

Using Google as the IDP for a SSO connection with Blackbaud ID

Is your org a Google shop? Then learn how easy it is to setup Single Sign On (SSO) with Blackbaud ID using Google

John Vogel Senior Technical Product Manager



John Vogel

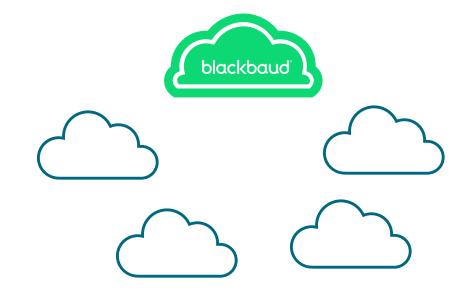
Senior Technical Product Manager

I'm the Identity and Access Management (IAM) product manager for Blackbaud SKY platform solutions.

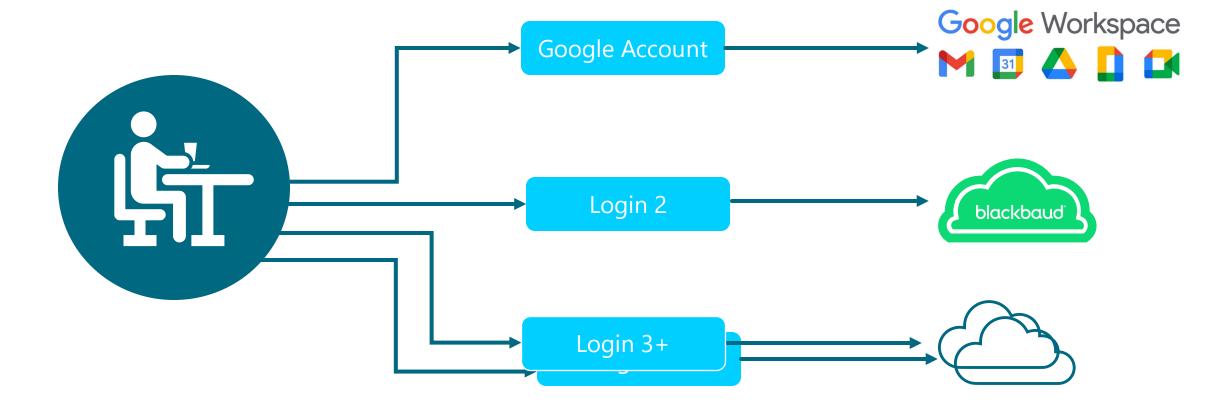
You're here because you regularly sign in to...

Other Business Applications

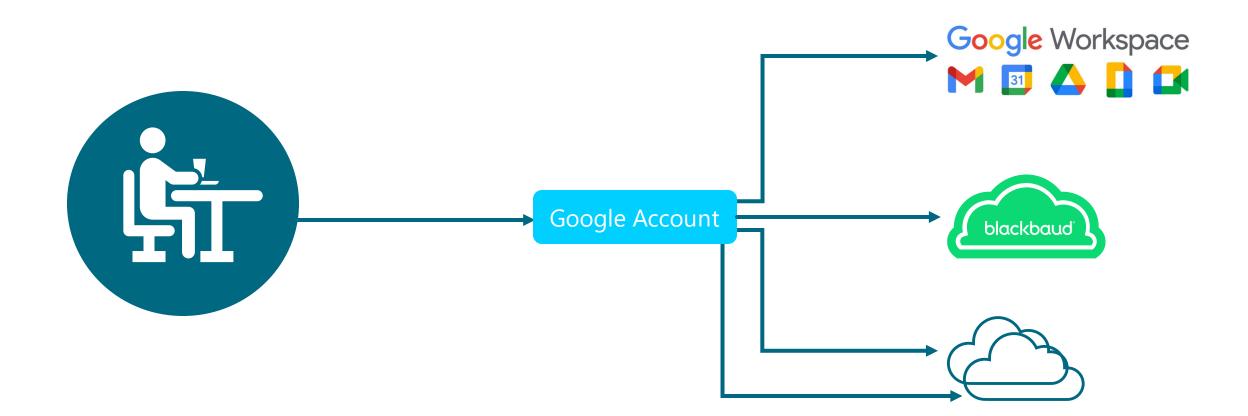




And your authentication landscape looks something like...



But you wish it was...



To complete this job you'll need access to 3 roles

- Blackbaud Org Admin –to configure the connection on the Blackbaud side
- **Google Admin** to configure the connection within Google
- **DNS Admin** to verify ownership of the domain being claimed on the connection

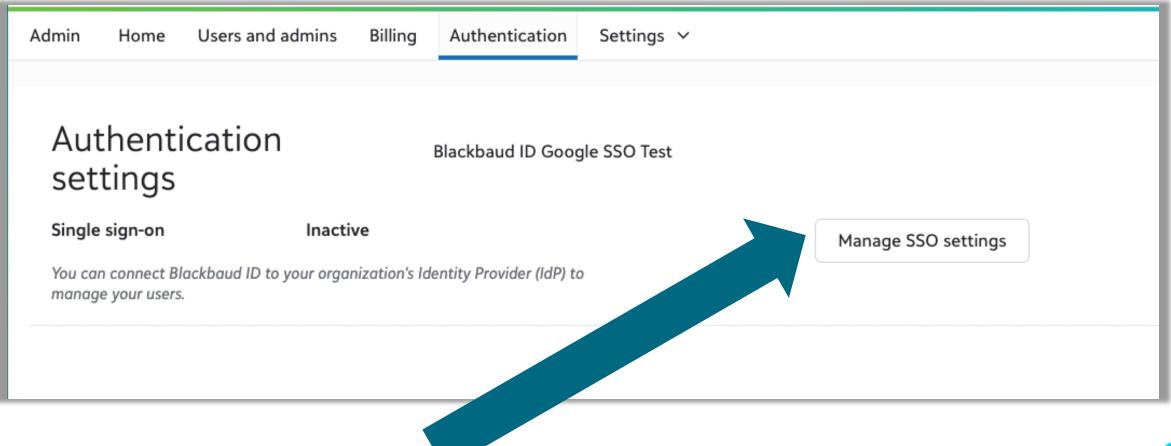
Pro tip: Before starting this process, consider inviting yourself as an Org Admin at an email address that will not be on the same domain you are claiming for SSO. This can help avoid accidental lockout on the account.



