

# **Configuration guide**

ManageEngine

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# 1. Overview

Two-factor authentication (2FA) adds an extra layer of security to your account along with your username and password. When 2FA is enabled, ADAudit Plus will request that you authenticate twice during login.

ADAudit Plus supports the following six authentication modes for 2FA:

- > Email Verification
- > SMS Verification
- Google Authenticator
- > RSA SecurID
- > Duo Security
- > RADIUS Authentication

This guide will take you through the steps involved in enabling 2FA and setting up the authentication modes in ADAudit Plus.

# 2. Enable 2FA in ADAudit Plus

# 2.1 Steps to enable 2FA in ADAudit Plus

- 1. Open the ADAudit Plus web console.
- 2. Navigate to Admin > Administration > Logon Settings.
- 3. Select Two-Factor Authentication, and toggle to enable 2FA.
- 4. Configure one or more of the following six authentication modes for 2FA.
- > Email Verification
- > SMS Verification
- > Google Authenticator
- > RSA SecurID
- > Duo Security
- > RADIUS Authentication

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ADAudit Plus	Dashboard	Reports	File Audit	Server Audit	Analytics	Alerts	Configuration	Admin	Support	<b>Q</b> Search	🔅 Domain Sett	tings
Administration	<ul> <li>Logo</li> </ul>	n Settings										
Alert Me	Login to	ADAudit Plus us	sing an authentic	ation method other th	han the first facto	r authenticatio	on.					
Domain Settings	c	ingla Sign On	Two	actor Authonticatic	10							
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Logon Settings	Tw	o-Factor Authe	ntication	Enabled								
Schedule Reports		Empil Varific	ation									
Custom Reports	e e	9 Email Verifica	auon								•	
Disk space analysis	¢	SMS Verificat	tion								•	
Exclude User Accounts	¢	Google Auth	enticator								•	
Business Hours	(	RSA SecurID									•	
Configuration	-	Duo Security	,								•	
Alerts/Reports	Q	RADIUS Auth	entication								•	
Archive Events		Backup Verific	ation Code 🗿								Enrolled Users 🕐	>
Restore Archived Events												
Search Archived Events												
Import Evt/Evtx Logs												
SIEM Integration												
General Settings	•											
Personalize												
Agent Settings												
Connection												

- When 2FA is enabled, technicians will have to authenticate twice before accessing ADAudit Plus. Only the default admin user has the option to skip the 2FA process during login. 2FA cannot be mandated for the default admin account.
- > When multiple authentication modes are configured for 2FA, ADAudit Plus will request you to select a preferred authentication method.

### 2.2 Manage 2FA for users

As an admin, you can view and manage the authentication modes selected by users.

- 1. Under the Two-Factor Authentication tab, click Enrolled Users.
- 2. In the pop-up that appears, you can view the list of users enrolled in 2FA as well as the authentication mode each has chosen.
- 3. To remove a user, select them and click the **delete icon**.



# 2.3 Backup verification codes

Backup verification codes allow users to bypass the second factor of authentication when they don't have access to their phone or face issues with any of the authentication modes. When enabled, a total of five codes will be generated for the users to store safely. Once a code is used, it will become obsolete and cannot be used again. The users also have the option to generate new codes.

#### Enable backup verification codes

As an admin, you can enable backup verification codes to allow users to access and manage their backup verification codes in ADAudit Plus.

- 1. Log in to the ADAudit Plus web console using admin credentials.
- 2. Navigate to Admin > Administration > Logon Settings.
- 3. Under the Two-Factor Authentication tab, select the Backup Verification Code check box.

#### Manage backup verification codes

When backup verification codes are enabled, users can access and manage their backup verification codes by following the steps below.

**Prerequisite:** To generate backup verification codes, at least one of the authentication modes must have been successfully configured when logging in to ADAudit Plus.

1. Click the drop-down next to your profile picture in the top-right corner and select

#### **Two-Factor Authentication.**

- 2. Click **Manage backup verification codes.** This will open the *Manage backup verification codes* pop-up, which will list the backup verification codes.
- 3. To generate new codes, click Generate New Codes.
- 4. Users can download, print, or email the codes and store them in a secure location.
- 5. Click OK.

