持本地Windows客户端的点到点隧道协议(PPTP)建立隧道的方法。集中器支持40位和128-bit加密受保护的可靠连接的。本文描述如何用Windows的Cisco Secure ACS配置在VPN 3000 Concentrator的PPTP RADIUS认证的。

参考[配置Cisco Secure PIX防火墙使用PPTP配置与PIX的PPTP连接](#)。

参考[配置Windows路由器PPTP认证的Cisco Secure ACS](#)能设置与路由器的一个PC连接;对思科安全访问控制系统(ACS) 3.2的此提供用户认证Windows服务器的，在您允许用户到网络前。

## [开始使用前](#)

### [Conventions](#)

有关文档规则的详细信息，请参阅 [Cisco 技术提示规则](#)。

### [Prerequisites](#)

本文假设，本地PPTP认证在添加Windows RADIUS认证的Cisco Secure ACS前工作。请参阅[如何用本地认证配置VPN 3000 Concentrator PPTP](#)关于本地PPTP认证的更多信息。关于需求和限制一张完全列表，[当是支持PPTP加密Cisco VPN 3000 Concentrator](#)，请参见？

## [Components Used](#)

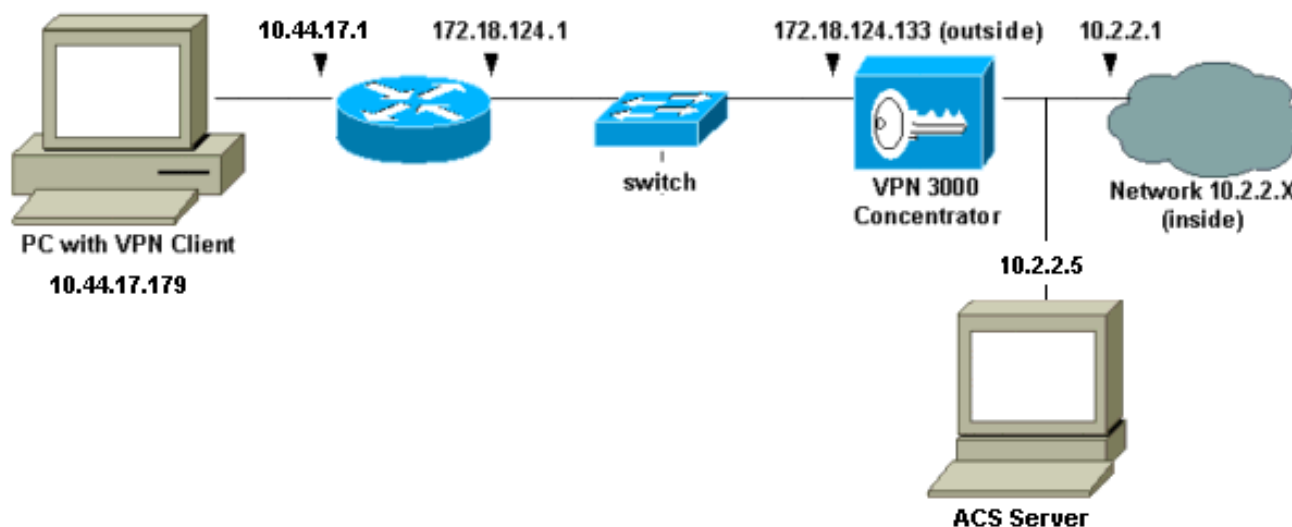
本文档中的信息基于以下软件和硬件版本。

- Windows版本2.5和以上的Cisco Secure ACS
- VPN 3000 Concentrator版本2.5.2.C和以上(此配置验证了与版本4.0.x。)

本文档中的信息都是基于特定实验室环境中的设备创建的。All of the devices used in this document started with a cleared (default) configuration.如果您是在真实网络上操作，请确保您在使用任何命令前已经了解其潜在影响。

## [Network Diagram](#)

本文档使用下图所示的网络设置。



## [配置VPN 3000 Concentrator](#)

### [添加和配置Windows的Cisco Secure ACS](#)

遵从这些步骤配置VPN集中器使用Cisco Secure ACS Windows。

1. 在VPN 3000 Concentrator，请去**Configuration > System > Servers > Authentication Servers**并且添加Windows服务器和键的("cisco123" Cisco Secure ACS在本例中)。

Configuration | System | Servers | Authentication | Add

Configure and add a user authentication server.