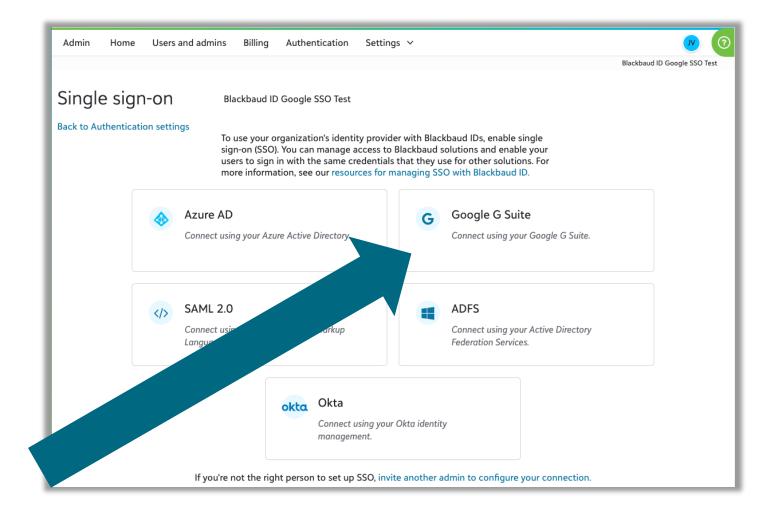


Google SSO by Creating an Application

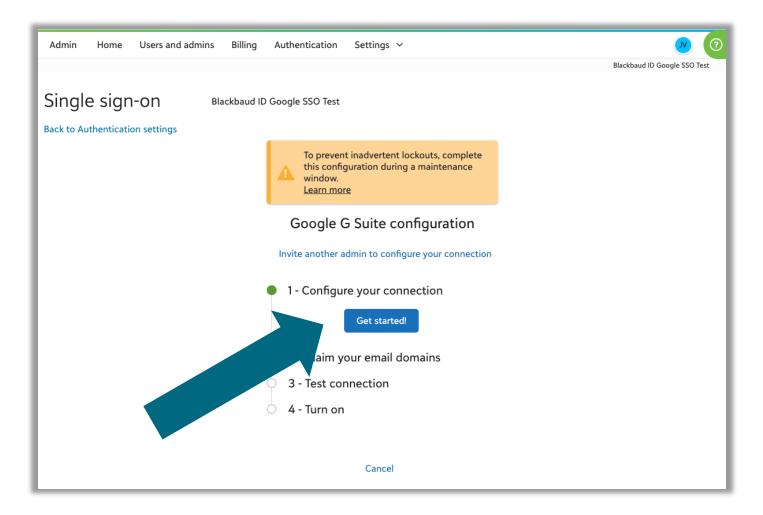
Navigate to Manage SSO within Blackbaud Admin



