

VOICE REGISTRATION

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Voice Registration

iOS Android Voice Biometric Token

1. Overview

In this article, we will demonstrate how to record a **voice** to enable 2FA using **voice biometrics**.

To use **Voice Biometrics**, it is necessary **WebADM 2.0.*** and **OpenOTP** mobile application version **1.4.11** or higher for Android and version **1.4.13** or higher for **iOS**.

2. Voice Biometric Registration

In order to record a **voice biometric** to a user, log in on the **WebADM admin GUI**, in the left LDAP tree, click on the user account that you want to register a voice. Once you are on the activated user account, in the Application Actions box, click on MFA Authentication Server.

	0	CN=aduser13	Web Dill Enternuis				
	0	CN=aduser14_new	Consticut O 2010-2020 BCDms	e Edition v2.0.6		API O) 🌐 🖼 🗎
	0	CN=aduser16	copyingin a coro coco nobera	decomy, resting not result		/ / /	
	0	CN=aduser17	# Home Admin Create	Search Import	Databases Statistics Applic	ations About Logout	
	0	CN=aduser18		Object CN	aduser3.CN=Users.DC=adrcdevs.	DC=com	
	0	CN=aduser19			uning and the second second second second		
	0	CN=aduser2	LDAP Actions		Object Details	Application Actions	
Ð	0	CN=aduser20	Delete this object	Object class(es): w	ebadmAccount, posixAccount, p	Secure Password Reset (1 actions)	
\square	0	CN=aduser3	Copy this object	WebADM settings: 4	settings [CONFIGURE]	User Self-Registration (1 actions)	-
	0	CN=aduser4	C Move this object	WebADM data: 1	2 data [EDIT]	MFA Authentication Server (14 action	ns)
۵	0	CN=aduser5	Chapter control	User activated: Y	es Deactivate U	SMS Hub Server (1 actions)	
	0	CN=aduser6	Create certificate	Logs and inventory:	repapp, websiry, inventory, Record	Soft Public Noy Server (S activita)	
	0	CN=aduser7	Unlock WebApp access				
	0	CN=aduser8	Advanced edit mode				
	ā	CN=aduser9					
	Ō	CN=group1	Object Name		aduser3		Rename
	P	CN=group2	Add Attribute (10)		WebADM Voice Model		- Add
	2.	CN=krbtgt	1415 August 145				
	3	CN=master_group	Add Extension (1)		Inetorgperson		• Add
	0	CN=normal_users					
	2.	CN=proxy_user	User Certificate		Subject: adrcdevsladuser3 (User)	Ren	ew Details
	0	CN=qagroup	fann vaineel frieidig aminning		Signer: WebADM CA #8759 (Serial 9 Status: Walld (Excises in 220 days)	4)	Download
	0	CN=qqcoisa	Circle Manage		Status. Valita (Expires in 558 days)		
۵	20	CN=testvoice	[delete attribute]		aduser3		
0	2.	CN=vpnuser	Account Created		07 07 2020		
	2.	CN=webadm_admins	[delete attribute]		01-01-2020		
	-	CN=webadmin	Account Modified [delete attribute]		24-11-2020		

Under the next menu, click on **Register / Unregister Voice Biometrics** item, and you will be in the registration page:

Web Copyright © 2010-20	terprise 20 RCDevs 5	Edition v2.0.8 Security, All Rights Reserved	-
Admin Admin	Create	Search Import Databases Statistics Applications About	Logout
0	penOTP Us	ser Actions for CN=aduser3,CN=Users,DC=adrcdevs,DC=com (14)	
Find below the user a	actions supp	ported by MFA Authentication Server (OpenOTP).	
		Register / Unregister OTP Tokens	
		You must register a hardware or software Token before a user can start using it.	
	fido	Register / Unregister FIDO Devices	
	-	You must register a FIDO Device before a user can start using it.	
		Register / Unregister Voice Biometrics	
		Enrol your voice fingerprint for voice biometrics authentication.	
		Resynchronize Tokens	
		Event-based and time-based tokens can get out of sync. You can use the action to resync the Token counter or clock drift.	
	20	Manage OTP PIN Prefix	
		Set an OTP PIN if you want the OTP passwords to be prepended by a static PIN password. Any OTP password will have to be prefixed by the static PIN code in the form [PIN][OTP].	