**Server Type**  Selecting *Internal Server* will let you add users to the internal user database.

**Authentication Server**  Enter IP address or hostname.

**Server Port**  Enter 0 for default port (1645).

**Timeout**  Enter the timeout for this server (seconds).

**Retries**  Enter the number of retries for this server.

**Server Secret**  Enter the RADIUS server secret.

**Verify**  Re-enter the secret.

2. 在Windows的Cisco Secure ACS，请添加VPN集中器到ACS服务器网络配置，并且识别词典

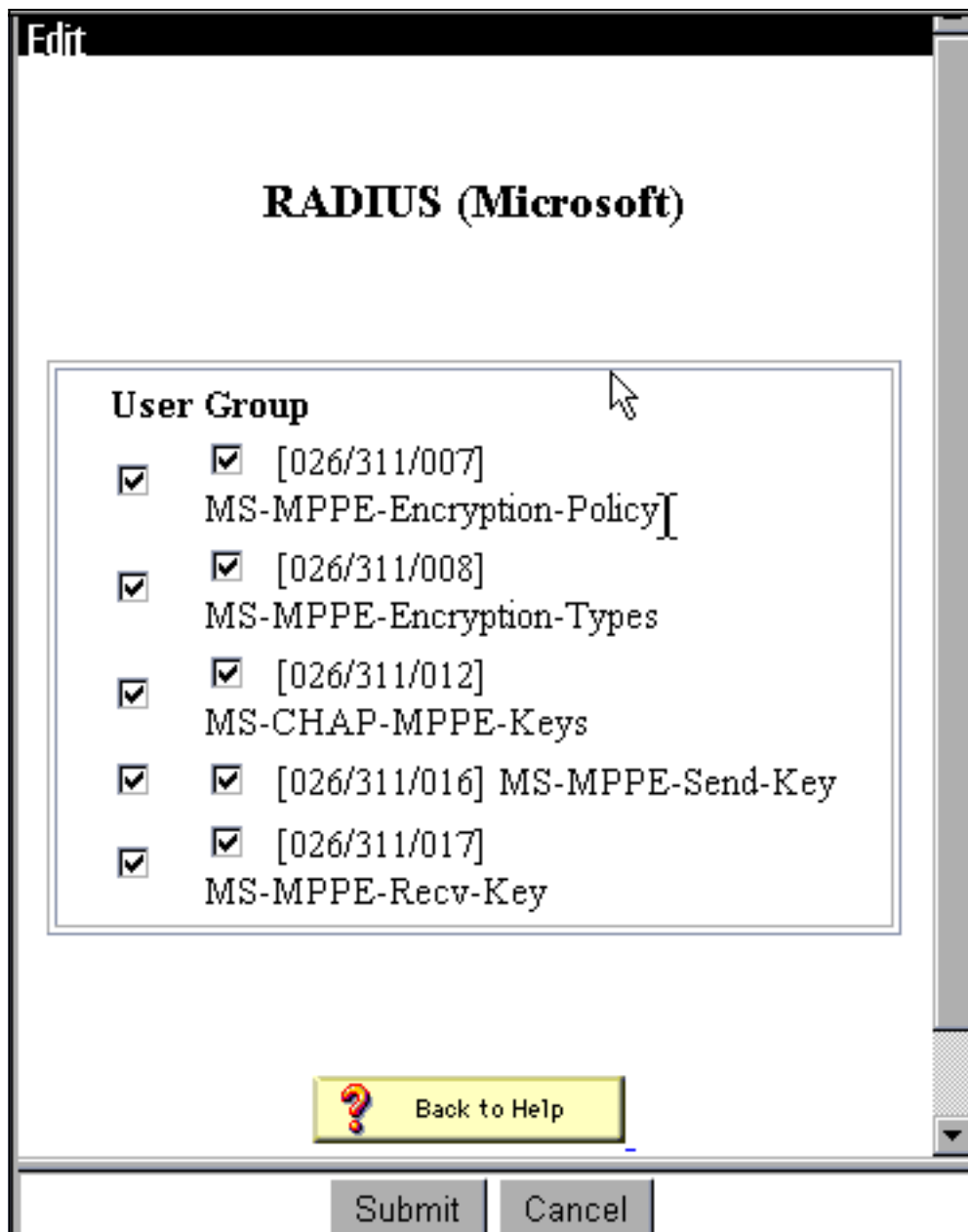
## Access Server Setup For VPN3000

Network Access Server IP Address	<input type="text" value="10.2.2.1"/>
Key	<input type="text" value="cisco123"/>
Network Device Group	<input type="text" value="(Not Assigned)"/>
Authenticate Using	<input type="text" value="RADIUS (Cisco VPN 3000)"/>

- Single Connect TACACS+ NAS (Record stop in accounting on failure).
- Log Update/Watchdog Packets from this Access Server
- Log Radius Tunneling Packets from this Access Server

类型。

3. 在Windows的Cisco Secure ACS，请去**Interface Configuration > RADIUS (Microsoft)**并且检查Microsoft点到点加密(MPPE)属性，以便属性出现于组接口。



4. 在Windows的Cisco Secure ACS，请添加一个用户。在用户组，请添加MPPE Microsoft RADIUS属性，万一以后需要加密。

Access Restrictions	Token Cards	Password Aging
IP Address Assignment	IETF Radius	Cisco VPN3000 Radius
MS MPPE Radius		

