

Identity Workshop



In this workshop we will configure Single Sign On (SSO) authentication, which allows users to access all published applications with a single set of credentials. Then, we'll enable multi-factor authentication (MFA) to add a layer of security control in verifying users' identity. Finally, we will review Workforce Password Management (WPM) and browser extension to capture username/password fields on login pages automatically.

- Start by signing up for a 30-day trial of CyberArk Workforce Identity at this url: <u>https://www.cyberark.com/try-buy/workforce-identity-trial/</u>
- 2. Continue the process by confirming the code received via email (check spam folder)

CYBERARK IDENTITY FREE TRIAL REQUEST CONFIRMATION

Your trial tenant has been successfully created, instructions will be sent to your registration email.

CYBERARK

WORKFORCE IDENTITY FREE TRIAL

See why more than 6,000 organizations trust CyberArk to manage and intelligently secure identities to prevent breaches, simplify user experience and reduce IT costs.

Try it yourself

- Single Sign-On: provide one-click secure access to everything your employees need with one set of credentials
- Multi-factor Authentication: protect your resources with a comprehensive range of user friendly authentication methods
- App Gateway: access on-premises web apps from anywhere without relying on a VPN
- Lifecycle Management: provision access and manage entitlements throughout your users'
 lifecycle





TRY THE CYBERARK IDENTITY SOLUTION, FREE FOR 30 DAYSI

* Läst Name	
* Company Name	
* Business Errul Address	
* Job Title	

3. Once registration is complete, you will receive an additional email with instructions to access the Identity administrative portal. When entering for the first time, a password change will be requested, you must comply with the established policy:



Password Requirements: Must be at least 8 characters long. Must be less than 64 characters long. Must include at least one digit. Must include at least one upper case and one lower case letter. Cannot be the same as any of the last 3 password(s).

4. Ingresar al **Admin Portal**:





Tenant Customization

1. In the Admin Portal, main menu, go to Settings | Customization and customize to your liking the General Options (Colors, Portal Images) and Login (wallpaper and logo in login view). In the User Name Hint Text at Login option, specify user@cybr.com (we will integrate the AD from our Skytap lab into our Identity service)

ccount Customiza	tion			
these settings to customize the look	and feel of CyberArk Identity	with your organization'	color scheme, logo, and t	text.
im more		, .		
General Options				
Portal Bibbon Accont Color				
222255	alact Calar =			
#3300r	Her Color			
Portal Ribbon Color			-	
#3366FF \$	slect Color -			
Company Name				
Compeny Support Link ①				
and the second se				
Portallmare ①				
	APK			
Short Portal Image (1)				
Upload				
Login Customization				
Block * centrify cons Life. Forwarding				
User Name Hint Text at Login				
usuario@cybr.com	Reset 🗧		-	
🖸 Remember last signed in overname	D			
Login Image	Login Background image			
Upload DE CYBERARK	(Upload)			

2. In the **Login** submenu | **Suffix**, add a new suffix to the environment. The value must be globally unique. Once the suffix is defined, for future authentications with the cloudadmin user we must add it, e.g. **cloudadmin@kbcorp.biz**



Enter a uniqu ensure it is no	e login suffix in the field b t already in use before be	elow. The suffix will be validated to ing saved.	D
Login Suffix (vhat users type to login)	
username @	kbcorp.biz		
> Advance	d		



Tenant Customization

3. For best practices, add a new tenant administrator from the **Core Services** menu | **Users** | **Add**. The **cloudadmin** user will be stored in a sealed envelope and no multi-factor policies will be applied.



4. In the new user creation form, be sure to add your **corporate email address** and **cell phone**, so that you can then perform MFA tests. **Assign a password manually** and di**sable the Require Password change at next login option.**







Tenant Customization

5. To add the new user as a **tenant administrator**, go to **Core Services | Roles** and select the **System Administrator** role. Add the new account.



cloudadmin@kbcorp.biz

.

User

6. Go to **Settings | Authentication | Security Questions** and add a security question that we will then ask for as part of our users' registration.

CYBERA	₹К,	Platform Authentication Profiles	Security Questions Create administrator defined security questions to include in user security policies.	
CyberArk Identity Admin Portal		Security Settings Signing Certificates	bbA	
Dashboards Core Services	~	Authentication Tokens RDD2 Authenticators QATH Tokens	Question # Nothing configured	
Users Roles Policies Reports		Other RADIUS Connections Duo Configuration		
Requests Organizations Apps & Widgets	~		Add Security Question	x
Web Apps Widgets Endpoints			What is your favorite color?	
Downloads	-		OK Cancel	
Settings Existenization Endpoints	-			

88

9

*

Network



Tenant Customization

7. In **Security Settings**, review and enable the following options, finally click **Save**:

the seconds to denine second	rity related settings.	
earn more		
Authentication Option	S	
Enable QR code based user i	dentification on login screen	
 Enable anti-phishing security 	image ①	
Securely capture users pass	vords at login ①	
Enable forgot username self-	service at login 🛈	
Send email notification to us	ers when password is changed	
Disable the force authenticat	tion at the Identity Provider for SAML login ${f } {f } {f }$	
 Don't use certificates for aut 	hentication on Android if prompt is required 🛈	
	-	
8 * Email and SMS pas	scode length (U)	
Additional Attributes for MFA ①		
Additional Attributes for MFA ①		
Additional Attributes for MFA ()		
Additional Attributes for MFA ()	Туре	
Additional Attributes for MFA () Add Attribute	Туре	
Additional Attributes for MFA () Add Attribute No attributes specified	Туре	
Additional Attributes for MFA (1) Add Attribute No attributes specified	Туре	
Additional Attributes for MFA (1) Add Attribute No attributes specified	Туре	
Additional Attributes for MFA () Add Attribute No attributes specified	Туре	
Additional Attributes for MFA () Add Attribute No attributes specified	Туре	

8. Authenticate to the portal with the newly created user. Note that we have enabled the QR code on the authentication screen, and also text help for our end users of the cybr.com

Sign In		
Scan QR Code wi	th the CyberArk Identity app.	
	OR	
Enter your usernam	e (usuario@cybr.com)	
A demouser@	kbcorp.biz	



Tenant Customization

9. We have not yet applied multi-factor authentication policies or defined our answers, note that it only asks us for the password.