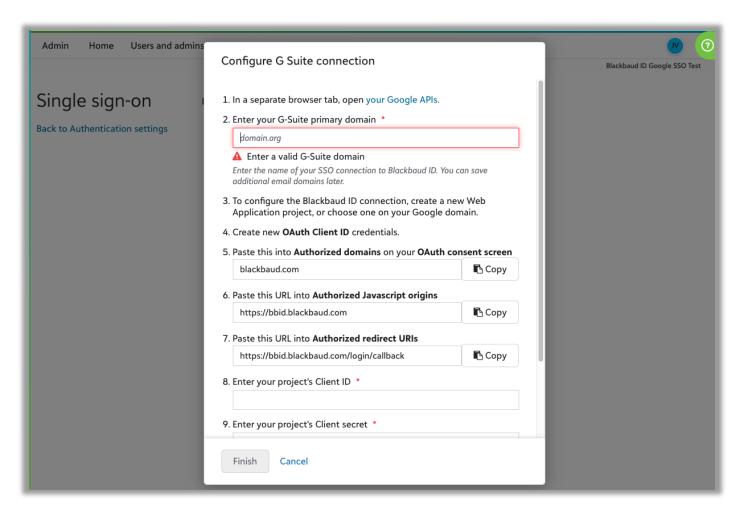
Select Google



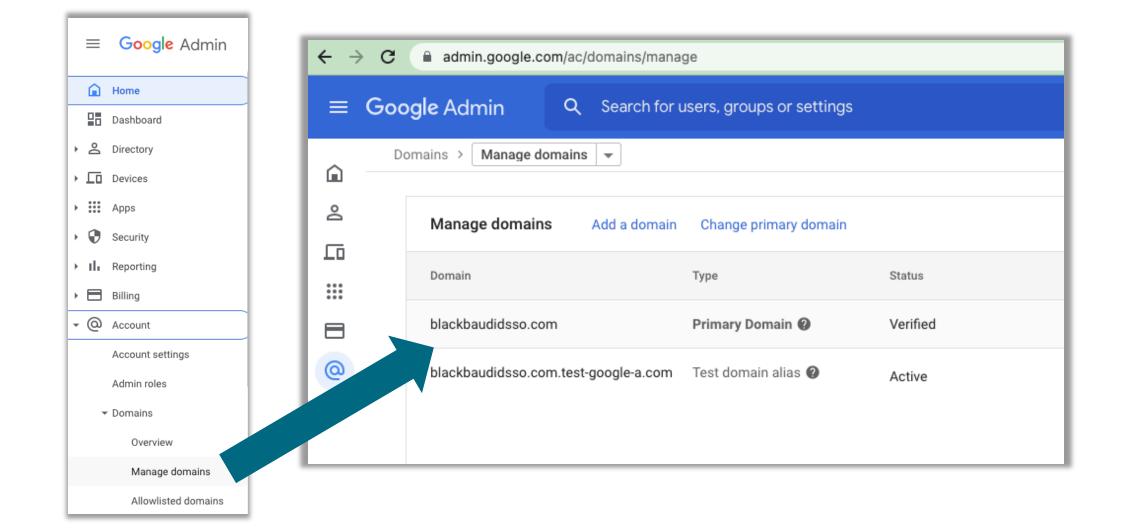
Configure your connection



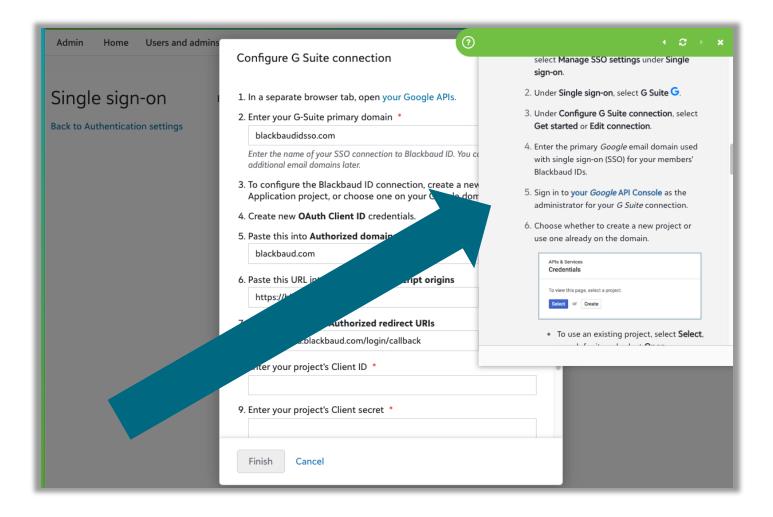
Enter your primary domain



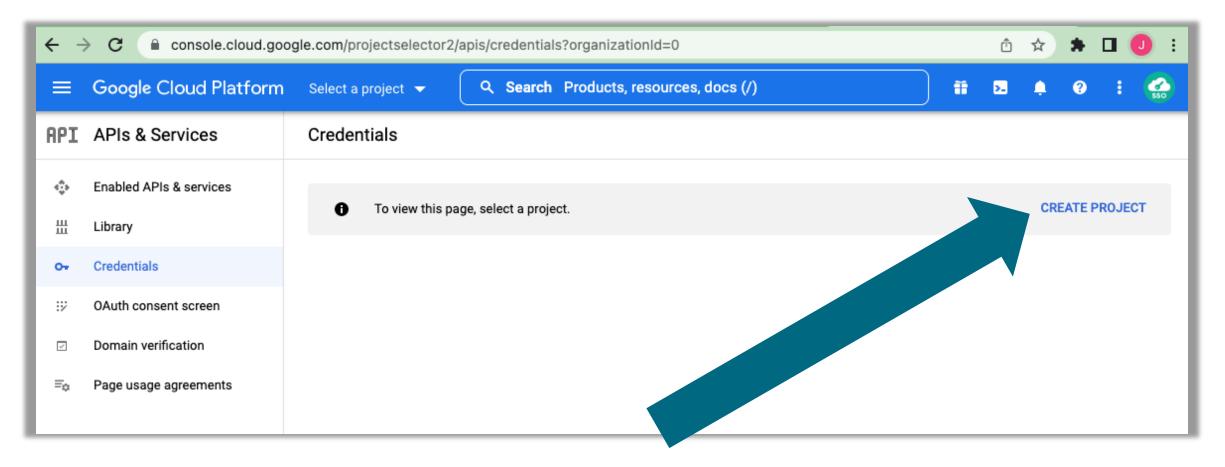
Here's where to confirm your domain



Follow Instructions for link to setup Google application



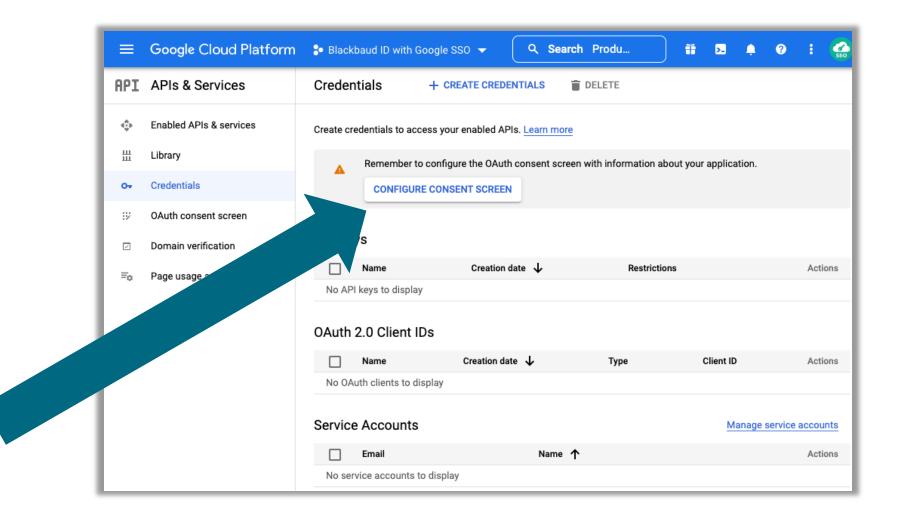
This is the view if your org has no existing connections



Create new project

≡ Google Cloud Platform		>.	۰	?					
New Project									
You have 12 projects remaining in your quota. Request an increase or delete projects. Learn more									
MANAGE QUOTAS									
Project name *				_					
Blackbaud ID with Google SSO ?				_					
Project ID: optimistic-tree-352319. It cannot be changed later. EDIT									
Location *									
No organization BROWSE				_					
Parent organization or folder									
CREATE CANCEL									