In that page, click in Click to Start, then record your **voice biometric**. It is recommended you use an earphone with microphone or other kind of dedicated audio input device.

Web Copyright	2010-2020	e rprise) RCDevs So	Edition	v2.0.8				1	
希 Home	Admin	Create	Search	Import	Databases	Statistics	Applications	About	Logout
	Register	/ Unregiste	r Voice Bio	metrics for	CN=aduser3,	CN=Users,D(C=adrcdevs,DC	=com	
You must re The registra The passph	egister your ition simply rase must	voice finge consists in be long end	rprint in ord speaking s bugh (minin	der to authorseveral tim num 3 seco	enticate with vo es the same se onds).	ncel	S. ISO.		

To make sure it will not be misunderstood by **OpenOTP**, you have to repeat your voice biometric 4 times and not use too short messages.

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🖨 Home	Admin	Create	Search	Import	Databases	Statistics	Applications	About	Logout
	Register	r / Unregiste	er Voice Bio	metrics for	CN=aduser3,	CN=Users,D	C=adrcdevs,DC	=com	
			Voi	ce fingerpr	int has been re	egistered			
					Ok				

Once the Voice registration is finished, you should see the attribute WebADM Voice Model (webadmVoice).

WebADM Voice Model [add values] [delete attribute]

[BIOMETRIC VOICE MODEL - 196 KBytes]

If you can see the **WebADM Voice attribute**, that means the voice registration was done successfully.

3. End-User enrollment through RCDevs Web Applications

RCDevs provides 2 Web Applications: <u>SelfDesk</u> and <u>SelfReg</u> for the user self-enrollment. These applications are free and must be installed on your **WebADM** server. To limit the end-user access to the **WebADM/OpenOTP** servers, you can allow access to these web applications through a <u>WebADM Publishing Proxy</u>. By this way, your end-users will have access to the **WebApps** through the **WAProxy** server and not from the **WebADM** server.

The User Self-Registration application is similar to the User Self-Service Desk, the only difference between both applications is that the Self-Registration can be accessed only under a WebADM Administrator request. To allow the user to access this application, the Administrator has to send a Self-Registration request to the user. Then, the user will receive a one-time link by mail or SMS to access the application.

SelfDesk application is accessible at any time by the end-user (if it is not locked in its configuration).

3.1 User Self-Registration

In this section, we will focus how to use **Self-Registration** for **Voice** registration. If you want a more complete understanding of how **Self Registration** works, you can check **Self Registration** documentation.

In **WebADM portal**, select the user you want under the LDAP tree, the user must be an active user. Then click in the **User-Self-Registration** link on the right to send a **Self-Registration** link to the specific user.

	CN=aduser12 CN=aduser13	Web ADM. Enterpris	e Edition v2.0.8 Security, All Flights Reserved		
•	CN=aduser14_new	Home Admin Create	Search Import Databases Statistics Appli	cations About Logout	
•	CN=aduser16		- Contract Contract Contract Contract Contract		
• 6	CN=aduser17		Object CN=aduser3,CN=Users,DC=adrcdevs,DC=c	om 🕕	
0	CN=aduser18				
	CN=aduser19	LDAP Actions	Object Details	Application Actions	
0 0	CN=aduser2	Delete this object	Object class(es): webadmAccount, posixAccount, p	Secure Password Reset (1 actions)	
	CN=aduser20	Copy this object	WebADM settings: 4 settings [CONFIGURE]	User Self-Registration (1 actions)	
	Chiradward	C Move this object	WebADM data: 13 data [EDIT]	MFA Authentication Server (14 actions)	
	<u>CN=aduser3</u>	Export to LDIF	User activated: Yes Deactivate	SMS Hub Server (1 actions)	
	CN=aduser4	Change password	Logs and inventory: WebApp, WebSrv, Inventory, Record	SSH Public Key Server (3 actions)	
0	CN=aduser5	Create certificate			
	CN=aduser6	Unlock WebApp access			
	CN=aduser7	Advanced edit mode			

In the next page, write a personalized message and set the parameters accordingly.