< Start Over	
Authenticat	e to the Platform
demouser@kbcc	prp.biz
Enter the password	associated with your username
<u></u>	<u> </u>
	Forgot your password?
Keep me signed	lin



10. In the **User Portal**, select **Account | Authentication Factors** and add a security question.

CYBERARK	You have not yet setup :	your Security Questions. C kin here to setup wow.			>
O CoberArk Liker Portal	Authentication Factors Passcodes	Authentication Factors			(C) Usuarin Demo
Courrent Oral Portal	Personal Profile Organization	Password Let Oranged Onteller 6, 2512 Security Question Certificare smortly questions to authenolate to Question too	ny	Ed.	
		Security Questions Configure all questions and answers below to enab authentocation mechanisms. Note: answers must b Questions configure 14: 10	le security questions as additional e a minimum of 3 characters.	×	
		Question	Answer		
		🔮 🥒 Cual es mi color favorito?	<i>~</i>		



Tenant Customization

11. Finally we will create a URL to access the Tenant that is more friendly for our organization. In the Admin Portal, go to Settings > Customization > Tenant URLs menu and select the Add Tenant URL button. Specify a unique name for your Tenant. The new URL may be used by our end users to access the service:

	Account Account Customization	Tenant URLs Use these settings to define a CyberArk identity UF	RL that is more specific to your organization.	🛞 Usuario Demo 🗟
CyberArk Identity III	Login	A BREETING B		Add Tenant URL Add Custom Domain
(?) Dashboards	Suffix Tenant URLs	Name 1 aq4930.id.cyberark.cloud	Default URL	
& Core Services ~	Other Additional Attributes			
88 Apps & Widgets ~				Create Tenant URL ×
🕁 Downloads				validated during save to ensure it is not already in use (note: please allow up to 20 minutes for DNS replication).
Customization				Name (63 characters max) * kbcorp
Authentication Network Users				Complete URL will be: https://kbcorp.id.cyberark.cloud
				Save Cancel

Installing the Identity Connector

1. We will install the Identity connector in our Skytap environment to be able to integrate the Active Directory of the organization so that our corporate users can take advantage of the features of SSO/MFA/WPM/App Gateway. In Skytap, login to the **DC01** server using Mike's credentials (Cyberark1)



2. Open Chrome and authenticate to the Identity **Admin Portal** with the newly created user (system administrator role). Select the **Downloads** menu and download the **CyberArk Identity Connector**



Note: In production environments, installing the connector on Domain Controllers is not recommended.

Installing the Identity Connector

3. After downloading the file, unzip it and run the Connector installer. Accept the terms of service, enable all options, and select the Install option 4. In the Configuration Wizard, specify the newly created admin user, we need to get 4 successes and then verify the successful completion of the install.







Installing the Identity Connector

5. In the **CyberArk Connector Configuration** window, verify the time of the last connection, server name, and customer ID. Review the options available on the **Connector** tab.



6. In the Admin Portal, go to Settings | Network | CyberArk Identity Connectors and verify that the connector is listed as Active. Review the services that are enabled by default.

¢.	CYBERAI	RK,	Network CyterArk Klentiky Connectors	CyberArk Id	entity Conne arcl manage connectars	ectors				() Usa	ark: Deens
1	CyberArk Identity Admin Portal		Secure Zones Blocked IP Ranges						Add CytierAck I	lentity Co	nnestor
			House addres	Name 1	Forest	Version	Last Ping	Hostname	Enables	Services	Status
82	Organizations			E 00H	CVBLCDW	22.10.218	10/05/2020 1.56/04/964	D-CD+	AD Proxy AH Frank App Gate LENAP Pro	Sanutra VAy V	Active
	Web Apos Widgets								Web Serv Web Serv	roer sr(MWA) roxy Seriet	
6	Endpoints	- 1									
$\overline{\gamma}$	Downloads										
0	Settings	-									
	Customization Endpoints										
	Authentication										
	Henwork										
	USE/S										

IWA Service: Integrated Windows Authentication, allows users already authenticated on their workstations to access the Identity portal automatically without the need for re-autenticate.

App Gateway: Access internal web applications from the SSO portal without the need to connect via a VPN

Creating Roles and Policies

Policy-based access control, also known as Attribute-based Access Control (ABAC) is a strategy for managing user access to one or more systems, where users' business roles are combined with policies to determine the access and privileges that users in each role must have. The **Default Policy** is the policy that is configured by default in our tenant. In this lab we will create a new policy that will be assigned to users of the **CYBR.COM** domain.

- In the Admin Portal, go to Core Services | Roles. We will create a new role for users in our organization's Active Directory.
- On the Description menu, specify a name for the new role, and under Members, add the Domain Users group of the active directory CYBR.COM

С С КВ	ERARK	Q Search All Roles					Add Rele
CyberArk in Admin Por	dentity III tai	Name 1	Role Type	Description			Organization
		CyberArk Remote Access	Static	The read-only administ	rative role that allows access t	to the CyberArk Remote Access Admin Portal. Members of $\ensuremath{\mathbb{I}}$	
(3) Dashboards	1	CyberArk Remote Access	Static	The default role that all	ows employee users to remot	tely access critical internal systems managed by CyberArk.	
		Everybody	Static	All users are in this role	by default, whether they have	$\mathbf e$ been added directly to the $C_{\! \mathbf a} berArk$ Cloud Directory, or $\mathbf a$.	
Core Service	es ~	SWS Admin	Static	Secure Web Sessions a	âministrative role.		
Users		SWS Auditor	Static	Secure Web Sessions a	aditor role.		
Policies Reports Requests Organizations		System Administrator	Static	The primary administra	tive role for the Admin Portal	Users in this role can delegate specific odministrative righ,	
Add Role					Add Role		
	Descri	ption			Add Role	Members Learn more	
Add Role	Descri	ption			Add Role	Members Learn more	
Add Role	Descri Learn mo Name	iption re			Add Role Description Members Administrative Rights	Members Learn more	

Creating Roles and Policies

3. In the **Admin Portal**, go to **Core Services | Policies** and review the properties of the **Default Policy**. Then, add a new policy.