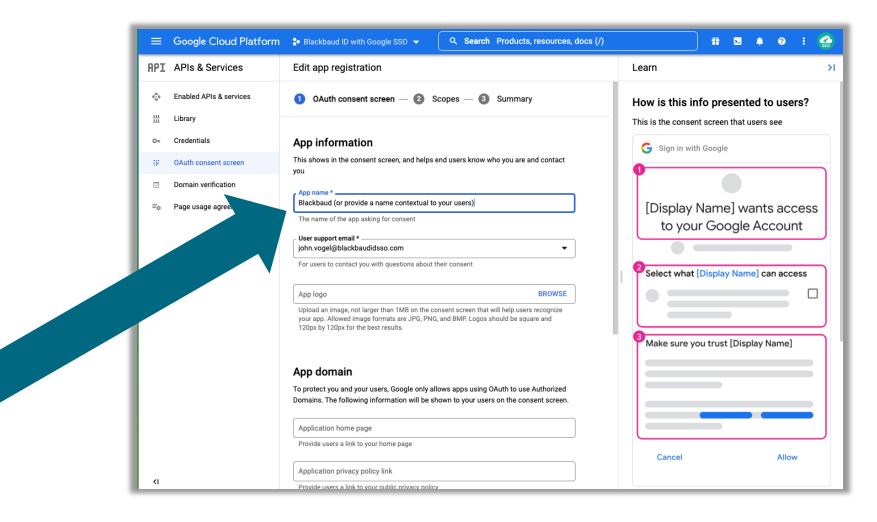
Configure consent screen



Select Internal

≡	Google Cloud Platform	🕽 Blackbaud ID with Google SSO 👻 🔍 🭳 Search Produ 🏥 🖪 🌲 🤗
API	APIs & Services	OAuth consent screen
ŵ	Enabled APIs & services	Choose how you want to configure and register your app, including your
出	Library	target users. You can only associate one app with your project.
0-	Credentials	User Type
92	OAuth consent screen	 Internal Only available to users within your organization. You will not need to
	Domain verification	submit your app for verification. Learn more about user type
Ξo	Page us	○ External Available to any test user with a Google Account. Your app will start in testing mode and will only be available to users you add to the list of test users. Once your app is ready to push to production, you may need to verify your app. Learn more about user type
		CREATE

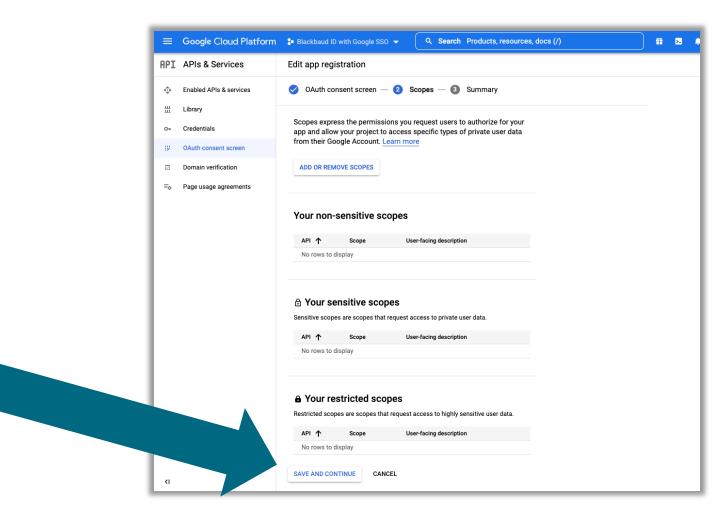
Enter the App name and support email (can be a group)



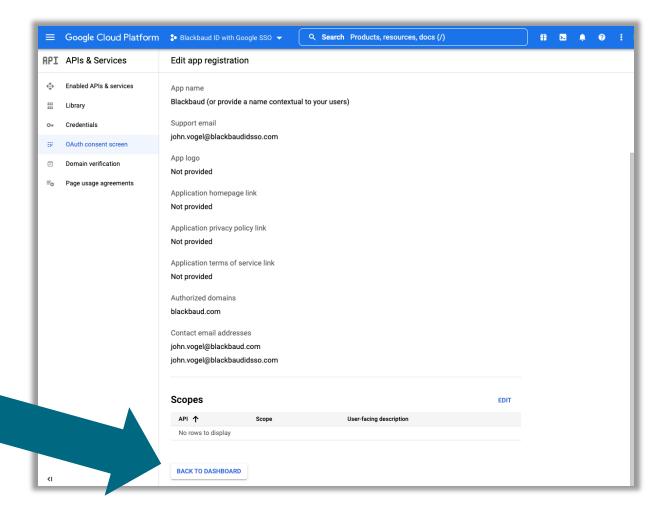
Enter Blackbaud.com as Authorized domain

	Google Cloud Platform	Blackbaud ID with Google SSO 👻 Q Search Products, resources, docs (/)	ii 🛛 🌲 🥹 : 🌏
IPI	APIs & Services	Edit app registration	Learn
€ .	Enabled APIs & services	To protect you and your users, Google only allows apps using OAuth to use Authorized Domains. The following information will be shown to your users on the consent screen.	How is this info presented to users?
Ш	Library		This is the consent screen that users see
0-	Credentials	Application home page	
		Provide users a link to your home page	G Sign in with Google
92	OAuth consent screen	Application privacy policy link	1
\checkmark	Domain verification	Provide users a link to your public privacy policy	
≡¢	Page usage agreements	· · · · · · · · · · · · · · · · · · ·	[Display Name] wants access
		Application terms of service link	to your Google Account
		Provide users a link to your public terms of service	
		Authorized domains When a domain is used on the consent screen or in an OAuth client's configuration, it must be pre-registered here. If your app needs to go through verification, please go to the Google Search Console to check if your domains are authorized. Learn more about the authorized domain limit.	Select what [Display Name] can access
		Authorized domain 1 * blackbaud.com	³ Make sure you trust [Display Name]
		+ ADD DOMAIN	
		Developer contact information	
		Email addresses *	
		These email addresses are for Google to notify you about any changes to your project.	Cancel Allow
41		SAVE AND CONTINUE CANCEL	Allow

No scopes needed



Review Summary and go back to dashboard



Go to Credentials tab & create Oauth client ID

=	Google Cloud Platform	Blackbaud ID with Generating	oogle SS0 👻 🔍 🔍 Search Products, resources, docs (/)		ii	>.	۰	?	:	? 50
API	APIs & Services	Credentials	+ CREATE CREDENTIALS							1
٩	Enabled APIs & services	Create credentials to ac	API key Identifies your project using a simple API key to check quota and access							I
丗	Library	API Keys	OAuth client ID Requests user consent so your app can access the user's data							ł
0+	Credentials		Service account	ictions					Actions	ł
92	OAuth consent screen	,s to displa	Enables server-to-server, app-level authentication using robot accounts							
	Domain verification	OAuth 2.0 Client I	Help me choose Asks a few questions to help you decide which type of credential to use							I
Ξo	Page usage agreements	Name	Creation date 🕹 Type		Client ID				Actions	ł
		No OAuth clients to dis	splay							
		Service Accounts				Ma	anage s	ervice a	accounts	l
		Email	Name 个						Actions	
		No service accounts to	o display							