Home Admi	n Create Search Ir	mport Databases Statistics Applications About Logout
	Send Registration Email /	SMS for CN=aduser3,CN=Users,DC=adrcdevs,DC=com
Self-registration se The link is usable of The SelfReg WebA	nds a onle-time link to the use only once and automatically ex opp address contained in the l	er by email and/or SMS. xpires after the expiration time specified below. link can be specified in the SelfReg configurations.
	Username:	aduser3
	Domain:	adrcdevs •
	Message Type:	MAIL
	Use Secure Mail:	🔿 Yes 🧿 No
	Use SMS Type:	Normal O Flash
	Link Expiration:	1 Hour
	Message Comments:	Click in the link for self registration. It will expire after 1 hour.
	Restricted Application:	Any
	Focused Item:	None

The user should receive an email with the registration link. After the user click in the link sent, he should enter his credentials to login in the **Self-Registration portal**.

0361	Sell-Registratio	חו
Welcome to the Self-Regis	tration Portal at rcde	evs.
Your login password is req	uired to continue.	
	Username:	aduser3
50.5	Domain:	adredavs
	Domain.	durcuevs
(0,0)	Password:	•••••
mound	Login	Canaal
	Login	Cancer

Once it is done, the user can start the **Voice Model** registration.

CLick in Voice tab, then CLick to Start



It is recommended you use an earphone with microphone or other kind of dedicated audio input device. To make sure it will not be misunderstood by **OpenOTP**, you have to repeat your voice biometric 4 times and not use a too short message.

After the procedure is done, you should see the below message:

User Self-Registration
Your voice fingerprint has been registered
Provided by RCDevs Security SA

Then you can go to **Voice** tab again and check if there is a **voice biometrics** already registered.

WebADM Voice Model [add values] [delete attribute]

[BIOMETRIC VOICE MODEL - 196 KBytes]

3.2 User Self-Service Desk

The user **Self-Service** desk is accessible to the following address:

https://YOUR_WEBADM/webapps/selfdesk/login_uid.php

Through the WAPRoxy the address is:

https://YOUR_WAPROXY/selfdesk/login_uid.php

To allow the user to enroll a Token, you have to allow the OTP management under the Selfdesk configuration.

When that setting is checked, you can log in to the **SelfDesk** application.

User Sel	f-Service De	esk
Welcome to the Self-Service Pe Please enter the required inform	ortal at <i>rcdevs.</i> mation to login.	
	Username:	aduser3
50	Password:	••••••
602	Domain:	adrcdevs 💌
inner		Login
	Provide	d by RCDevs Security SA

Once logged on the **SelfDesk** application, go on the **OTP** tab.

		Us	er Self-S	ervice l	Desk				
A Home	OTP	FIDO	App Keys	SSH	SSO	PKI	Logout		
Reg Mov	ister OT ve your c	P Token(ursor on	s) to authen the (i) icons	ticate at <i>i</i> below fo	rcdevs. r more ir	nformati	ion.		
Authenticat	ion Sett	ings							
Primary OTF	P Method	d:	Voice						
Fallback OT	P Metho	d:	Not Se	t					
OTP Challer	nge Time	out:	90 Sec	onds					
Enable Push	Login:		• Ye	s 🔿 No	5 ()				
View My	/oice Bi	ometrics		Mm { to Regis	ter				
User Statist	ics								
Login Count	:		8 succ	8 success & 4 failure					
Last Login:			2020-1	2020-11-24 11:56:45					
Blocking Sta	itus:		Accou	nt active	(0 login	failed)			
Download To) oken F	Register 1	oken Res	ync Toke	n Test	Login	Build OTP List		
						-			
*					Provide	ed by R	CDevs Security SA		

Change View My to Voice Biometrics. Then click in Click to Register





	User Self-Service Desk
	Your voice fingerprint has been registered
₩	Provided by RCDevs Security SA

It is recommended you use an earphone with microphone or other kind of dedicated audio input device. To make sure it will not be misunderstood by **OpenOTP**, you have to repeat your voice biometric 4 times and not use a too short message.