	CYBERA	RK	Policies		sharen fi	(Cald Brilles For
1	CyberArk Identity	III	AT this policy set to specify o	status	Description	(Add PolicySet) (Putiti Policy
	SAMIN PACAD		Default Policy	Active	The default policy contains all security settings related to enforcement of Adapti	re NFA: SSD. RADRUS, and other identity related configurations.
0	Dashboards	- 1				
3	Core Services	1.00				
	Users Roles					
	Policies					
	Reports					
	Requests Organizations					
99	Acos & Widerts	~				

4. In the **Policy Settings** menu, specify a name for the new policy and assign it to the newly created

role:

Q Search Policy Settings Application Policies Endpoint Policies	Policy Settings Name * CYBR Policy Description
Authentication Policies User Security Policies Third Party Integration Summary	Policy Setting Set policy to active Verify compliance on Android and iOS devices Policy Assignment All users and Devices Specified Roles Sets Add Name Usuarios CYBR

Creating Roles and Policies

5. Go to **Application Policies | User Settings** and enable the following options:

Add Policy Set



Allow users to add personal apps: Allow the end user to add new applications to his/her Single Sign On (SSO) portal

Enable Browser Extension Land & Catch: Option to use the browser extension to capture username/password when authenticating to web pages

6. Go to Endpoint policies | Common Settings | Mobile Settings | Security Settings, enable the following options:

CUDD D. II

Se	curity Settings
A seems	Yes * Show Mobile Authenticator by default ①
Policy Settings	 Finable auto-login to biantity part of from Android Instance with Android annumber (1)
Application Policies	career and with the second backs up and any second and any second s
Endpoint Policies	Require authentication to open CyberArk Identify app 🛈
Device Management Settings	Yes * Require biometric authentication for Passcodes and QR code authenticator ①
Device Enrollment Settings	Ves $~~$ Use App PIN as faitback mechanism to biometric ${\ensuremath{\mathbb O}}$
Cammon Settings	\sim \rightarrow $~\star$ Enable Mobile authenticator and Passcodes on Apple watch \oplus
Mobile Settings	
Common	
Restrictions Settings	
Security Settings	

Show Mobile Authenticator by Default: show the mobile authenticator in the Identity app (OATH OTP)

Require Biometric authentication for Passcodes and QR code authenticator: use biometric scanning to access passcodes or QR code scans for authentication.



Creating Roles and Policies

7. We will now secure user console access with MFA. Expand Authentication Policies | CyberArk Identity and enable Enable Authentication Policy Controls: 8. Expand **Default Profile (used if no conditions matched)**, and select the **Add New Profile** option:

CYBR Policy			
Status: Active			Actions ~
Q Search	Authentication Policy for CyberArk Identi	ty and line Retailand on demand application authentication	
Policy Settings	Yes Enable authentication policy controls	tene olar i anana telori verna ne approvner sautistik detene	
Application Policies	Authentication Rules (1)	—	
Endpoint Policies	Add Rule Drag rule to specify order. The hig	hest priority is on top.	
Authentication Policies	Condition	Authentication Profile	
CyberArk Identity	Nothing configured		
CyberArk Identity Admin Portal			
Local Account Linking			
Endpoint Authentication			

	v
Default Other Login Profile	
Default Password Reset Profile	
Not Allowed -	
Add New Profile -	



Creating Roles and Policies

9. The authentication profile is where the required authentication mechanisms are defined, such as password, email confirmation code, mobile authenticator, etc. Define a name for the policy and enable the following options:

First challenge: Password

Second challenge: none (we will show the behavior when enabling second challenges later)



Cancel

Creating Roles and Policies

10. Now we will enable the possibility that our users can reset their password in case they forget it. Still in the policy properties, go to **User Security Policies | Self Service**, enable **Enable Account Self Service Controls** and create a new authentication profile:



11. Specify a name for the new policy, and enable only the following mechanisms in the first challenge column:





Creating Roles and Policies

12. We will also allow our users to integrate with an OATH OTP (Identity Authenticator / Google Authenticator / MS Authenticator, etc). Go to User
Security Policies | OATH OTP, and enable Allow OATH OTP Integration:



13. Expand Endpoint Policies | Device Enrollment Settings and enable Permit device Enrollment. Finally save (click on SAVE button) the policy that will apply to the users of the CYBR domain.

Ŕ	CYBERA	RK	← Back to Policies 〈 〉 1 of 2			
6	CyberArk Identity Admin Portal		Status: Active			
				Device Enrollment	Sett	ings
(?)	Dashboards		Q Search	Yes	+	Permit device enrollment ()
\$	Core Services	*	Policy Settings			Customize user portal Add Devices options \textcircled{O}
	Users Boles		 Endpoint Policies 		-	Permit only corporate device enrollment ①
	Policies		Device Management Settings	-	-	Permit non-compliant devices to enroll ①
	Reports		Device Enrollment Settings		+	Enable invite based enrollment ①
	Requests Organizations		Common Settings			- • Invite based eeroliment kirk expiration (default 60 minutes) * ①
88	Apps & Widgets	^	 iOS Settings OS X Settings 			Miss number of devices a user can enroll (default 20)



CyberArk Identity Mobile App

1. Login to the User Portal with **john@cybr.com** (Cyberark1) – <u>https://xxxxxxx.id.cyberark.cloud</u>



2. Go to the **Devices** menu:

CYRERARK	Contigure your Circle CTP Lines apply a accenticate to Conservationing						
	Devices						
CytierArk Dier Portai							
Applications		The relation information available.					
Seconed Items							
Devices		Add a Device					
Activity		Choose an option lietow to enroll your ICS or Android device. Privacy folky					
Account		Send enrollment link via: Scan QR code: Email ①					
		You can also download CyberArk identity mobile app from Google Play or Apple App Store					
		To enroll this Mac, download Mac Cloud Agent.					
		Close					

CyberArk Identity Mobile App

3. Download the CyberArk Identity app on your phone.Once installed, run the app and select the Enroll with QR option. Scan the QR code displayed in the User Portal.