Select Web application

≡	Google Cloud Platform	Blackbaud ID with Google SSO - Q Search Products, resources, docs (/)	ii
API	APIs & Services	Create OAuth client ID	
¢	Enabled APIs & services	A client ID is used to identify a single app to Google's OAuth servers. If your app runs on	
#	Library	multiple platforms, each will need its own client ID. See <u>Setting up OAuth 2.0</u> for more information. <u>Learn more</u> about OAuth client types.	_
07	Credentials	Application type *	_
92	OAuth consent screen	Web application	
	Domain verificatio	Android Chrome app	
≡o	Page ints	iOS	_
		TVs and Limited Input devices	_
		Desktop app	_
		Universal Windows Platform (UWP)	
I 1			

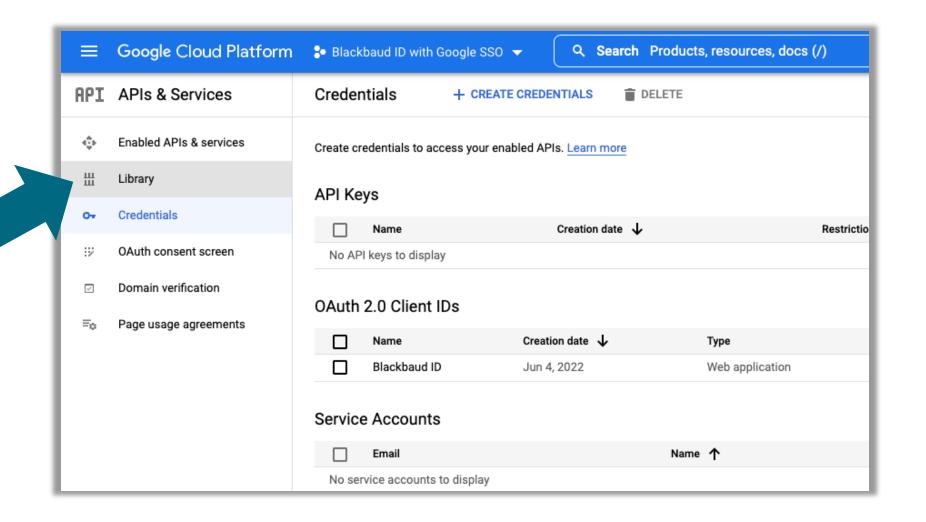
Copy over the authorized URIs from Blackbaud

= Admin 🍅	=	Google Cloud Platform	🐉 Blackbaud ID with Google SSO 👻	Q Search Products, resources, docs (/)) 🏭 🔽		
Configure G Suite connection	API	APIs & Services	← Create OAuth client ID				
Enter the name of your SSO connection to Blackbaud ID. You can save additional email domains later.	¢	Enabled APIs & services	Application type *				
 To configure the Blackbaud ID connection, create a new Web Application project, or choose one on your Google domain. 	#	Library					
4. Create new OAuth Client ID credentials.	07	Credentials	Name * Blackbaud ID				
5. Paste this into Authorized domains on your OAuth consent screen		OAuth consent screen	The name of your OAuth 2.0 client. This name is console and will not be shown to end users.	only used to identify the client in the			
blackbaud.com		Domain verification					
🖪 Сору	Ξo	Page usage agreements	I he domains of the URIs you add it your <u>OAuth consent screen</u> as <u>auth</u>	below will be automatically added to horized domains.			
 6. Paste this URL into Authorized Javascript origins https://bbid.blackbaud.com 7. Paste this URL into Authorized redirect URIs https://bbid.blackbaud.com/login/callback © Copy 8. Enter your project's Client ID •	· •						
9. Enter your project's Client secret *			Authorized redirect URIs @				
 Ensure the Admin SDK library is enabled on your project. After you save this connection, Blackbaud IDs on your primary email domain won't be able to sign in through Google until you complete the configuration. 			URIs 1 *				
Finish Cancel	<1		Note: It may take 5 minutes to a few hours for CREATE CANCEL	settings to take effect			

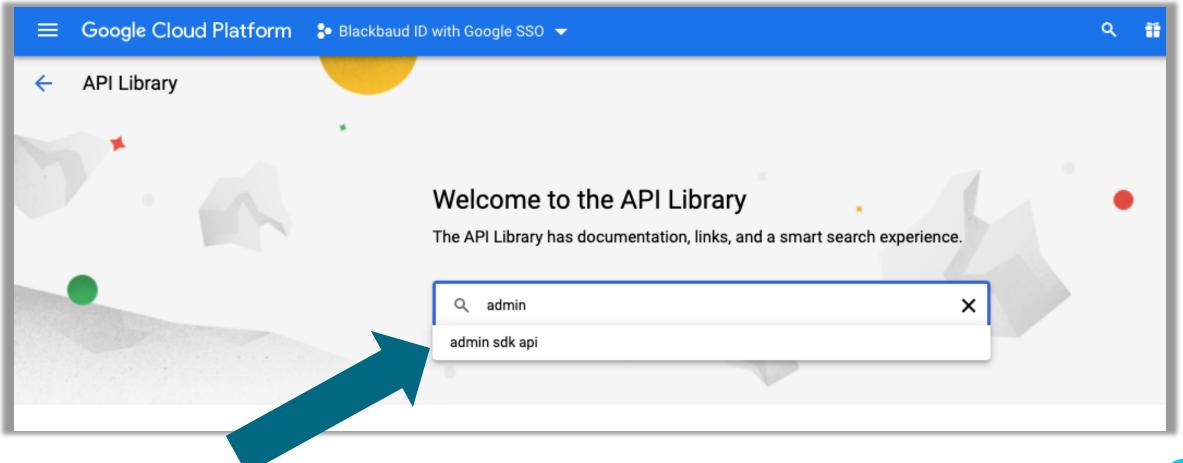
Enter your project's Client ID & Client Secret