After the **Voice registration** is done. You will see, under **OTP** tab, that the **Voice** Login Status is Ok.

	User Self-Service Desk										
A Home	OTP	FIDO	App Keys	SSH	SSO	PKI	Logout				
Reg	jister OT /e your c	P Token(s sursor on t) to authent he (i) icons	icate at <i>n</i> below for	<i>cdevs.</i> more ir	nformati	ion.				
Authenticat	tion Sett	tings									
Primary OT	P Metho	d:	Voice								
Fallback OT	P Metho	d:	Not Set	t							
OTP Challer	nge Time	eout:	90 Sec	onds							
Enable Push	n Login:		• Yes	💿 Yes 🔿 No 🕕							
View My	Voice Bi	ometrics	•		_						
Voice Login	Status:		Ok (Un	Ok (Unregister)							
User Statis	tics										
Login Count	:		8 succe	8 success & 4 failure							
Last Login:			2020-11	-24 11:5	6:45						
Blocking Sta	itus:		Accour	Account active (0 login failed)							
ۍ 🚯		🛞 💌 o 🔍									
Download Token Register Token Resync Token Test Login Build OTP List											
X	Provided by RCDevs Security SA										

4. Authentication Test through the WebADM Admin GUI

Login on the WebADM admin GUI and click on your user in the left tree. In WebADM settings, click on Configure

CN=aduser12	Web 1014 Enterpris	Web/1014 Enterprise Edition v2.0.8			
CN=aduser14_new	Home Admin Create				
CN=aduser16 CN=aduser17		Cbject CN=aduser3,CN=Users.DC=adrodevs.DC=com			
CN=aduser18	LDAP Actions	Object Details	Application Actions		
CN=aduser19 CN=aduser2	Delete this object On Copy this object	Object class(es): webadmAccount, posixAccount, p WebADM settings: 4 settings (CONFIGURE)	Secure Password Reset (1 actions) User Self-Registration (1 actions)		
CN=aduser20	(2) Move this object	WebADM data: 13 data [EDIT]	MFA Authentication Server (14 actions)		
CN=aduser4	Qe Change password	Logs and inventory: WebApp, WebSrv, Inventory, Record	SSH Public Key Server (3 actions)		
CN=aduser5	 Create certificate Unlock WebApp access 				
CN=aduser7	Advanced edit mode				

Make sure the **OTP Type** type is set to **VOICE**.

	A	pplication Settings for CN=aduser3,CN=Users,DC=adrcdevs,DC=com	
Applications		Authentication Policy	
✓ MFA Authentication Server (4) SSH Public Key Server	Login Mode	LDAPOTP (Default)	
OpenID & SAML Provider	The login mode (re - LDAPOTP: Requ	equired login factors) should be ajusted via Client Policies. irre both LDAP and OTP passwords.	
Secure Password Reset	- LDAPU2F: Require both LDAP and FIDO response. - LDAPMFA: Require LDAP and either OTP or FIDO.		
User Self-Service Desk	- LDAP: Require L	- LDAP: Require LDAP password only.	
User Self-Registration	- OTP. Require Of	password only.	
	OTP Type	VOICE	
	- TOKEN: OATH H - SMS: SMS one-t - MAIL: Email one- LIST: Pre-genera - VOICE: Voice bio - PROXY: Forward	IOTP/TOTP/OCRA, YubiKey or MobileOTP Token. ime password (On-demand or Prefetched). -time password (On-demand or Prefetched). ted OATH OTP password list (to be printed). pretrics authenticaton (requires license option). d requests to another RADIUS server (for migrations).	
	OTP Fallback	TOKEN	
	Fallback OTP Type SMS/MAIL OTPs a	e to be used as secondary authentication method. are delayed for MobileTimeout seconds before beeing sent.	