ADAudit Plus		Manage backup verification codes	×		License 🥒 Jobs 📪
Dashboard Reports	Azure AD File Audit	These codes can be used to prove your identity when you don't have access to your mobile device or face issues in receiving code via text/call. Each code can be used only once.		0	
Two Factor Authentication Enrolled authentication mode Authentication mode Modify Authentication mode Note  Manage backup ve courant use other	Google Authenticator	Backup Verification Codes 1. xvpn 58tf 3ddh 2. 2c8b 5ggt i3rn 3. vnfb plg4 2cye 4. thut kfav ui3w 5. cyzv epf8 iekg Generated date: 2022/12/06 11:25:16			reneish Tersonalize Two-Factor Authentication Cugout
Manage trusted br	owsers: You can manage your li	Commond     Print     Cancel			
					9

#### Using backup verification codes during login

When users do not have access to their phone or face issues with any of the authentication modes, they can use a backup verification code to log in to ADAudit Plus.

- 1. To use a backup verification code during login, select one of the authentication modes and click **Next.**
- 2. Click the Use backup verification codes link. This will open the Backup Verification Code page.
- 3. Enter one of your backup verification codes and click Verify Code to log in to ADAudit Plus.

# 2.4 Manage trusted browsers

Users can manage their trusted browsers for 2FA by following the steps below:

- Click the drop-down next to your profile picture in the top-right corner and select Two-Factor Authentication.
- 2. Click Manage trusted browsers.

# 3. Authentication modes

# **3.1 Email Verification**

If you're enabling Email Verification as a 2FA method, you have to configure the email server settings first, and follow up with the steps to enable Email Verification in ADAudit Plus.

#### 3.1.1 Steps to configure email server settings in ADAudit Plus

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > General Settings > Server Settings.
- 3. Under Mail, specify the Server name, Port, From Address, and the Email ID for Notifications.
- 4. Check Authentication, and enter the Username and Password for mail server access.
- 5. Verify the email server settings by clicking the **Test Mail** link to ensure that the test email is received by the recipient email address specified in **Email ID for Notifications.**
- 6. Click Save Settings.

	🛃 Download Now 🔤 Jump to 🛛 License 🔍 🗳 Jobs 🔶 🗧
ADAudit Plus	Dashboard Reports File Audit Server Audit Analytics Alerts Configuration Admin Support Q Search O Domain Settings
Logon Settings	Server Settings
Schedule Reports	Configure Server Settings
Custom Reports	
Disk space analysis	Mdil SMS
Exclude User Accounts	Configure Mail Server
Business Hours	the Company Name and D
Configuration	• Server Name or IP
Alerts/Reports	* Port
Archive Events	* From Address ③
Restore Archived Events	
Search Archived Events	* Email ID for Notifications [Use comma to separate multiple mail ID]
Import Evt/Evtx Logs	
SIEM Integration	Secure Connection (SSL/TLS) None 👻
General Settings	Authentication      IProvide Isorname/Password if mail/SMTPI soner required authentication
Personalize	(rionice oschanter assession in mainswire) server required aduterinication)
Agent Settings	Send Emails in HTML Format
Connection	Save Settings Cancel
ADAP Server	
Privacy Settings	
Server Settings	
lump To	

#### 3.1.2 Steps to enable Email Verification in ADAudit Plus

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > Administration > Logon Settings, and select Two-Factor Authentication.
- 3. Under Email Verification, check Enable Email Verification.
- 4. Enter the Subject of the email (e.g. ADAuditPlus 2-Step Verification Code).
- 5. Enter the content of the email in the **Message** box using macros.
- 6. Click Save.