CYBERARK CYBERARK CYBERARK < start Over Sign In Sign In Authenticate to the Platform Enter your upername GreekBidomain John@CYBR.COM G John@CY8R.COM R Your username (user@domain Enter the password associated with your username A Forgot your passwort CYBERARK to 2022 Cyber Mk Software Ltd © 2022 CyberArie Software Ltd. Terms of the PrisacePoles Terroyel User Privacy Palmy Summafilter PrivacePadar Enroll with D

4. Complete the registration process with user **John** (note that the username field is populated by default). Once the new device is registered, it will appear in the list:

	Configure your DATH QTP Client app to authenticate t	s CyberArix Identity.	
Q CyberArk User Portal	Devices		
Applications Secured Items	Galaxy A20s Lat connected 10/08/302 44950 PM Brodied	No location information available.	
 ↓ Devices ↓ Activity ③ Account 			
Account			



CyberArk Identity Mobile App

5. Go to **Account | Authentication Factors** and add a security question:



6. In the **OATH OTP Client** option, click **Show QR Code** and register your favorite OATH OTP client application (MS Authenticator, Google Authenticator, etc.)

OATH OTP Client		
1. Install your 3rd party authenticator app.		
 Launch your authenticator app and tap the "+" icon or the "Add Account" button to add a new account. 	回报 动脉 《 2 回 图 1 1 1 2 1 2	
 Select "Scan Barcode" or "Scan QR Code" and use your phone's camera to scan this code: 		-
 Dnce you have scanned the code, enter the 6-digit verification code generated by the authenticator app and click verify. 		
Cede		
Verify		
Cancel		





CyberArk Identity Mobile App

7. We will modify the authentication policy to add new mechanisms in the second challenge. In the Admin Portal, select Settings | Authentication | Authentication Profiles and edit the profile we created for users in the CYBR domain:



8. Add the following mechanisms in the Challenge 2 column:

Authentication Profile Profile Name * CYBR Auth Profile Minimum AAL: AAL1 Maximum AAL: AAL2 **Multiple Authentication Mechanisms** Challenge 1 Challenge 2 (optional) Something you have Something you have Mobile Authenticator Mobile Authenticator Phone call Phone call OATH OTP Client ✓ OATH OTP Client Text message (SMS) confirmation code Text message (SMS) confirmation code Email confirmation code Email confirmation code QR Code V OR Code FIDO2 Authenticator(s) (single-factor) FIDO2 Authenticator(s) (single-factor) Something you are Something you are FIDO2 Authenticator(s) (multi-factor) FIDO2 Authenticator(s) (multi-factor) Something you know Something you know ✓ Password Password Security Question(s) Security Question(s) 1 Number of questions user must answer Other Other 3rd Party RADIUS Authentication 3rd Party RADIUS Authentication

Cancel



Multifactor Authentication

9. Authenticate to the **User Portal** with User **john@cybr.com**. Note that the first challenge is the password, and then we must select some mechanism as the second challenge. The list is updated depending on the mechanisms that we have available according to the registrations made in previous steps.



10. Try password and Mobile Authenticator. This will send a push to the mobile device Identity App:



Multifactor Authentication

11. Now try with password and OATH OTP code

\checkmark	\downarrow
< Start Over	< Start Over
Authenticate to the Platform	Provide a code
john@cybr.com	john@cybr.com
Password	
≙	Enter Verification Code
Choose authentication method	Enter code
OATH OTP Client 🔸 🔹	≙
2011 10 10 10 10 10 10 10 10 10 10 10 10	

12. Now let's try a Passwordless authentication, authenticating with only QR code. Let's edit the authentication policy again in the **Admin Portal**, **Settings** | **Authentication** by selecting the policy for the CYBR domain. Enable **QR Code** under the **Single Authentication Mechanism** section:

Challenge 1	Challenge 2 (optional)				
Something you have	Something you have				
Mobile Authenticator	Mobile Authenticator				
Phone call	Phone call				
DATH OTP Client	 OATH OTP Client 				
Text message (SMS) confirmation code	Text message (SMS) confirmation code				
Email confirmation code	Email confirmation code				
QR Code	QR Code				
FID02 Authenticator(s) (single-factor)	FIDO2 Authenticator(s) (single-factor)				
Something you are	Something you are				
FID02 Authenticator(s) (multi-factor)	FID02 Authenticator(s) (multi-factor)				
Something you know	Something you know				
 Password 	Password				
Security Question(s)	 Security Question(s): 				
1 Sumber of questions user must answer					
Other	Other				
3rd Party RADIUS Authentication	3rd Party RADIUS Authentication				
ngle Authentication Mechanism ① QR Code allenge Pass-Through Duradon ① 00 minutes ~					

Multifactor Authentication

13. Now try to authenticate by simply scanning the QR code using the CyberArk Identity app:







Application Management – SAML

The CyberArk Identity App Catalog contains thousands of integrations available. Administrators can provide SSO access to on-premises, cloud, and mobile applications. Once applications are configured, end users can authenticate to Identity and run any of your web applications without needing to re-enter their credentials. The following basic use cases show how to configure SAML, bookmark, and user/password applications.

1. Authenticate to the **Admin Portal** and navigate to the **Apps & Widgets** menu | **Web Apps**. Add a new Web App.

4			Q	Search	All Web Applications								A	ld Web Apps
m	CyberArk Identity Admin Portal				Name †	Туре	Description	Provisioning	App Gateway	Organization	Status	0	Sets	Add
100		-		¢	CyberArk Remote Access	Web - SAML	Remote Access is a CyberArk compon				Deployed	5	All Web Applications	
æ	Dashboards			e	CyberArk Secure Web Ses	Web - SAML	CyberArk Secure Web Sessions Portal.				Deployed	MACK.	Bookmark Web	
6-3	Date inclution			¢	User Portal	Web - Portal	The User Portal is your interface to th				Deployed		OpenID Connect Web	
62	Core Services	-											Portal Web	
-													SAMI, Web	
88	Apps & Widgets	- A-											SSO Web	
	Web Apps	_											User Password Web	
	Widgets												Ws Fed Web	
2	Endpoints													
₹	Downloads													
rên.	Catting													