**Microsoft RADIUS Attributes** ?

[311\007] MS-MPPE-Encryption-Policy  
Encryption Allowed

[311\008] MS-MPPE-Encryption-Types  
40-bit

[311\012] MS-CHAP-MPPE-Keys

[311\016] MS-MPPE-Send-Key

[311\017] MS-MPPE-Recv-Key

5. 在VPN 3000 Concentrator，请去**Configuration > System > Servers > Authentication Servers**。选择一个认证服务器从列表，然后选择**测试**。测试从VPN集中器的认证到Cisco Secure ACS为Windows服务器通过输入用户名和密码。在良好的验证，VPN集中器应该显示"Authentication Successful"消息。在Cisco Secure ACS的故障Windows的是登陆的**报告和活动>失败的尝试**。在默认安装，这些报告在磁盘被存储在C:\Program Files\CiscoSecure ACS v2.5\Logs\Failed尝试。

Configuration | System | Servers | Authentication | Test

Enter a username and password with which to test. **Please wait for the operation to complete or timeout.**

User Name

Password


OK Cancel

6. 因为您当前验证了认证从PC到VPN集中器工作和从集中器到Windows服务器的Cisco Secure ACS，您能重新配置VPN集中器派遣PPTP用户到Windows RADIUS的Cisco Secure ACS通过移动Windows服务器的Cisco Secure ACS向服务器列表的顶层。要执行此在VPN集中器，请去**Configuration > System > Servers > Authentication Servers**。

This section lets you configure parameters for servers that authenticate users.

You should have a properly configured RADIUS, NT Domain, or SDI server to access, or you can configure the internal server and [add users to the internal database](#).

Click the **Add** button to add a server, or select a server and click **Modify**, **Delete**, **Move**, or **Test**.