Logon Settings Login to ADAudit Plus using	an authentication method other than the first factor authentication.		<b>Q</b> Search	Domain Settings
Single Sign On	Two-Factor Authentication			
Two-Factor Authenti	cation Enabled			
🖉 Email Verificatio	n			•
🗹 Enable Email V	erification			
* Subject	ADAuditPlus 2-Step Verification Code			
* Message	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1		
	Dear %userName% ,			
	Please enter this verification code: %confirmCode% to log in to ADAuditPlus.			
	Regards, Administrator.			
	Save Cancel	Macros		

# **3.2 SMS Verification**

If you're enabling SMS Verification as a 2FA method, you can configure ADAudit Plus to use a GSM Modem for sending SMS notifications, or you can configure your own custom SMS gateway.

#### 3.2.1 Steps to configure ADAudit Plus to use a GSM Modem as an SMS provider

- 1. Connect the GSM modem to the serial communication port with a serial cable.
- 2. Open the ADAaudit Plus web console.
- 3. Navigate to Admin > General Settings > Server Settings.
- 4. UUnder SMS, select GSMModem from the SMS Provider drop-down.
- 5. Enter the port number the modem is connected to in Modem Port Number.
- 6. Click Advanced Settings.
- 7. Specify the Modem Port Speed, Message Center Number, and SIM PIN Number.

- 8. Click Send Test Message, and enter the recipient's Mobile Number and the Message to be sent.
- 9. Verify the SMS server settings by clicking **Send SMS**, and ensure that the test message is received by the recipient.
- 10. Click Save Settings.

Server Sett Configure Serve	<b>ings</b> r Settings	
Mail	SMS	
	SMS Provider	GSMModem 🗸
*	Modem Port Number	
		Format : COM5, COM7, COM8, etc.           Advanced Settings
	Modem Port Speed	
Me	essage Center Number	
	SIM PIN Number	
		Save Settings Cancel Send Test Message

- If the message exceeds 160 characters, then the notification will be split into two or more text messages.
- To find the modem port number, go to My Computer > Manage > Device Manager > Modems > (select your modem) > Properties > Modem.

#### 3.2.2 Steps to configure ADAudit Plus to use a custom SMS gateway

#### a. To use an HTTP-based custom SMS gateway:

Follow these steps to use an HTTP-based custom SMS gateway in ADAudit Plus:

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > General Settings > Server Settings.
- 3. Under SMS, select Custom from the SMS Provider drop-down.
- 4. Select HTTP from the Send SMS via drop-down.
- 5. Select either of the available HTTP Methods, Post or Get.
- 6. Enter the HTTP URL of your SMS gateway provider.

- 7. Specify the **HTTP Parameters** specific to your SMS provider, the user's **mobile number**, and the **message** to be sent.
- 8. Select the Success or Failure response from the Select Response Type drop-down.
- 9. Specify the Success and Failure Response from the provider.
- 10. Click Advanced Settings.
- 11. Enter the HTTP Request Headers specific to your SMS provider.
- 12. If the SMS provider expects unicoded messages, check Convert Message into Unicode.
- 13. Click Send Test Message, and enter the recipient's Mobile Number and the Message to be sent.
- 14. Verify the SMS server settings by clicking **Send SMS**, and ensure that the test message is received by the recipient.
- 15. Click Save Settings.

> Separate the HTTP parameters with an ampersand (&) sign.

#### Example:

userName=xxx&password=yyy&mobileNumber=%mobNo%&message=%message%.

- 1. xxx: API authentication username.
- 2. yyy: API authentication password.
- 3. %mobNo%: This macro denotes the user's mobile number.
- 4. %message%: This macro denotes the SMS message content.
- > More HTTP parameters: If your SMS provider requires more parameters like unicode and apiID, include them as well using the "&" sign.