Application Management - SAML

2. In the Add Web Apps window, on the Custom tab, add SAML:





3. In the **Settings** section, name the SAML app and add a custom logo image if you like.





Application Management - SAML

4. In the Trust > Identity Provider Configuration > Metadata section, select the Download Metadata File option

શ Mi Prueba de SAML Status: Ready to Deploy Application Configuration Help Actions Type: Web - SAML + Provisioning Trust Settings Learn mor Trust Identity Provider Configuration SAML Respon Sonfigure your IdP Intity ID7 Issuer and Signing Certificate, If needed, Your SAMI, Service Provider will require you to send dP Configuration values in a certain method, Chatse the m Permissions Metaclata Metadata Policy Manual Configuration SIP Enoty ID / Issuer and Signing Certificate do not need to be edited in most cases. If you need to ecil them edit them first their proceed to the configuration method required by Service Provale Account Mapping Linked Applicatio > IdP Entity ID / Issuer (I) Provisioning > Signing Certificate (App Gatewa 5 Single Sim On URL (T) Workflow Changelog https://aaq4950.id.cyberark.cloud/saasManage/Dow Copy URL 100 Secure Web Sessions Download Metadata File AML. Copy XML



5. In a new Chrome Browser tab, navigate to https://sptest.iamshowcase.com/index#start then select Instructions and then IDP initiated SSO

		🕂 🕶 😽 🔶 🕂 What do	pes this	s site do?
		SP initiated SSO Indening why you would Attribute headling	use this site, trying to solv	here are some of the problems we are re:
¢ ·	Testin	& AuthNRequest Wizard	ŵ	Demo
	If you su check if This site Point yo	It works correctly. helps you with that task or IDP to this site (see instructions) and test away!		Yeu have a demo IDP with all kinds of cool authentication methods and policies ("Helio RSA SecurID Access") and next to show it's capabilities this site is an excellent target application!

Application Management - SAML

6. Click on **Download Metadata**. This will load our metadata in a new browser tab.



7. We need the URL of our metadata found in the address bar of the browser. Copy the URL into memory.

sptest.iamshowcase.com/testsp_metadata.xml



Application Management - SAML

8. Go back to the Admin Portal, we will add the URL in the SAML Service Provider settings. In the properties of our SAML App, select the Trust menu in the Service Provider Configuration section, under Metadata, paste the URL from the previous step, and then click Load. This will popularize the XML portion of the metadata section:



9. On the **Permissions** menu, click **Add** and add **John's** account:

🛞 Mi Prueba de SAML

ettings ust	Permis	ssions								
MI, Response	Add) 🗕 🗕 🗕	_							
ermissions sikty		Name	Grant	View	Manage	Delete	Run	Automatically D., Starts	Expires	Inherited Fro
count Mapping	1	alero-intégration-users@	1	2	8	2				Administrati.
ked Applications	- A	two-integration user\$@a.,	×.	1	8	1				Administrati.
ovisioning	22	System Administrator	1	×.	10	20				Sysamore
orkflow		Johnes CYBR. COM	11				9			



Application Management - SAML

10. Authenticate with John in the User Portal and run the new SAML App. If the app does not appear, select the **Reload Rights** option by clicking on the menu for user John (upper right corner)



11. Clicking on the SAML App will open the **RSA SAML test** application, indicating successful federation for user John:





Application Management - Bookmark

 Use Bookmark-type applications when you want to provide a link to the URL of a web application. This link does not provide any authentication mechanism. In the Admin Portal, in the Apps & Widgets menu, add a new Web App of type Bookmark:





2. Add the URL: <u>https://www.cyberark.com/resources/blog</u>



Application Management - Bookmark

3. In the **Description** menu, specify a name for the new app: **CyberArk Blog**. Change the logo if desired.

Type: Web - Bookmark	Status: Not Configured
Application Settings	Description Learn more
Description	
Permissions Policy App Gateway	Customize Name and Description for each language U Application Name * CyberArk Blog
Workflow Changelog Secure Web Sessions	This template enables you to provide a link to the URL of an application or website. Bookmarks do not provide an authentication mechanism.
	Category * ①
	Other
	Logo Browse Recommended image size is 180 x 180



4. On the **Permissions** menu, add **John's** account:

Bookmark

Type: Web - Bookmark Status: Not Configured

plication Settings scription	Pe	rmis m more	sions						
missions		Add)						
licy p Gateway			Name	Grant	View	Manage	Delete	Run	Automatically D Starts
rkflow		1	alero-integration-user\$@,,,	<i>¥</i>	1. A.	<i></i>	×.		
angelog		1	sws-integration-user\$@a	2	1.00	2	× .		
ture Web Islans		25	System Administrator	21	<i>.</i> ?	2	2		
		1	John@CYBR.COM	6.3	11			2	~



Application Management - Bookmark

5. Authenticate to the User Portal as John and run the newly created App:





Application Management – User/Password App

1. In the **User Portal**, click the **Add Apps** button to add a new application from the CyberArk Catalog.

Applications D John CYBERARK Q Search Apps All Apps Add Apps (0 Q CyberArk User Portal 0 CyberArk Blog Mi Prueba de R Applications SAML Ø Secured Items 5 Devices

App Catalog × Add applications for single sign-on to those apps. Search Recommended import Search catalog by app name LinkedIn Add Q linked User Password Categories LinkedIn Recruiter Add All Apps User Password Popular Analytics Collaboration Communication CRM Customer Service DevOps Education ERP Finance

Close



2. In the catalog, find and add the **LinkedIn** app:

Application Management – User/Password App

3. In the application properties, specify the following options:
Add Tags: Social Media
Enable the Auto-Login at site option
Specify the username
Specify your password
Click in Save





Application Management – User/Password App

4. Run the **LinkedIn** app from the SSO portal. This will prompt for installation of the browser extension, click **Install**, **Download** and then add it in Chrome. The browser extension is an addon required for SSO to certain web applications. The extension is required by any application that has a puzzle piece icon in the user portal.



N.						
	4	Star	t a post			
		-				
		Photo	D V	ideo 📳	Audio event	Write artic



Application Management – Land & Catch

1. Apps can also be added to the User Portal using the Land&Catch feature of the browser extension. This feature detects when you enter credentials on a web page and then adds the site to your user portal. Land & Catch must be enabled by your system administrator and then enabled on your computer. In your browser, click on the **Identity extension** and verify that the **Enable Land&Catch on this computer** option is enabled.