= Admin &	≡ Google Clou	d Platform	🐌 Blackbaud ID w	rith Google SSO 🔻	Q Search Products, resources	, docs (/)		2
Configure G Suite connection	RPI APIs & Servic	ces	Credentials	+ CREATE CREDE	ENTIALS 👕 DELETE			
Enter the name of your SSO connection to Blackbaud ID. You can save additional email domains later.	🔹 Enabled APIs & se	ervices	Create credentials t	o access your enabled AF	1s. <u>Learn more</u>			
3. To configure the Blackbaud ID connection, create a new Web Application project, or choose one on your Google domain.	Library O- Credentials		API Keys					
 Create new OAuth Client ID credentials. Paste this into Authorized domains on your OAuth consent screen 	III OAuth consent sci	reen	No API keys to	_	Creation date 🔸	Restrictio	ons	
blackbaud.com	Domain verificatio	'n	OAuth 2.0 Cli	OAuth client	created			
Copy Seste this URL into Authorized Javascript origins	≡ _© Page usage agree	ements	Name	The client ID and secre Services	t can always be accessed from Credentials	s in APIs &	Client ID	_
https://bbid.blackbaud.com			Blackb:		ess is restricted to users within your organi OAuth consent screen is published and ver		38899279054-m0qpp	
🖪 Сору			Service Acco	Your Client ID				Manage s
7. Paste this URL into Authorized redirect URIs https://bbid.blackbaud.com/login/callback				Your Client Secret		Π		
Copy						Ē		
8. Enter your project's Client ID *				± DOWNLOAD JSC	N	•		
9. Enter your project's Client secret *						ок		
 10. Ensure the Admin SDK library is enabled on your project. After you save this connection, Blackbaud IDs on your primary email domain won't be able to sign in through Google until you complete the configuration. 								
Finish Cancel	<1							