Mail       SMS         SMS Provider       Custom         Send SMS via       HTTP         HTTP Method       Post         HTTP VRL       http://www.smsserver.com/sendsms         * HTTP VRL       http://www.smsserver.com/sendsms         * HTTP Parameters       username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%         Select Response Type       Failure         Failure Response          Advanced Settings          HTTP Request Headers       Authorization: Basic QWxhZGRpbpvcGy Content-Type: text/htm;charset=UTF-8         Convert Message into Unicode       ©				
SMS Provider Custom   Send SMS via HTTP   HTTP Method Post   IHTP Method Post   IHTP Varue Inttp://www.smsserver.com/sendsms   * HTTP Varue Inttp://www.smsserver.com/sendsms   * HTTP Parameters username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%   Select Response Type Failure   Failure Response Image: Convert Message into Unicode	Mail SMS			
Send SMS via HTTP   HTTP Method Post   * HTTP URL http://www.smsserver.com/sendsms   * HTTP VRL http://www.smsserver.com/sendsms   * HTTP Parameters username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%   Select Response Type Failure   Failure Response Image: Convert Message into Unicode	SMS Provider	Custom	~	
HTTP Method  Post  Get  HTTP URL  http://www.smsserver.com/sendsms  HTTP Parameters  username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%  Select Response Type Failure Failure Response Advanced Settings  HTTP Request Headers Authorization: Basic QWxhZGRpbjpvcGy Content-Type: text/html;charset=UTF-8  Convert Message Into Unicode	Send SMS via	HTTP	~	
* HTTP URL       http://www.smsserver.com/sendsms         * HTTP Parameters       username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%         Select Response Type       Failure         Failure Response          Advanced Settings          HTTP Request Headers       Authorization: Basic QWxhZGRpbjpvcGy Content-Type: text/html;charset=UTF-8         Convert Message Into Unicode	HTTP Method	Post O Get		
* HTTP Parameters       username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%         Select Response Type       Failure         Failure Response          Advanced Settings          HTTP Request Headers       Authorization: Basic QWxhZGRpbjpvcGy Content-Type: text/html;charset=UTF-8       ?         Convert Message into Unicode	* HTTP URL	http://www.smsserver.com/sendsms	;	
Select Response Type       Failure         Failure Response	* HTTP Parameters	username=xxx&password=yyy& mobileNumber=%mobNo%& message=%message%	11	3
Failure Response         Advanced Settings         HTTP Request Headers         Authorization: Basic         QWxhZGRpbjpvcGy Content-Type:         text/html;charset=UTF-8	Select Response Type	Failure	~	
Advanced Settings       ▼         HTTP Request Headers       Authorization: Basic         QWxh2GRpbjpvcGy Content-Type:       1         text/html;charset=UTF-8       Image: Convert Message into Unicode	Failure Response			
HTTP Request Headers       Authorization: Basic         QWxhZGRpbjpvcGy Content-Type:       text/html;charset=UTF-8         Convert Message Into Unicode		Advanced Settings 🔻		
Convert Message Into Unicode	HTTP Request Headers	Authorization: Basic QWxhZGRpbjpvcGy Content-Type: text/html;charset=UTF-8	11	3
		Convert Message into Unicode		
Save Settings Cancel Send Test Mess		Save Settings Cancel	💌 S	iend Test Message

#### b. To use an SMTP-based custom SMS gateway:

Follow these steps to use an SMTP-based custom SMS gateway in ADAudit Plus:

- 1. Open the ADAudit Plus web console.
- 2. Navigate to Admin > General Settings > Server Settings.
- 3. Under SMS, select Custom from the SMS Provider drop-down.
- 4. Select SMTP from the Send SMS via drop-down.
- 5. Enter the email address the SMS will be sent from in the From Address field.
- Specify the mobile number macro (%mobNo%), followed by the email address of the SMS provider in the To Address field.

Example: %mobNo%@adauditplus.com.

- Enter the required Subject using macros. Generally, it's either the mobile number (%mobNo%) or the message (%message%), depending on your SMS provider.
- 8. Specify the **Content** to be sent using macros (%message%).
- 9. Enter the name or the IP address of the SMTP Server, and the SMTP Server port.
- 10. Provide the **Username** and **Password** with required permissions on the SMTP server.
- 11. Select your connection security preference from the **Connection Security** drop-down.
- 12. Click Save Settings.

Mail SMS		
SMS Provider	Custom	~
Send SMS via	SMTP	~
* From Address	noreply@adauditplus.com	
* To Address	%mobNo%@adauditplus.com	?
Subject	%mobNo% or %message%	
* Content	%message%	
	Use default mail settings	
* SMTP Server/Port		
Username		
Password		
Connection Security	None 🗸	
	Save Settings Cancel	🗙 Send Test Message

#### Note:

If the SMTP server is not configured, check **Use default mail settings** for the mail server configured under the **Mail** tab to be used.