Authentication Servers	Actions
10.2.2.5 (Radius)  Internal (Internal)	<input type="button" value="Add"/>
	<input type="button" value="Modify"/>
	<input type="button" value="Delete"/>
	<input type="button" value="Move Up"/>
	<input type="button" value="Move Down"/>
	<input type="button" value="Test"/>

7. 去 Configuration > User Management > Base Group 并且选择 PPTP/L2TP 选项。在 VPN 集中器基本组中，请保证 PAP 和 MSCHAPv1 的选项是启用的。



General

IPSec

PPTP/L2TP

## PPTP/L2TP Parameters

Attribute	Value	Description
Use Client Address	<input type="checkbox"/>	Check to accept and use an IP address received from the client.
PPTP Authentication Protocols	<input checked="" type="checkbox"/> PAP <input type="checkbox"/> CHAP <input type="checkbox"/> EAP <input type="text" value="-MD5"/> <input checked="" type="checkbox"/> MSCHAPv1 <input type="checkbox"/> MSCHAPv2	Select the authentication protocols allowed by the device. <b>Unchecking <i>all</i> options means that <i>no</i> authentication is required.</b>
PPTP Encryption	<input type="checkbox"/> Required <input type="checkbox"/> Require Stateless <input checked="" type="checkbox"/> 40-bit <input checked="" type="checkbox"/> 128-bit	Select the allowed encryption methods for PPTP connections for this group.
L2TP Authentication Protocols	<input type="checkbox"/> PAP <input checked="" type="checkbox"/> CHAP <input type="checkbox"/> EAP <input type="text" value="-MD5"/> <input checked="" type="checkbox"/> MSCHAPv1 <input type="checkbox"/> MSCHAPv2	Select the authentication protocols allowed by the device. <b>Unchecking <i>all</i> options means that <i>no</i> authentication is required.</b>
L2TP Encryption	<input type="checkbox"/> Required <input type="checkbox"/> Require Stateless <input type="checkbox"/> 40-bit <input type="checkbox"/> 128-bit	Select the allowed encryption methods for L2TP connections for this group.

8. 选择一般选项并且保证PPTP在Tunneling Protocols部分允许。

<b>Idle Timeout</b>	<input type="text" value="30"/>	(minutes) Enter the idle timeout for this group.
<b>Maximum Connect time</b>	<input type="text" value="0"/>	(minutes) Enter the maximum connect time for this group.
<b>Filter</b>	<input type="text" value="-None-"/>	Select the filter assigned to this group.
<b>Primary DNS</b>	<input type="text"/>	Enter the IP address of the primary DNS server for this group.
<b>Secondary DNS</b>	<input type="text"/>	Enter the IP address of the secondary DNS server.
<b>Primary WINS</b>	<input type="text"/>	Enter the IP address of the primary WINS server for this group.
<b>Secondary WINS</b>	<input type="text"/>	Enter the IP address of the secondary WINS server.
<b>SEP Card Assignment</b>	<input checked="" type="checkbox"/> SEP 1 <input checked="" type="checkbox"/> SEP 2 <input checked="" type="checkbox"/> SEP 3 <input checked="" type="checkbox"/> SEP 4	Select the SEP cards this group can be on.
<b>Tunneling Protocols</b>	<input checked="" type="checkbox"/> PPTP <input checked="" type="checkbox"/> L2TP <input checked="" type="checkbox"/> IPsec <input type="checkbox"/> L2TP over IPsec	Select the tunneling protocols this group can connect with.

9. 为Windows RADIUS服务器测试与用户的PPTP认证Cisco Secure ACS的。如果这不工作，请参阅[Debugging部分](#)。

### [添加MPPE \(加密\)](#)

如果Windows RADIUS PPTP认证的Cisco Secure ACS工作，不用加密，您能添加MPPE到VPN 3000 Concentrator。

1. 在VPN集中器上，请去**Configuration > User Management > Base Group**。
  2. 在PPTP加密的部分下，请检查选项**必需**，**40位**和**128-bit**。因为不是所有的个人计算机支持40位和128-bit加密，请检查两个选项允许协商。
  3. 在PPTP身份验证协议的部分下，请检查选项**MSCHAPv1**。(您已经配置了Windows的Cisco Secure ACS加密的2.5用户属性在一个更早的步骤。
- )