Note

Voice Biometrics feature requires that PUSH is configured and enabled in MFA/OpenOTP application settings. Also, in a real scenario, the user should have an OpenOTP software token registered.

Then, in Applications Actions box, click on MFA Authentication Server



We scroll down and click on Test User Authentication:

Web Old Enterprise Edition v2.0.8 Copyright © 2010-2020 RCDevs Security, All Rights Reserved					
Admin (Create	Search Import Databases Statistics Applications	About	Logout	
		action to set or reset the PIN code on the user account.			
	-	Manage Emergency OTP			
	22	An emergency OTP is an auto-expirable static OTP which can be used when the user cannot use his usual OTP/FIDO method and requires a temporary access.			
	a	Manage Printed OTP List			
	9	You can use this action to register, remove, display and download user OTP Lists.			
	8	Manage Application Passwords			
	»م الله الله	You can use this action to register, remove and display per- application passwords.			
		Unblock Account			
		You can use this action to unblock an account after the max authentication attempts has been reached.			
		Import OATH-PSKC File			
		You can use the action to import a PSKC (RFC-6030) OATH Token key file.			
		Export OATH-PSKC File			
		You can use the action to export the registered OATH Token to a PSKC (RFC-6030) file.	_		
		Test User Authentication			
		You can use this action to test a user authentication with OpenOTP.			
		Test User Confirmation			
		You can use this action to test a transaction confirmation with OpenOTP.			
		Cancel			

We insert the LDAP password and click on **Start**:

Web Copyright © 2010-2020 RCDevs Se	Edition v2.0.8	a
Admin Create	Search Import Databases Statistics Applications About	Logout
System: Linux 4.18.0-193.14.2.el8_2.x86 Listener: 192.168.3.171:8080 (HTTP/1.1 Uptime: 14339s (0 days) Cluster Node: 1/1 (Session Server) Local Memory: 1M (33M total) Shared Memory: 1M (256M total) Connectors: OK (4 alive & 0 down)	6_64 x86_64 (64 bit) SSL)	
Login Method:	Normal O Simple	
Username:	aduser3	
Domain:	adrcdevs	
LDAP Password:	•••••	
OTP Password:		
Simulated Client:	[Default]	
Simulated Source:	192.168.3.146	
Simulated Options		
Request Settings:	1.	
Virtual Attributes:		
Browser Context:	8ccf10de8f0ca311c26668901f7c374e	
Debug Mode:	(enable debug logs for this request)	
	Start Cancel	

Then, if you have **Soft Token with Push** registered, you will get a notification in your mobile. Perform the authentication with **Voice** in your mobile.

We are authenticated!

Web COM Enterprise Editi Copyright © 2010-2020 RCDevs Security, A	on v2.0.8 All Rights Reserved	
Admin Create Search	ch Import Databases Statistics	Applications About Logout
Test User Authentio	Result: Success Message: Authentication success Ok Cancel	cdevs,DC=com

5. Using Voice Biometrics with Credential Provider

In order to see **Voice Biometrics** working in a real scenario, we will test it with **Windows Credential Provider** plugin.

To make it works, we should enable **Push Login** in **MFA (OpenOTP)** application. Also, it is necessary that **OTP Type** is set to **VOICE** and **Mobile Voice Login** is set to **Yes**. Lastly, the user must have a **Software Token** registered via **OpenOTP mobile** application.

Since we are testing using **Windows Credential Provider**, having <u>Windows CP</u> working is also a requirement here.

In Windows **OpenOTP** page, enter the LDAP credentials as usual:



After doing that, **WebADM** endpoint will be called:



Then the following notification should appear in your mobile phone:



After you click in the **Record** button, you have 5 seconds to enter your **Voice** authentication.



If everything works correctly, you should be able to log in.