Application Management – Land & Catch

2. In your browser, enter the web application you want to add to the User Portal and authenticate with your own credentials. The browser extension will detect this action and will add the site to the **User Portal**. In this example, I'll use the **Udemy** app. Once the new application is added, try to login through the User Portal, notice that the credentials are injected automatically:

Continue with Facebook		
G Continue with Google	Add this site to your User Portal?	9
Continue with Apple	Udemy - brandes	~ More
brandes@gmail.com	Add a description	
••••••	ûdemy Upload	
Log In	Yes No	Never
or Forgot Password		

Log in with your organization





Application Management – Infinite Apps

1. Infinite Apps is a browser extension feature that simplifies the creation of username/password applications that are not available in the catalog. Infinite Apps captures the username and password fields of the web application and adds the application to the Web Apps page of the Admin Portal, from where you can configure additional options, add authentication mechanisms and deploy the app to user portals and mobile devices. Infinite Apps is available for Firefox browsers only. On the CLIENTO1 workstation, locate the Firefox installer and run it with the CYBR\Mike account:







Application Management – Infinite Apps

2. In Firefox, authenticate to the **Admin Portal** and then enter the **Downloads** menu to download the browser extension:



3. Add the extension:





Application Management – Infinite Apps

4. Authenticate to the browser extension:



5. In Firefox, go to a web application that you want to capture, in this example, I will use **Github**:





Application Management – Infinite Apps

6. In the browser extension, click **Settings** – **Advanced** and then click the **Capture** button:



7. The fields will be captured automatically. In the wizard, specify that no additional values are required and leave the other options by default. Add the application to the **Admin Portal**.





Application Management – Infinite Apps

8. In the Admin Portal, in the Apps & Widgets menu | Web Apps, note that the GitHub app was added, select it to edit its properties:

Ś	CYBERAI	RK,	W Q	eb A	PPS						
1	CyberArk Identity Admin Portal				Name †	Туре	Description	Provisioning	App Gateway	Organization	Status
	- Address - Address	_		۵	CyberArk Blog	Web - Bookmark	This template enables you to provide				Deployed
0	Darbhoarde			0	CyberArk Remote Access	Web - SAML	Remote Access is a CyberArk compon				Deployed
603	Desciboeros			C	CyberArk Security Web Ses	Web - SAML	CyberArk Secure Web Sessions Portal.				Deployed
ക	Core Services	Υ.		-	GitHub	Web - User Password	GitHub is where people build softwar				Ready to Deploy
88	Apps & Widgets	~			Mi Prueba de SAMI.	Web - SAML + Provisioning	This template enables you to provide				Deployed
00	Web Apps			e	User Portal	Web - Portal	The User Portal is your interface to th				Deployed
	Widgets										
FA	Production .										

9. In the **Permissions** menu, add **John**:

Sessions

GitHub								
Type: Web - User Pa	ssword	Status: Ready to Deploy						
Application Settings Description	Permi	issions						
Permissions	Add	\sum						
Policy Account Mapping		Name	Grant	View	Manage	Delete	Run	Automatic
Advanced	1	alero-integration-user\$@	2	*	2	8		
App Gateway	4	sws-integration-user\$@a	4	~	3	1		
Workflow Changelog	1	System Administrator	×	4	×	a.		
Secure Web	1	John@CYBR.COM					-	-



Ily D... Start

Application Management – Infinite Apps

10. In the **Policy** menu, we'll add an additional authentication mechanism to verify the user's identity every time they try to log in to the **github** portal. In the **Default Profile** section, select the **Add New Profile** option:

Type: Web - User Pas	sword Status: Deployed	
Application Settings Description Permissions Policy	Policy Learn more Application Challenge Rules Add Rule If Drag rule to speci	fy order. The highest priority is on top.
Account Mapping Advanced App Gateway Workflow Changelog	Condition Nothing configured	
Secure Web Sessions	Default Profile (used if no conditions matched)	10
Sessions	CYBR Auth Profile Default Other Login Profile Default Password Reset Profile Password Reset Auth Profile - Always Allowed -	are ignored)

11. Specify **GitHub** as the name for the profile, and enable **OATH OTP Client** and **Security Questions** as authentication mechanisms in the first challenge:

itHub	Minimum AAL: ● AAL1 Maximum AAL: ● AAL1						
ultiple Authentication Mechanisms							
Challenge 1	Challenge 2 (optional)						
Something you have	Something you have						
Mobile Authenticator	Mobile Authenticator						
Phone call	Phone call						
 OATH OTP Client 	OATH OTP Client						
Text message (SMS) confirmation code	Text message (SMS) confirmation code						
Email confirmation code	Email confirmation code						
QR Code	QR Code						
FIDO2 Authenticator(s) (single-factor)	FIDO2 Authenticator(s) (single-factor)						
Something you are	Something you are						
FIDO2 Authenticator(s) (multi-factor)	FIDO2 Authenticator(s) (multi-factor)						
Something you know	Something you know						
Password	Password						
Security Question(s)	Security Question(s)						
1 C Number of questions user must answer							
Other	Other						
Brd Party PADI IS Authantication	Ted Party PADILIS Autheorization						

Cancel

Application Management – Infinite Apps

12. Go to the Account Mapping menu, select the All Users share one name option, and add the username/password for the GitHub portal. Note that a single set of credentials could be shared by an entire development team. Finally click on Save:

GitHub GitHub Type: Web - User Password Status: Deployed **Account Mapping Application Settings** Learn more Description Directory Service Field All users share one name Permissions All users share one name All users share the following user name Policy Prompt for user name Account Mapping Script User name * Account Mapping brandes@gmail.com Advanced Password App Gateway Workflow Allow users to view credentials Changelog Secure Web Sessions

13. In the **User Portal**, authenticated with John, go to the Github portal. Note that John does not have access to credentials, we have only published the app on his SSO portal.