#### c. To use an SMPP-based custom SMS gateway:

Follow these steps to use an SMPP-based custom SMS gateway in ADAudit Plus:

- 1. Open the ADAudit Plus web console.
- 2. Navigate to Admin > General Settings > Server Settings.
- 3. Under SMS, select Custom from the SMS Provider drop-down.
- 4. Select SMPP from the Send SMS via drop-down.
- 5. Enter the SMPP Server Port number.
- 6. Specify the Username and Password with required permissions on the SMPP server.
- 7. Click Advanced Settings.
- 8. Specify the SMPP Time-Out and SMPP Source Address.
- Enter the ESME System Type and from the ESME Bind Type drop-down, and select Bind Transmitter or Bind Transceiver.
- Select the Source Address' TON, Source Address' NPI, Destination Address' TON, and Destination Address' NPI from their respective drop-downs.
- 11. Click Save Settings.

Mail SMS		
SMS Provider	Custom	
Send SMS via	SMPP ~	
* SMPP Server Port	86.96.240.20 10000	
* Username	GASCO	
* Password		
	Advanced Settings	
SMPP Timeout	ads.smshandl 🐱	
SMPP Source Address	ADNOC	
ESME System Type		
ESME Bind Type	Bind Transmitter 🗸	
Source Address's TON	Alphanumeric 🗸	
Source Address's NPI	Internet (IP)	
Destination Address's TON	Alphanumeric 🗸	
Destination Address's NPI	Internet (IP)	
	Save Settings Cancel	Send Test Messa

- > TON: Type of number
- > NPI: Numeric plan indicator

#### 3.2.3 Steps to enable SMS Verification in ADAudit Plus

- 1. Log in to your ADAaudit Plus' web console.
- 2. Navigate to Admin > Administration > Logon Settings, and select Two-Factor Authentication.
- 3. Under SMS Verification, check Enable SMS Verification.
- 4. Enter your content in the **Message box** using macros.
- 5. Click Save.

Logon Settings Login to ADAudit Plus using	an authentication method other than the first factor authentication.	<b>Q</b> Search	O Domain Settings
Single Sign On	Two-Factor Authentication		
Two-Factor Authenti	cation Enabled		
🖉 Email Verificatio	n		•
🖉 SMS Verification	1		-
🗹 Enable SMS Ver	ification		
* Message	Please enter this verification code: %confirmCode% to log in to ADAuditPlus.		
	Macro	05	
	Save		

# 3.3 Google Authenticator:

When Google Authenticator is enabled, users will be required to enter a code generated by the Google Authenticator app during the login process.

#### 3.3.1 Steps to enable Google Authenticator in ADAudit Plus

#### **Prerequisite:**

Download and install Google Authenticator on your mobile device from Google's website.

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > Administration > Logon Settings, and select Two-Factor Authentication.
- 3. Under Google Authenticator, click Enable Google Authenticator.

- 4. When logging in to the ADAudit Plus web console for the first time, a QR code will be displayed. Open the Google Authenticator app on your mobile device, and scan the QR code to create an account for ADAudit Plus.
- 5. When ADAudit Plus is added to the Google Authenticator app, a **secret code** will be generated automatically.
- Enter the secret code generated by the Google Authenticator app, and click Verify to access ADAudit Plus.

Logon Settings Login to ADAudit Plus using an authentication method other than the first factor authentication.	<b>Q</b> Search	Domain Settings
Single Sign On Two-Factor Authentication		
Two-Factor Authentication C Enabled		
O Email Verification		•
SMS Verification		•
O Google Authenticator		-
Enable Google Authenticator		
Note:		
<ul> <li>Google Authenticator adds an extra layer of security. Once enabled, users will be required to enter a code generate app during the login process.</li> </ul>	ed by the Google .	Authenticator
• The Google Authenticator app can be used with Android, iPhone, and BlackBerry phones.		

