Integration Guide

Configuring TOTP (Multi-Factor Authentication) Using Duo Authentication on SonicWall® SMA Appliance
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SMA 200/400
SMA 500v for ESXi
SMA 500v for Hyper-V

This document describes how to configure time-based, one-time password (TOTP), multi-factor authentication for Secure Mobile Access (SMA) appliances running SMA 10.0. This document focuses on Duo Mobile integration.

Topics:
- Authentication Overview
- System Requirements
- Managing TOTP-Based Two-Factor Authentication in SMA
- Authenticating with the SMA Appliance

Authentication Overview

Topics:
- About TOTP
- About Duo Authentication
- SMA Two-Factor Authentication Options

About TOTP
The time-based, one-time password (TOTP) is a multi-factor authentication scheme that utilizes an algorithm to generate a one-time code. TOTP is an alternative to traditional two-factor authentication methods. The TOTP keeps changing and is valid for 30 seconds at a time. Because the TOTP changes frequently, it is considered more secure than a standard OTP solution.
Several third parties have password applications that you can integrate into your SonicWall infrastructure, for example, Microsoft Authenticator, Google Authenticator, and Duo Mobile. This document focuses on Duo authentication.

**About Duo Authentication**

Duo has multiple options for securing your authentication. Review their Two-Factor Authentication Guide to determine which method works best for your SonicWall solution. Duo Mobile has the option to approve push notifications before accessing applications. SMA appliance supports Duo TOTP-based two-factor authentication.

**SMA Two-Factor Authentication Options**

SMA appliance provides several options for managing password authentication, starting with Secure Mobile Access 9.0.

- **OTP via email**: one-time password (OTP) authentication is verified one time through email. The user gets a temporary password, by email, after they log in with their regular username and password. Once they input the password from their email, the login process completes.
- **OTP via SMS**: enables user to use an SMS code for One-Time password authentication.
- **TOTP or OTP via mobile application**: enables user to use the OTP authentication in which the OTP (generated using a mobile application) keeps changing and is valid for 30 seconds at a time. To take advantage of time-based, one-time password (TOTP) authentication, users must download a TOTP client application, such as Duo Mobile, on their smartphone.

**System Requirements**

To take advantage of the TOTP-based two-factor authentication, you should have an SMA appliance running Secure Mobile Access 9.0 at a minimum.

Before enabling TOTP-based two-factor authentication on your appliance, Duo Mobile must be set up on the user’s smartphone. For information on how to download and install the Duo Mobile application for users, refer to the information available at Secure Two-Factor Authentication App.

**Managing TOTP-Based Two-Factor Authentication in SMA**

To set up the authentication you have to work in both SMA web-based management interface and in Duo Mobile. The following outlines the general steps:

1. Create or set up a user on SMA with the TOTP option as described in the following sections:
   - Editing 2FA for a User
   - Adding a Domain
   - Editing a Domain
   - Setting Up the Administrator
   - Editing 2FA for a User in Virtual Office
   - Authenticating with the SMA Appliance

   The user now has a temporary password to log into the appliance.

2. When the user logs in, the SMA shows a QR code along with instructions to install and bind the Duo authenticator with your appliance. (Refer to Authenticating with the SMA Appliance for more information.)

3. The user follows the instructions and the TOTP is enabled for two-factor authentication.
Editing 2FA for a User

To edit 2FA for a user:

1. In the SMA web-based management interface, navigate to Users > Local Users.
2. Hover over a user account and click <edit icon> that appears.
3. In the GENERAL USER SETTINGS section, enable Require password change on next logon.

   **NOTE:** You should enable Require password change on next logon, only if Allow password changes option is enabled in the domain settings. This ensures that the user changes the password in the next login.

4. Click Login Policies.

5. From the One-Time Password drop-down list, select Enable.


   **NOTE:** To enable user to configure TOTP-based two-factor authentication after logging into Virtual Office, enable User discretion and select Mobile App as one of the options. See Editing 2FA for a User in Virtual Office to configure TOTP-based 2FA for a user from the client side of the SMA.

7. Click SUBMIT at the lower-right corner of the page.
Adding a Domain

To add a new domain with TOTP-based two-factor authentication:

1. After logging into the SMA management interface, navigate to Portals > Domains.
2. Click ADD DOMAIN.

3. In the Add Domain window, enter the domain name and configure other settings as required.
4. Enable Allow password changes.
   (NOTE: Select Require password change on next logon, to ensure that the user must change the password when they log in the first time.)
5. Enable One-time password.
7. Click SUBMIT.
   (NOTE: To add a user group or user with TOTP-based 2FA, select a TOTP-based 2FA domain when adding a group or user.)

Editing a Domain

To edit an existing domain:

1. After logging into the SMA management interface, navigate to Portals > Domains.
2. Hover over the domain and click the <Edit icon> that appears.
3. Enable Allow password changes and select Require password change on next logon checkbox.
   This ensures that the user must change the password when they log in the next time.
4. In the Edit Domain page, select One-time Password.
5 Select **Use Mobile App**.

6 Click **Submit**.

**Setting Up the Administrator**

Two-factor authentication applies to the built-in administrator also and the configuration is similar to that of a user.

**To set up TOTP-based two-factor authentication for the administrator:**

1. After logging into the SMA management interface, navigate to **Users > Local Users**.
2. Hover over the administrator account and click **edit icon** that appears.
3. Set up the administrator parameters.
4. Click **Login Policies**.
5. From the **One-Time Password** drop-down list, select **Enable**.
6. Enable **Use Mobile App**.
7. Click **Submit** at the lower-right corner of the page.

**Editing 2FA for a User in Virtual Office**

Users can enable TOTP-based 2FA for their accounts themselves only if the administrator has enabled **One-Time Password** and has selected **Mobile App** as one of the User discretion options.

1. Log in to the Virtual Office with the credentials assigned by your administrator.
2. Click **user icon** at the upper-right corner of the page.
3. Click **Settings**.
4. In the **ONE TIME PASSWORD SETTINGS** section, enable **one-time password**.
5 Enable Use Mobile App.
6 Click Accept.

Authenticating with the SMA Appliance

After setting up the two-factor authentication:
1 Log in to the SMA appliance with the credentials assigned by your administrator.
2 Reset your password if prompted.
3 Log in with your new password.
4 If you see multiple options for authentication, select MOBILE APP.

NOTE: You see multiple options for authentication when your user account is configured to use any of the supported authentication methods.

The Mobile APP BINDING window is displayed.

5 Install Duo Mobile application on your phone.
6 Open Duo Mobile and click the + icon.
7 Scan the QR code from your SMA appliance or enter the text code that is displayed when you click text code into Duo application to generate an OTP.
8 Enter the 6-digit OTP generated from your application in the Code field.
9 Click VERIFY.

If the bind is successful, a confirmation message appears, and you are logged into Virtual Office.

After Duo Mobile is bound with your SMA user account, TOTP is generated in your Duo Mobile application that changes every 30 seconds. From next login, use the OTP from Duo Mobile application to complete authentication.
Configuring TOTP Using Duo Authentication on SonicWall SMA Appliance
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Legend

⚠️ WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.

⚠️ CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

🔍 IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

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