PPTP/L2TP Parameters		
Attribute	Value	Description
Use Client Address	<input type="checkbox"/>	Check to accept and use an IP address received from the client.
PPTP Authentication Protocols	<input type="checkbox"/> PAP <input type="checkbox"/> CHAP <input type="checkbox"/> EAP <input type="text" value="-MD5"/> <input checked="" type="checkbox"/> MSCHAPv1 <input type="checkbox"/> MSCHAPv2	Select the authentication protocols allowed by the device. <b>Unchecking all options means that no authentication is required.</b>
PPTP Encryption	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Require Stateless <input checked="" type="checkbox"/> 40-bit <input checked="" type="checkbox"/> 128-bit	Select the allowed encryption methods for PPTP connections for this group.
L2TP Authentication Protocols	<input type="checkbox"/> PAP <input checked="" type="checkbox"/> CHAP <input checked="" type="checkbox"/> EAP <input type="text" value="-MD5"/> <input checked="" type="checkbox"/> MSCHAPv1 <input type="checkbox"/> MSCHAPv2	Select the authentication protocols allowed by the device. <b>Unchecking all options means that no authentication is required.</b>
L2TP Encryption	<input type="checkbox"/> Required <input type="checkbox"/> Require Stateless <input type="checkbox"/> 40-bit <input type="checkbox"/> 128-bit	Select the allowed encryption methods for L2TP connections for this group.

**Note:** PPTP客户端应该为最佳被认可或所需的数据加密和MSCHAPv1 (如果选项)。

## 增加记帐功能

在您设立了认证后，您能添加记帐到VPN集中器。去 **Configuration > System > Servers > Accounting Servers** 并且添加Windows服务器的Cisco Secure ACS。

在Windows的Cisco Secure ACS，计费记录出现如下。

```
Date,Time,User-Name,Group-Name,Calling-Station-Id,Acct-Status-Type,Acct-Session-Id,
Acct-Session-Time,Service-Type,Framed-Protocol,Acct-Input-Octets,Acct-Output-Octets,
Acct-Input-Packets,Acct-Output-Packets,Framed-IP-Address,NAS-Port,NAS-IP-Address
03/18/2000,08:16:20,CSNTUSER,Default Group,,Start,8BD00003,,Framed,
PPP,,,,,1.2.3.4,1163,10.2.2.1
03/18/2000,08:16:50,CSNTUSER,Default Group,,Stop,8BD00003,30,Framed,
PPP,3204,24,23,1,1.2.3.4,1163,10.2.2.1
```

