

## How to Configure MS-CHAP Authentication

<https://campus.barracuda.com/doc/53248844/>

Use the Microsoft Challenge Handshake Authentication Protocol Version 2 (MS-CHAP V2) to authenticate VPN clients over [L2TP/PPTP](#) (mutual authentication between peers) or to authenticate [HTTP Proxy](#) users. The firewall must join the domain before using MS-CHAP authentication.

### Connecting to Read-only Domain Controllers

In addition to the adding the hostname for the Barracuda NextGen Firewall F-Series, you must verify that the password for the user account used in the **Helper Scheme** is cached on the read-only domain controller.

### Before You Begin

- Enable SMBv1 on the Windows Domain Controller.

### Step 1. Configure MS-CHAP Authentication

1. Go to **CONFIGURATION > Configuration Tree > Box > Infrastructure Services > Authentication Service**.
2. In the left menu, select **MS-CHAP Authentication**.
3. From the **Configuration Mode** menu on the left, select **Switch to Advanced View**.
4. Click **Lock**.
5. Enable MS CHAP as external directory service.
6. Choose the NTLM protocol version supported by your authentication service.  
When changing the protocol version, a restart of the authentication daemon (phibs) is necessary. Restart the service in **CONTROL > Server > Service Status > box**.
7. In the **Domain Realm** field, enter the name of the Windows domain that is queried by the authenticator.
8. If the NetBIOS domain name differs from the MS Active Directory domain name, specify the **NetBIOS Domain Name**.  
The NetBIOS domain name is important for user group synchronization. It is required for NTLM authentication and URL Filter configuration when user group filters apply. For more information, see [How to Configure URL Filtering in the HTTP Proxy](#).
9. Enter the MS Active Directory **Workgroup Name** if the workgroup name is different from the MS Active Directory domain name (**Domain Realm**).
10. In the **Domain Controller** field, enter the IP address of the domain controller.

If you also configured the [MSAD authentication scheme](#) with the **Use MSAD-groups with NTLM** setting enabled, the Barracuda NextGen Firewall F-Series must be able to resolve the DNS name of the domain controller. (This also applies for the WINS Server IP address.)

11. In the **WINS Server** field, enter the IP address of the domain's Windows Internet Name Service (WINS) server.
12. If group information is queried from a different authentication scheme, select the scheme from the **User Info Helper Scheme** list. For example, select **MSAD** if MS-CHAP is used for identity verification but group information must be queried from MSAD.
13. Click **Send Changes** and **Activate**.

## Step 2. Add the Barracuda NextGen Firewall F-Series to a Windows Domain

1. Go to **CONTROL > Box**.
2. In the left menu, expand **Domain Control** and click **Register at Domain**.

### Report

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```
Domain successfully joined !!!!
Using short domain name -- DOC
Joined 'HQ-NG2' to dns domain 'doc.org'
Joined domain successfully
```

Verify that the Barracuda NextGen Firewall F-Series is joined to the domain by clicking **Show Registration Status** in **CONTROL > Box > Domain Control**.

## Figures

1. domain\_join.png

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