Connexion réussie ! Vous êtes connecté à 192.168.3.218



6. Logs

Now, we can check the logs using Voice Biometrics in a real scenario., we click on **Databases** tab:

Click on WebADM Server log Files. It corresponds to the /opt/webadm/log/webadm.log file:

Tue M	W 24	11:56:31.259121 20	201 [192.168.3.218]	[OpenOTP: 25J7U1xC1	New openotpSimpleLogin SOAP request
Tue M	W 24	11:56:31.259176 20	20] [192.168.3.218]	[OpenOTP: 25J7U1XC]	> Username: aduser3
Tue M	w 24	11:56:31.259184 20	20] [192.168.3.218]	[OpenOTP: 25J7U1XC]	> Domain: adredevs.com
Tue N	24	11:56:31.259219 20	20] [192.168.3.218]	[OpenOTP: E5J7U1XC]	> Password: xxxxxxxxx
[Tue N	w 24	11:56:31.259232 20	20] [192.168.3.218]	[OpenOTP: 25J7U1XC]	> Options: -LDAP,OFFLINE,NOVOICE
Tue S	w 24	11:56:31.259254 20	20] [192.168.3.218]	[OpenOTP: 25J7U1XC]	Registered openotpSimpleLogin request
Tue No	w 24	11:56:31.259574 20	20] [192.168.3.218]	[OpenOTP:ESJ7U1XC]	Resolved LDAP user: CN=aduser), CS=Users, DC=adrodevs, DC=com (cached)
Tue N	w 24	11:56:31.259651 20	20] [192.168.3.218]	(OpenOTP: 25J7U1XC)	Resolved LDAP groups; group2, remote desktop users
Tue M	W 24	11:56:31.270757 20	20] [192.168.3.218]	[OpenOTP:25J7U1XC]	Started transaction lock for user
Tue M	W 24	11:56:31,283882 20	20] [192.168.3.218]	[OpenOTP:25J7U1XC]	Found user fullname: aduser3
(Tue %	W 24	11:56:31.283912 20	20] [192.168.3.218]	[OpenOTP:25J7U1XC]	Found 1 user mobiles: +352 691
[Tue N	w 24	11:56:31.283921 20	20] [192.168.3.218]	[OpenOTP: 25J7U1XC]	Found 1 user emails: aduser3@adredevs.com
[Tue N	w 24	11:56:31.284501 20	20] [192.168.3.218]	[OpenOTP: 25J7U1XC]	Found 49 user settings: LoginMode=LDAPOTP,OTPType=VOICE,PushLogin=Yes,PushVoice=Yes,BlockNotify=MAIL,ExpireNotify=MAIL,ChallengeMode=Yes
[Tue N	w 24	11:56:31.285679 20	20] [192.168.3.218]	[Open0TP: ISJ7U1XC]	Found 6 user data: VoiceState,TokenType,TokenKey,TokenState,TokenID,TokenSerial
[Tue N	27 24	11:56:31.285783 20	20] [192.168.3.218]	[Open0TP: 25J701XC]	Found 1 registered OTP token (TOTP)
[Tue N	w 24	11:56:31.287052 20	20] [192.168.3.218]	[OpenOTP:E5J7U1XC]	Requested login factors: OTP
Tue N	ov 24	11:56:31.287276 20	20] [192.168.3.218]	[OpenOTP:E5J7U1XC]	Authentication challenge required
[Tue M	w 24	11:56:31.409081 20	20] [192.168.3.218]	[OpenOTP: 25J701XC]	Sent push notification for token #1
Tue M	W 24	11:56:31.409111 20	20] [192.168.3.218]	[OpenOTP:25J7U1XC]	Waiting 28 seconds for mobile response
(Tue M	W 24	11:56:44.612725 20	20] [192.168.3.172]	[OpenOTP: 25J7U1XC]	Received mobile voice response from 192.170.3.17
Tue %	W 24	11:56:44.612756 20	20] [192.168.3.172]	[OpenOTP: 25J7U1XC]	> Session: 77Exxx0zDK02tE1K
[Tue N	w 24	11:56:44.612764 20	20] [192.168.3.172]	[OpenOTP: 25J7U1XC]	> Sample: 152368 Bytes
[Tue N	w 24	11:56:44.612770 20	20] [192.168.3.172]	[OpenOTP: 25J7U1XC]	Found authentication session started 2020-11-24 11:56:31
[Tue N	w 24	11:56:45.318400 20	20] [192.168.3.172]	[OpenOTP: E5J7U1XC]	Voice sample Ok (score: 2.066 / 1.936[2.626] with token #1)
[Tue N	w 24	11:56:45.328857 20	20] [192.168.3.218]	[OpenOTP:E5J7UIXC]	Updated user data
The N	27 24	11:56:45.334469 20	201 [192.168.3.218]	[OpenOT2: 25.37U1XC1	Sent login success response

Each authentication is identified by an ID. Here, it is **Z5J7U1XC**.