## Verify

当前没有可用于此配置的验证过程。

## Troubleshoot

本部分提供的信息可用于对配置进行故障排除。

## 启用调试

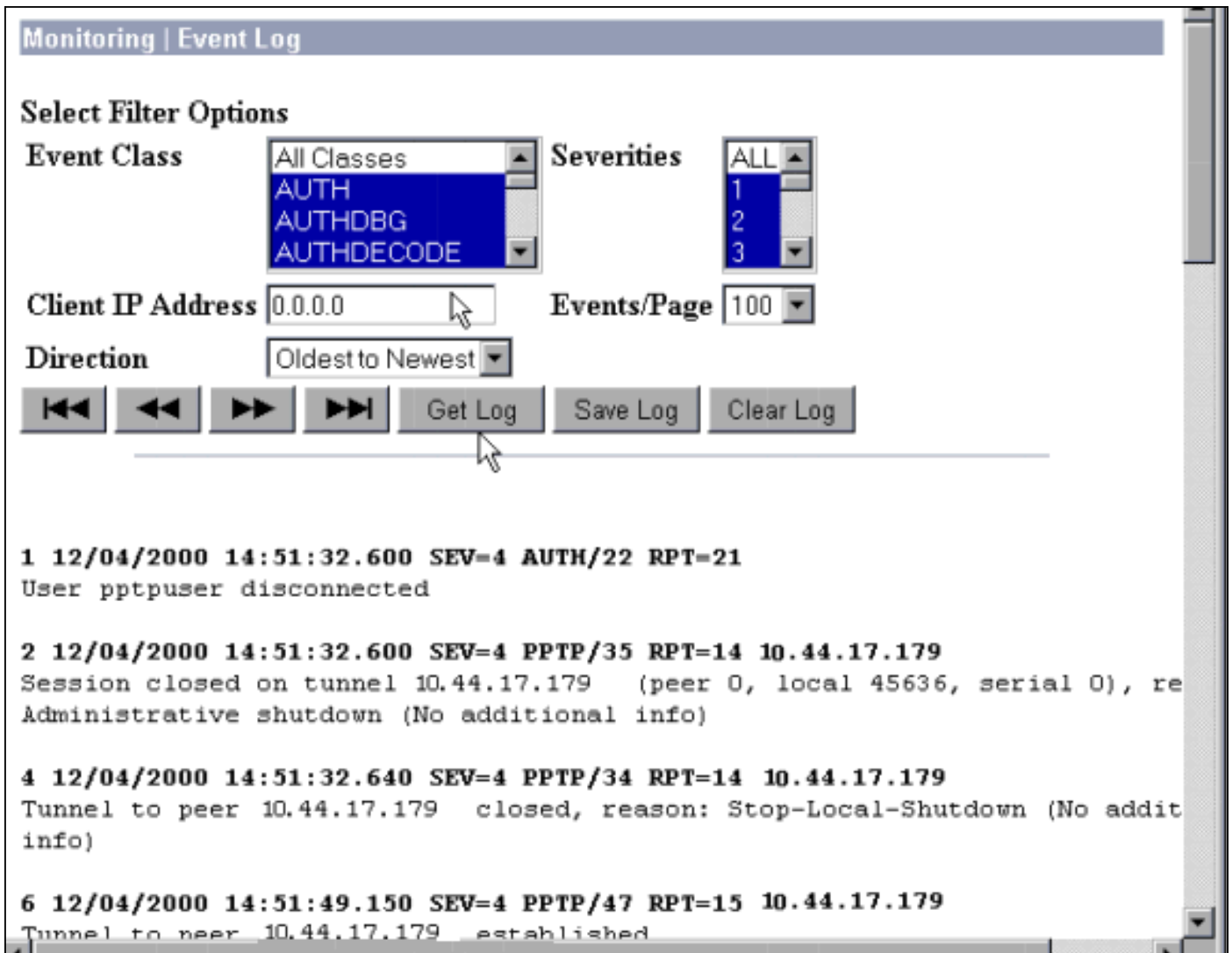
如果连接不工作，您能添加PPTP和认证事件类到VPN集中器通过去**Configuration > System > Events > Classes > Modify**。您能也添加PPTPDBG、PPTPDECODE、AUTHDBG和AUTHDECODE事件类，但是这些选项可能提供许多信息。

**Configuration | System | Events | Classes | Modify**

This screen lets you modify an event class configured for special handling.

<b>Class Name</b>	<input type="text" value="PPTP"/>	
<b>Enable</b>	<input checked="" type="checkbox"/>	Check to enable special handling of this class.
<b>Severity to Log</b>	<input type="text" value="1-9"/>	Select the range of severity values to enter in the log.
<b>Severity to Console</b>	<input type="text" value="1-3"/>	Select the range of severity values to display on the console.
<b>Severity to Syslog</b>	<input type="text" value="None"/>	Select the range of severity values to send to a Syslog server.
<b>Severity to Email</b>	<input type="text" value="None"/>	Select the range of severity values to send via email to the recipient list.
<b>Severity to Trap</b>	<input type="text" value="None"/>	Select the range of severity values to send to an SNMP system.