> The Google Authenticator app can be used with Android, iPhone, and BlackBerry phones.

# 3.4 RSA SecurID

When RSA SecurID is enabled, users can use the RSA security console's security codes for identity verification while logging in to ADAudit Plus.

**Note:** When enabling RSA SecurID two-factor authentication in ADAudit Plus, contact RSA support or use your RSA login to get the RSA dependent libraries named authapi.jar and its compatible log4j jars, and paste them into the ADAudit Plus lib folder (cproduct\_installation\_path</lib/).</pre>

#### 3.4.1 Steps to add the ADAudit Plus server in the RSA admin console

- 1. Log in to your **RSA admin console** (e.g., https://RSA machinename.domain DNS name/sc).
- 2. Go to the Access tab, select Authentication agent from the drop-down, and click Add new.
- 3. Create a Client, and set its type as Standard Agent.

- 4. Go to the Home tab, select Manage Users, and click Add new.
- 5. Create a user with a last name and a user ID similar to the SAM Account name in the domain.
- 6. After adding the user, click the username, and in the menu, select Secure ID Token.
- 7. Click Assign Token, select any one token, click Assign, and click Save.
- 8. Go to the Authentication tab, click On Demand Authentication, and select Enable Users.
- 9. Select the User from the list, and click Enable for ODA.
- 10. Select the associated pin and expiration date, and click Save.
- 11. Go to the Access tab, and select Authentication agent from the drop-down.
- 12. Click Generate Configuration File, select Generate Config File, and click Download now.
- 13. Extract the AM\_Config.zip file to get the sdconf.rec file.

#### 3.4.2 Steps to enable RSA SecurID in ADAudit Plus

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > Administration > Logon Settings, and select Two-Factor Authentication.
- 3. Under RSA SecurID, check Enable RSA SecurID.
- 4. Browse and select the **sdconf.rec file** downloaded from the RSA Authentication Manager Server.
- 5. Click Save.

Logon Settings Login to ADAudit Plus using an authentication method other than the first factor authentication.	<b>Q</b> Search	O Domain Settings
Single Sign On Two-Factor Authentication		
Two-Factor Authentication Enabled		
O Email Verification		•
O SMS Verification		•
O Google Authenticator		•
🔗 RSA SecurID		•
Enable RSA SecurID  Browse sdconf.rec.file Browse		
Save Cancel		
<ul> <li>To complete RSA SecurID configuration, choose sdconf.rec file from RSA Authentication Manager server. Learn More</li> </ul>		

# 3.5 Duo Security

When Duo Security verification is enabled, users can use the six-digit security codes generated by the Duo Mobile app to prove their identity.

#### 3.5.1 Steps to retrieve security details from Duo Security

- 1. Log in to your **Duo Security account**.
- 2. Navigate to the Applications section in the left pane, and click Protect an Application.
- 3. Search for Web SDK, and click Protect.
- 4. Copy the Integration Key, Secret Key, and API Host Name.

	Search for users, groups, applications, or devices	F	Study1   ID: 2656-6929-64 Re	neish Rajendran 🗸
Dashboard Policies	Dashboard > Applications > Protect an Application			
Applications Protect an Application				
Users Groups	Application	Protection Type		
2FA Devices Administrators	Partner WebSDK	2FA	Documentation 🗗	Protect
Reports Settings	C Web SDK	2FA	Documentation E*	Protect
Billing				

#### 3.5.2 Steps to enable Duo Security in ADAudit Plus

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > Administration > Logon Settings, and select Two-Factor Authentication.
- 3. Under Duo Security, check Enable Duo Security.
- 4. Enter the Integration Key, Secret Key, and API Host Name copied from Duo Security.
- 5. Choose the Username Pattern, and click Save.

✓ Enable Duo Security					
* Integration Key					
* Secret Key					
* API Host Name					
Username Pattern	domain_dns_name	<b>∼</b> \	~	user_name	~
	Save Cancel				

If an enrolled user is deleted in Duo, it is essential to remove the user's enrollment in ADAudit Plus as well. Otherwise, the user will not be able to access ADAudit Plus without entering the Duo security code during login.