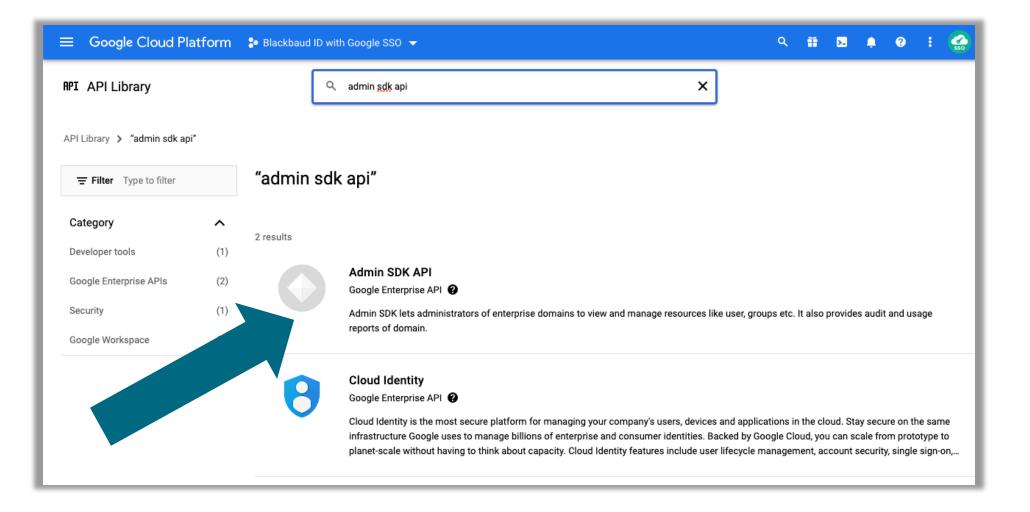
Go to the Library



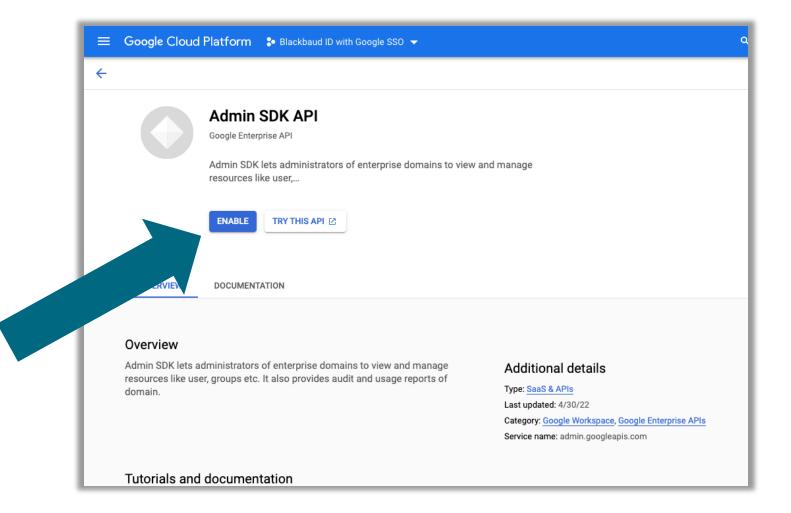
Search for Admin SDK API



Select Admin SDK API



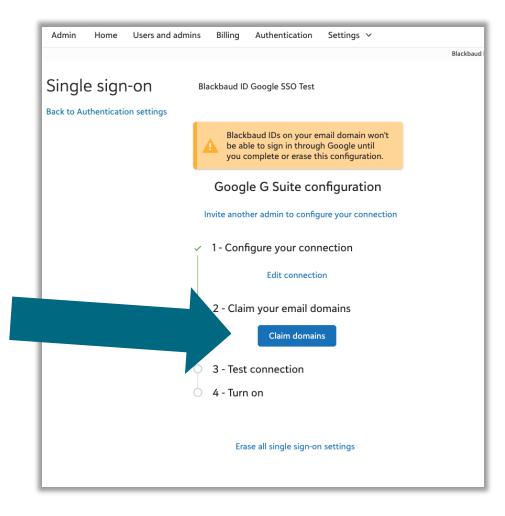
Enable Admin SDK API



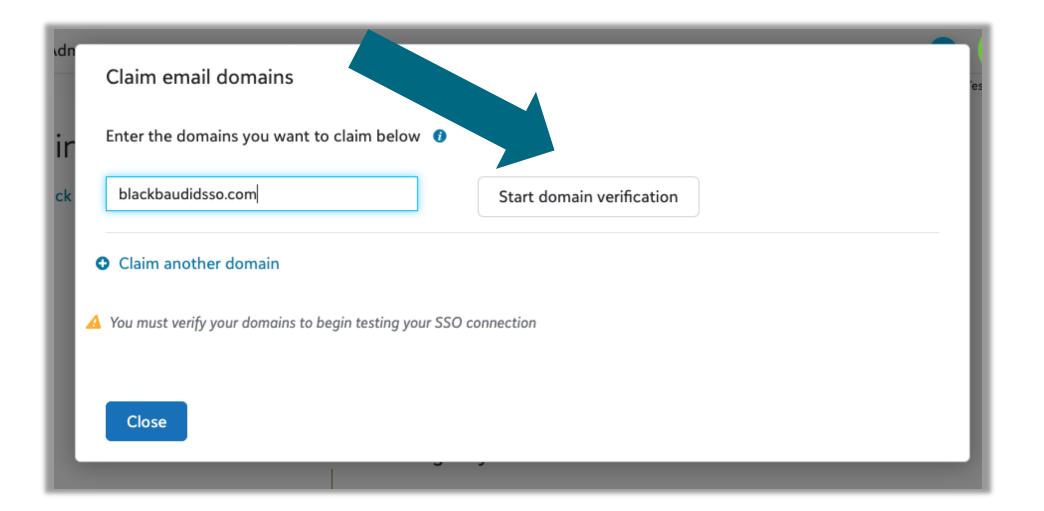
Finish connection

	-						
Single sign-o	1. In a separate browser tab, open your Google APIs						
Back to Authentication se	2. Enter your G-Suite primary domain *						
ack to Authentication se	blackbaudidsso.com	blackbaudidsso.com					
	Enter the name of your SSO connection to Blackbaud ID. additional email domains later.	You can save					
	3. To configure the Blackbaud ID connection, create Application project, or choose one on your Googl						
	4. Create new OAuth Client ID credentials.						
	5. Paste this into Authorized domains on your OAut						
	blackbaud.com						
	6. Paste this URL into Authorized Javascript origins						
	https://bbid.blackbaud.com	🖪 Сору					
	7. Paste this URL into Authorized redirect URIs						
	https://bbid.blackbaud.com/login/callback	🖪 Сору					
	8. Enter your project's Client ID *						
	9. Enter your project's Client secret *						
	10. Ensure the Admin SDK library is enabled on your	project.					
	A After you save this connection, Blackbaud IDs on domain won't be able to sign in through Google u the configuration.						
		intil you complete					

Claim Email Domains

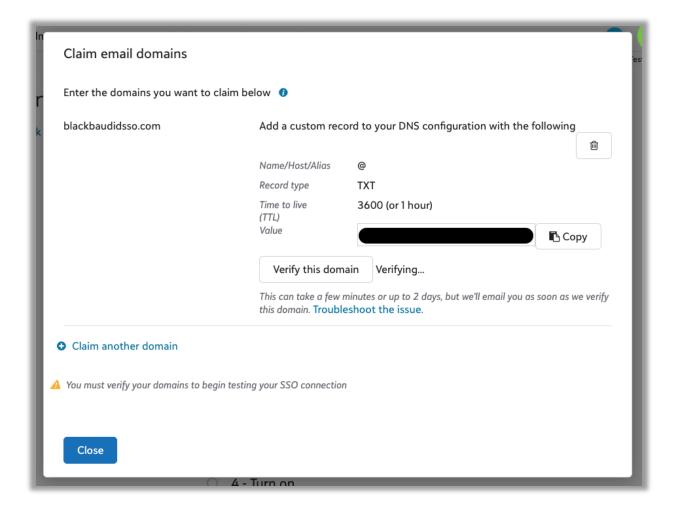


Enter domain and start verification



Ь

Record details to place on DNS



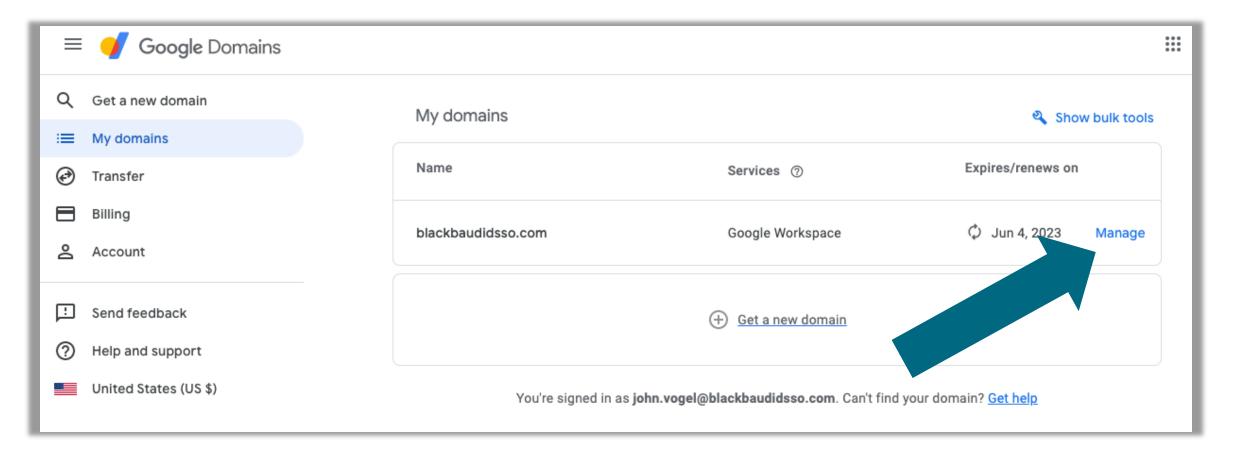
View details of domain

≡ Goo	≡ Google Admin Q Search for users, groups or settings								
D.	omains > Manage domains -								
	Manage domains Add a domain	Change primary domain							
ے ت	Domain	Туре	Status	Actions					
000 000 000	blackbaudidsso.com	Primary Domain 🕖	Verified	View Details Add Users					
0	blackbaudidsso.com.test-google-a.com	Test domain alias 🛿	Active	Deactivate					
th			· ·						
8									
@									
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0									