您能通过去检索事件日志**Monitoring > Event Log**。



## [调试-良好的验证](#)

在VPN集中器的成功的调试将显出类似于以下。

```
1 12/06/2000 09:26:16.390 SEV=4 PPTP/47 RPT=20 10.44.17.179  
Tunnel to peer 161.44.17.179 established  
2 12/06/2000 09:26:16.390 SEV=4 PPTP/42 RPT=20 10.44.17.179  
Session started on tunnel 161.44.17.179  
3 12/06/2000 09:26:19.400 SEV=7 AUTH/12 RPT=22  
Authentication session opened: handle = 22  
4 12/06/2000 09:26:19.510 SEV=6 AUTH/4 RPT=17 10.44.17.179  
Authentication successful: handle = 22, server = 10.2.2.5,  
user = CSNTUSER  
5 12/06/2000 09:26:19.510 SEV=5 PPP/8 RPT=17 10.44.17.179  
User [ CSNTUSER ]  
Authenticated successfully with MSCHAP-V1  
6 12/06/2000 09:26:19.510 SEV=7 AUTH/13 RPT=22  
Authentication session closed: handle = 22  
7 12/06/2000 09:26:22.560 SEV=4 AUTH/21 RPT=30  
User CSNTUSER connected
```

## [可能的错误](#)

您可以遇到可能的错误如下所示。

## 用户名不正确或密码在Cisco Secure ACS Windows RADIUS服务器的

- VPN 3000 Concentrator调试输出

```
6 12/06/2000 09:33:03.910 SEV=4 PPTP/47 RPT=21 10.44.17.179
Tunnel to peer 10.44.17.179 established
```

```
7 12/06/2000 09:33:03.920 SEV=4 PPTP/42 RPT=21 10.44.17.179
Session started on tunnel 10.44.17.179
```

```
8 12/06/2000 09:33:06.930 SEV=7 AUTH/12 RPT=23
Authentication session opened: handle = 23
```

```
9 12/06/2000 09:33:07.050 SEV=3 AUTH/5 RPT=4 10.44.17.179
Authentication rejected: Reason = Unspecified
handle = 23, server = 10.2.2.5, user = baduser
```

```
11 12/06/2000 09:33:07.050 SEV=5 PPP/9 RPT=4 10.44.17.179
User [ baduser ]
disconnected.. failed authentication ( MSCHAP-V1 )
```

```
12 12/06/2000 09:33:07.050 SEV=7 AUTH/13 RPT=23
Authentication session closed: handle = 23
```

- Windows日志输出的Cisco Secure ACS

```
03/18/2000,08:02:47,Authen failed, baduser,,,CS user
unknown,,,1155,10.2.2.1
```

- 用户看到的消息(从Windows 98)

```
Error 691: The computer you have dialed in to has denied access because
the username and/or password is invalid on the domain.
```

**“需要的MPPE加密”在集中器选择，但是Windows服务器的Cisco Secure ACS没有为MS-CHAP-MPPE-Keys和MS-CHAP-MPPE-Types被配置**

- VPN 3000 Concentrator调试输出如果AUTHDECODE (1-13严重性)和PPTP调试(1-9严重性)打开，日志表示，Windows服务器的Cisco Secure ACS从服务器(部分日志)不发送在access-accept的供应商专用属性26 (0x1A)。

```
2221 12/08/2000 10:01:52.360 SEV=13 AUTHDECODE/0 RPT=545
0000: 024E002C 80AE75F6 6C365664 373D33FE .N...u.l6Vd7=3.
0010: 6DF74333 501277B2 129CBC66 85FFB40C m.C3P.w....f....
0020: 16D42FC4 BD020806 FFFFFFFF ..//.....
```

```
2028 12/08/2000 10:00:29.570 SEV=5 PPP/13 RPT=12 10.44.17.179
User [ CSNTUSER ] disconnected. Data encrypt required. Auth server
or auth protocol will not support encrypt.
```

- Windows日志输出的Cisco Secure ACS不显示故障。

- 用户看到的消息

```
Error 691: The computer you have dialed in to has denied access because
the username and/or password is invalid on the domain.
```

## Related Information

- [Cisco VPN 3000 Series Concentrator支持页面](#)
- [Cisco VPN 3000系列客户端支持页](#)
- [IPSec 支持页面](#)
- [Windows支持页面的Cisco Secure ACS](#)
- [RADIUS 支持页](#)
- [PPTP 支持页](#)

- [RFC 2637 : 点对点隧道协议\(PPTP\)](#)
- [请求注解 \(RFC\)](#)
- [Technical Support & Documentation - Cisco Systems](#)