Application Management – Infinite Apps

14. Note that when you have configured MFA, an additional authentication method is requested, select **OATH OTP Client** and then specify the verification code obtained from your OATH client app. If the code is correct, the portal will open and the browser extension will inject the credentials into the GitHub portal:





Application Management – Application Gateway

1. The Identity connector provides an **Application Gateway** functionality that allows end users to remotely access VPN-free web applications that are available on the organization's internal network. In this example, we'll add the IIS Web portal (https://comp01.cybr.com).





Application Management – Application Gateway

2. In the Admin Portal, add a new Web App from the Apps& Widgets menu | Web Apps:

3. In the **Add Web Apps** window, on the **Custom** tab, add an app of type **Bookmark**:

¢	CYBERAR	ιK,	Web A	ops He All Web Applications							C	Add Web Apps
6	CyberArk Identity Admin Portal	=		Name 1	Тури	Description	Provisioning	App Geterway	Organization	Status) Sets	Ada
				CyberArk Blog	Web - Boolemark	This template enables you to provide				Deployed	All Web Applications	
Ø	The state of the state of the		e	CyberArk Remote Access	Woo - SPMIL	Remote Access is a CyberArk compon				Deployed	 Bookmark Web	
603	Dashobaros		3	CyberArk Secure Web Set	Web SAML	CylterArti Secure Web Sessions Portal				Deptoyed	OpeniD Carried, Web	
8	Core Services		-	Gined	Web - User Password	GEHID IS where people build softwar				Deployer	PortalWob	
88	Apps & Widgets	~		Mi Prueba de SAML	Web - SAML + Provisioning	This template enables you to provide				Deployed	54ML Web	
00	Web Apps		6	User Portal	Web - Portal	The User Portal is your interface to th				Deployed	Lines Personanti Web	
	widgens										Wo-Red Watc	
9	Endpoints											





Application Management – Application Gateway

4. In the **Application Settings** menu, add the URL **https://comp01.cybr.com**:

Bookmark	
Type: Web - Bookmark	Status: Not Configured
Application Settings Description Permissions Policy App Gateway Workflow Changelog Secure Web Sessions	URL * () https://comp01.cybr.com

5. On the **Description** menu, specify a new name for the app:

Bookmark							
Type: Web - Bookmar	k Status: Not Configured						
Application Settings	Description						
Description							
Permissions	Application Name *						
Policy App Gateway	Prueba AppGateway						
Workflow	Application Description						
Changelog	This template enables you to provide a link to the URL of an application or website. Bookmarks do not provide an authentication mechanism.						
Secure Web Sessions							
	L						



Application Management – Application Gateway

6. On the **Permissions** menu, add **John's** account:

Application Settings	Permi	ssions						
Description Permissions	Add							
Policy App Gateway		Name	Grant	View	Manage	Delete	Run	Automatically D., Starts
Norkflew	1 1	alero-integration-user\$@	2	<u>.</u>	2	9		
	111 124	was-integration-user\$10a	3	4	2	8		
Changelog	-							
Changelog Secure Web Sessions	1	System Administrator	×.	~	2	2		

7. From the **App Gateway** menu, enable the **Make this app available via the internet** option, and select the **Use this Idaptive generated external URL....** option. Then click on **Test Connection**:

oplication Settings	App Gateway	
escription	Make this application available via the internet	
rmissions	Internal URL for this application	
p Gateway	https://comp01.cybr.com/	
orkflow angelog	Use this external URL for application access on or off the corpora [Note: you will need to upload an SSL certificate and make DNS change	ite network is after saving)
cure Web ssions	https:// comp01.cybr.com	
	Upload	
	 Use this idaptive generated external URL for application access o https://661bfbaf-bed8-413a-88bd-ad5f140401fa-gw,gatewa 	in or off the corporate network ay.id.cyberark.cloud
	Gateway Options Pass the requested URL to the application without decoding Lock session to source IP address	
	Cock session to expiration of User Rewrite generated external URL to internal URL in requests and r Enable standard web proxy headers	esponses (I)
		Connectivity Verification
	Connectors to use with this service:	



Application Management – Application Gateway

8. Authenticate to the **User Portal** as **John** and run the newly added application. If you get the error "**This site cant be reached**" wait a few minutes and try again. Note the URL generated by Identity.



Endpoint Authentication

In this use case, we will install the **CyberArk Identity Agent** on the **CLIENT01** workstation to demonstrate MFA authentication to the OS. We will test John's passwordless authentication with Mobile Authentication.

1. In the Admin Portal, in the Core Services menu | Policies, add a new policy for our Endpoints:

Ŕ	CYBERA	RK	Policies			@ suario Demo
			T Drag policy set to spec	cify order. The high	test priority is an top. ①	Add Policy Set Push Policy
1	CyberArk Identity Admin Portal		Name	Status	Description	
×.			CYBR Policy	Active		
(P)	Dashboards		Default Policy	Active	The default policy contains all security settl	ngs related to enforcement of Adaptive MFA, SSO, RADIUS, and other \ldots
ය	Core Services	~				
	Users	_				
	Roles					
	Policies					
	Reports					
	Requests					
	Organizations					
88	Apps & Widgets	~				

2. In the **Policy Settings** menu, name the policy (CYBR Endpoints):

Q Search	Policy Settings
Policy Settings	Endpoints CYBR
Application Policies	Description
Endpoint Policies	
Authentication Policies	
Jser Security Policies	Policy Setting
hird Party Integration	 Verify compliance on Android and IDS devices
Summary	Policy Assignment All users and Devices Specified Roles Sets



Endpoint Authentication

3. On the Authentication Policies menu | Endpoint Authentication, enable the Enable authentication policy controls option, and in the Default Profile section add a new profile:

	Endpoint Authentication	
Q Search		
	Yes Enable authentication policy controls	
Policy Settings	Authentication Rules	
Application Policies	Add Rule Drag rule to specify order.	The highest priority is on top.
Endpoint Policies		
Authentication Policies	Condition	Authentication Profile
survey of the second	Nothing configured	
CyberArk Identity		
CyberArk Identity Admin Portal		
Local Account Linking		
	Default Profile (used if no conditions matched)	
Endpoint Authentication		
Endpoint Authentication		-
Endpoint Authentication User Security Policies	CYBR Auth Profile	
Endpoint Authentication User Security Policies Third Party Integration	CYBR Auth Profile Default Other Login Profile Default Reservent Reset Profile	
Endpoint Authentication User Security Policies Third Party Integration Summary	CYBR Auth Profile Default Other Login Profile Default Password Reset Profile Gittrub	
Endpoint Authentication User Security Policies Third Party Integration Summary	CYBR Auth Profile Default Other Login Profile Default Password Reset Profile Gilthub Password Reset Auth Profile	
Endpoint Authentication User Security Policies Third Party Integration Summary	CYBR Auth Profile Default Other Login Profile Default Password Reset Profile GitHub Password Reset Auth Profile - Always Allowed -	
Endpoint Authentication User Security Policies Third Party Integration Summary	CYBR Auth Profile Default Other Login Profile Default Password Reset Profile GitHub Password Reset Auth Profile - Always Allowed - - Not Allowed -	

4. Specify a name for the new profile (Endpoints Profile) and define the following authentication mechanisms. Finally **save** the new policy.





Endpoint Authentication

5. Now we will generate a security code to enroll agents in our environment. Go to the **Settings** menu | **Endpoints** | **Enrollment Codes** and select the **Add** button:



6. In the **Generate Bulk Enrollment Codes** window, specify an expiration date and the maximum number of endpoints that can be enrolled with the code. Best security practices do NOT recommend to configure the code without an expiration date. **COPY** the code to a Notepad, you will not have access to the code later.

Settings	
P Range Restrictions	Enrollment Code Expiration ① Never Specify Date 10/10/2022 III Max joinable Endpoints ① Unlimited Specify Max 5
	Description



Endpoint Authentication

7. Go to the **Admin Portal** from the **CLIENT01** workstation and in the **Downloads** menu, download the **Windows Cloud Agent**:



8. Run the installer. On the **Enter Enrollment parameters** screen, specify the following options:

- Tenant URL: url of your Identity Tenant
- Enrollment Code: The enrollment code copied in previous steps.
- Optional Parameters:
 - **-I "Usuarios CYBR"** : The role that contains the users allowed to authenticate to the machine.



Endpoint Authentication

9. Restart the **CLIENT01** machine and attempt to authenticate with the user **CYBR\John**, following the authentication flow and selecting the **Mobile Authenticator** option as a second challenge.





Endpoint Authentication

10. Now modify the authentication mechanism for the Endpoints and enable **QR Code** as the first and only challenge (Passwordless Authentication). Then restart the machine again and try to authenticate with the user **CYBR\John**.



Secured Items

With CyberArk Workforce Password Management, we can allow our users to store personal confidential information on their **User Portal**, and also allow them to share those secure items with other users. CyberArk Identity stores:

- Passwords: Non-web application/service credentials

- Secured Notes: Credentials or secrets for use cases other than application access. For example: licenses, Access tokens, encryption keys, security questions, among others.

 We will first hand over the right to share secure items to our users in the CYBR domain. For this, in the Admin Portal, go to the Core Services menu | Roles and edit the CYBR Users role:



2. Go to the **Administrative Rights** menu and add the **shared credentials** right, finally **save** your changes:



Secured Items

1. Authenticate with User John in the User Portal and select the Secured Items menu. Then click Add Secured Notes



2. In the **Secure Notes** window, specify the requested values (Name, tag (for quick search), Notes, custom fields):

Settings		
	Secure Notes Specify description for Secure Notes type	/
General	Sharing	
Name 🙁	Llave Licencia Office	
Add Tags	Licencias Mic 👻 🛈	
Notes 🖈	xxeds-sdvds-httff.s332f	
Callo	Concel	

Secured Items

3. On the **Sharing** tab, click **Add** and add the Identity admin user. We are going to share the note with him. Save your changes.

General	Sharing				
Name		Permissions	Start Time	End Time	
demouser(@kbcorp.biz	View notes 🖕			

4. Now add a password with the **Add Password** button and fill in the corresponding options:

1

Hidden

Settings

0

Add Tags

Name

Save

General

Password

RRHH App Creds

mhhuser1

Cancel

Add custom field

pecify description for Password type.

- ①

Ð

OE

Value

Sharing



×



Secured Items

5. On the **Sharing** tab, click **Add** and add the Identity admin user. We are going to share our password for the HR app with him. We will only allow you to view the password (not edit it) and only for a specified period of time:



Secured Items

6. Do you remember that we added our personal Linkedin account as an SSO portal app? We need to give HR staff access to our account, so we will share access to the user. In the **User Portal**, in the **Applications** menu, edit the properties of the LinkedIn app and in the **Sharing** tab add the administrative user, without being able to see the password, and specify an access period of time:

		Applicatio							Applic
Ŧ	CYBER ARK		Q Search App	ps					lin
2	CyberArk User Portal	m				m			ш
			GitHub	In	X	Ľ	üdemy		Gene
8	Applications	CyberArk Blog	GitHub	LinkedIn	Mi Prueba de SAML	Prueba AppGateway	Udemy - brandes		Actions ~
	Secured Items								•
3	Devices								
~ /	Activity								
6	Account								





Secured Items

7. Now authenticate to the **User Portal** with the administrative user. Note that we have the LinkedIn application published in our profile. Review the properties of the application and then execute it. Finally enter the **Secured Items** menu and check if the shared items are listed.

	Application Settings	C Search	Home My Network Jobs Messaging
CYBERARK Applications	LinkedIn LinkedIn is a social networking website for people in professional occupations		Start a post
CyberArk User Portal	A Shared by: john@cybr.com ©Until: 10/10/2022 12:00:00 AM	Karsten Brandes Lead Channel Solutions Engineer at Cyber/rk	Photo Video T Audio event Write article Sort by: Top •
→ in	URL * https://www.linkedin.com/uas/login?goback=&trk	e Jasima	Agustin Robles celebrates this
88 Applications LinkedIn	Add Tags - ①	œ	CYBERARK Secured Items
Secured Items	Notes		. All secured items ∼ Q
Devices			yberArk User Portal
~ Activity	Auto-login at site ①	88 4	pplications Llave Licencia Office
Account		D se	ecured Items
	Save Cancel		evices