# **3.6 RADIUS Authentication**

When RADIUS Authentication is enabled, end users can use their username and password from the RADIUS server to log in to ADAudit Plus.

#### 3.6.1 Steps to integrate the ADAudit Plus server with RADIUS

- 1. Access your RADIUS server and find the /etc/raddb/ folder.
- 2. Select the clients.conf file, and enter the ADAudit Plus server details.

For example, if the name of the ADAudit Plus server is "ADAP" and its IP address is 172.21.193.194, add the following entry in the **clients.conf file:** 

client ADAP{ ipaddr = 172.21.193.194 secret = Radius@123 require\_message\_authenticator = no nastype = other

```
}
```

#### Note:

Here, "Radius@123" is the **Secret Key** that must be entered in the **ADAudit Plus web console** while configuring RADIUS.



3. Select users, and enter the user details.

Example format: "domain\_name\\user\_name" Cleartext-Password := "Test@123"



4. Restart the **Radiusd service** using shell script.

#### 3.6.2 Steps to enable RADIUS Authentication in ADAudit Plus

- 1. Open the ADAaudit Plus web console.
- 2. Navigate to Admin > Administration > Logon Settings, and select Two-Factor Authentication.
- 3. Under RADIUS Authentication, check Enable RADIUS Authentication.
- Enter the hostname or IP address of the host where the RADIUS server is running in the Server Name / IP Address field.
- 5. Enter the port used for RADIUS server authentication in the **Server Port** field (by default, RADIUS is assigned the UDP port 1812).
- Select the Authentication Scheme used to authenticate users. Choose from four protocols: Password Authentication Protocol (PAP), Challenge-Handshake Protocol (CHAP), Microsoft Challenge-Handshake Protocol (MSCHAP), or Microsoft Challenge-Handshake Protocol Version 2 (MSCHAP2).
- Enter the Secret Key that you specified while adding ADAudit Plus server as a client in your RADIUS server.
- 8. Choose the Username Pattern, and set the Request Time Out limit.
- 9. Click Save.

☑ Enable RADIUS Authentication	
* Server Name / IP Address	
* Server Port	1812
Authentication Scheme	PAP 🗸
* Secret Key	
Username Pattern	domain_flat_name
Request Time Out (Secs)	5 v seconds
	Save Cancel

# 4. Set a preferred authentication mode

When multiple authentication modes are enabled, you will be asked to choose which authentication mode you want to use to prove your identity during login. You can also set a preferred authentication service that will serve as your default authentication mode for 2FA.

#### Steps to select a preferred authentication mode:

- 1. Click the drop-down next to your profile picture in the top-right corner.
- 2. Select Two-Factor Authentication, and click Modify Authentication mode.
- 3. Choose your preferred authentication mode, and click Next.
- 4. Complete the verification process for the authentication service you choose to set as your preferred authentication mode for 2FA.

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Note • Manage backup verification codes: You can use your backup verification codes to log in if you don't have access to your phone, or otherwise couldn't use other authentication methods.										
• Manage trusted browsers: You can manage your list of trusted browsers here. We won't ask for verification codes during login from your trusted browser.										

If you choose Google Authenticator as your preferred method, the next step will prompt you to scan a QR code and enter the code generated by the app in your smartphone, then click Verify Code.

# 5. Reset the second authentication factor for the default admin

If you have lost your authentication device or are unable to retrieve the verification code required to complete the authentication, you can reset the second authentication factor to access ADAudit Plus.

#### Note:

> The authentication factor can only be reset for the default administrator account.

To reset the authentication factor:

- 1. Navigate to the <product\_installation\_path>\bin folder.
- 2. Find and run the resetAdminTFAEnrollment.bat file.
- 3. You can now log in to ADAudit Plus and reenroll for the second authentication factor by repeating the steps to configure the authentication mode(s).

#### ManageEngine) ADAudit Plus

ManageEngine ADAudit Plus is a real-time change auditing and user behavior analytics solution that helps keep your Active Directory, Azure AD, Windows servers, and workstations secure and compliant.