[Tue Nov 24 11:56:31.259121 2020] [192.168.3.218] [OpenOTP:Z5]7U1XC] New openotpSimpleLogin SOAP request [Tue Nov 24 11:56:31.259176 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] > Username: aduser3 [Tue Nov 24 11:56:31.259184 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] > Domain: adrcdevs.com [Tue Nov 24 11:56:31.259219 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] > Password: xxxxxxxxxxx [Tue Nov 24 11:56:31.259232 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] > Options: -LDAP, OFFLINE, NOVOICE [Tue Nov 24 11:56:31.259254 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Registered openotpSimpleLogin request [Tue Nov 24 11:56:31.259574 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Resolved LDAP user: CN=aduser3,CN=Users,DC=adrcdevs,DC=com (cached) [Tue Nov 24 11:56:31.259651 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Resolved LDAP groups: group2,remote desktop users [Tue Nov 24 11:56:31.270757 2020] [192.168.3.218] [OpenOTP:Z5]7U1XC] Started transaction lock for user [Tue Nov 24 11:56:31.283882 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Found user fullname: aduser3 [Tue Nov 24 11:56:31.283912 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Found 1 user mobiles: +123 456789012 [Tue Nov 24 11:56:31.283921 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Found 1 user emails: aduser3@adrcdevs.com [Tue Nov 24 11:56:31.284501 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Found 49 user settings: LoginMode=LDAPOTP,OTPType=VOICE,PushLogin=Yes,PushVoice=Yes,BlockNotify=MAIL,ExpireNotify=MAIL 1:HOTP-SHA1-6:QN06-T1M,DeviceType=FIDO2,SMSType=Normal,SMSMode=Ondemand,MailMode=Ondemand,PrefetchExpire=10, [Tue Nov 24 11:56:31.285679 2020] [192.168.3.218] [OpenOTP:Z5]7U1XC] Found 6 user data: VoiceState,TokenType,TokenKey,TokenState,TokenID,TokenSerial [Tue Nov 24 11:56:31.285783 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Found 1 registered OTP token (TOTP) [Tue Nov 24 11:56:31.287052 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Requested login factors: OTP [Tue Nov 24 11:56:31.287276 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Authentication challenge required [Tue Nov 24 11:56:31.409081 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Sent push notification for token #1 [Tue Nov 24 11:56:31.409111 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Waiting 28 seconds for mobile response [Tue Nov 24 11:56:44.612725 2020] [192.168.3.172] [OpenOTP:Z5J7U1XC] Received mobile voice response from 192.170.3.17 [Tue Nov 24 11:56:44.612756 2020] [192.168.3.172] [OpenOTP:Z5]7U1XC] > Session: 77HxxxOzDKO2tE1K [Tue Nov 24 11:56:44.612764 2020] [192.168.3.172] [OpenOTP:Z5J7U1XC] > Sample: 152368 Bytes [Tue Nov 24 11:56:44.612770 2020] [192.168.3.172] [OpenOTP:Z5J7U1XC] Found authentication session started 2020-11-24 11:56:31 [Tue Nov 24 11:56:45.318400 2020] [192.168.3.172] [OpenOTP:Z5J7U1XC] Voice sample Ok (score: 2.066 / 1.936[2.626] with token #1) [Tue Nov 24 11:56:45.328857 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Updated user data [Tue Nov 24 11:56:45.334469 2020] [192.168.3.218] [OpenOTP:Z5J7U1XC] Sent login success response

The last line, **Sent login success response** indicates the authentication worked.

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