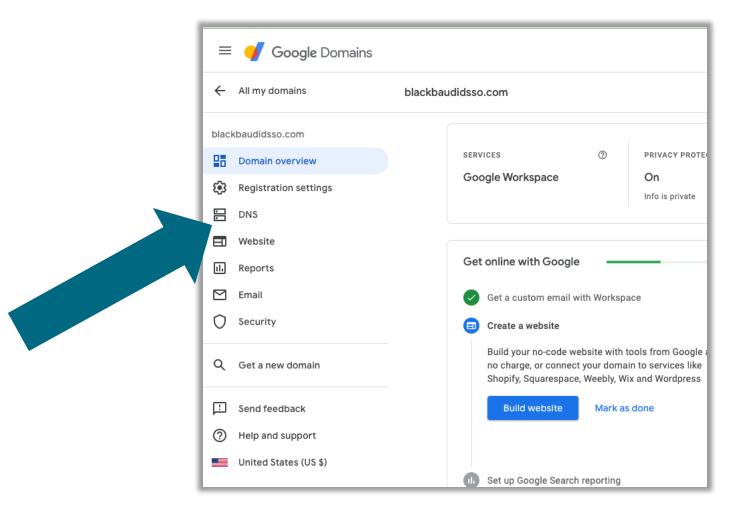
Go to Google Domains (or your domain manager)

≡ Goo	ogle Admin Q Search for	users, groups or settings		:	× blackbaudidsso.com
Do	omains > Manage domains -				Registered since Jun 04, 2022 with Google Domains @ Google Domains Terms of Service
□ ⊘	Manage domains Add a domain	n Change primary domain			Registrant rights and responsibilities Google Workspace Domain Registration Terms of Service
	Domain	Туре	Status	А	Autorenewal
0 0 0 0 0 0 0 0 0	blackbaudidsso.com	Primary Domain 🔞	Verified	v	This domain will automatically renew every year. 🔇
0	blackbaudidsso.com.test-google-a.com	Test domain alias 🕖	Active	D	Manage your domain subscription
ılı —					The person who registered this domain can visit Google Domains to edit advanced settings such as WHOIS or DNS
					records.
@ •					MANAGE DOMAIN (via Google Domains)
6					Cancel your domain subscription
					Canceling your domain subscription Canceling your domain billing subscription will also turn off autorenewal for your domain.
					CANCEL DOMAIN BILLING SUBSCRIPTION

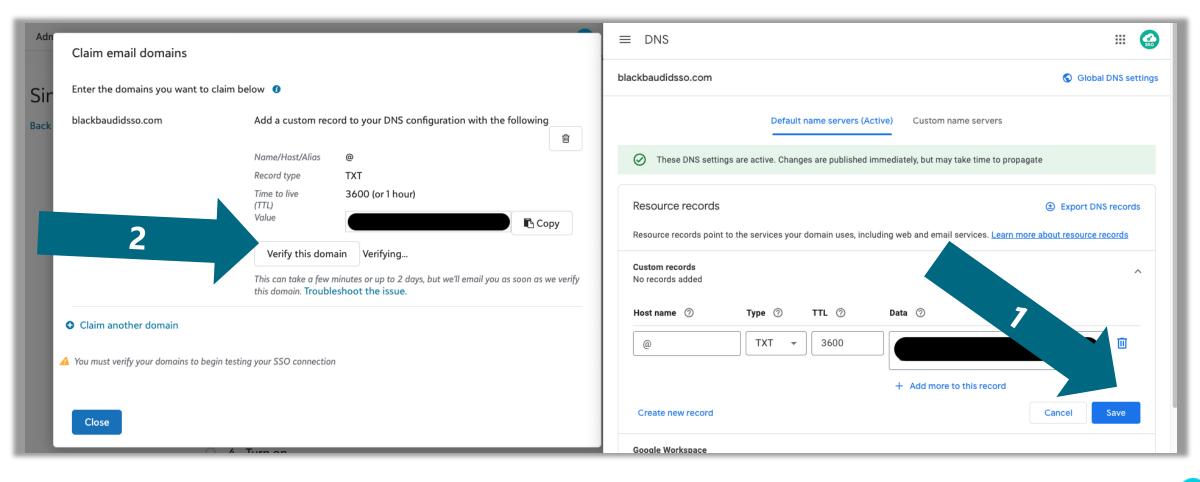
Manage domain



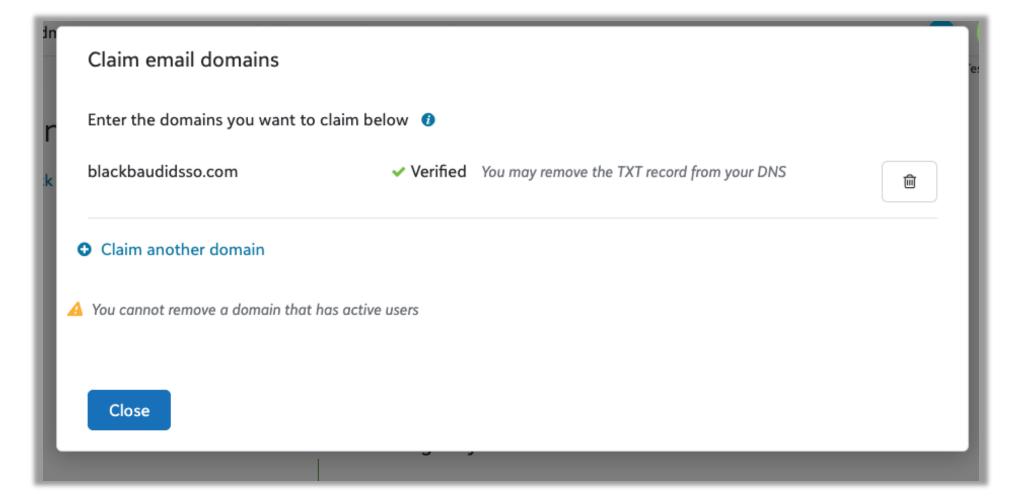
Go to DNS



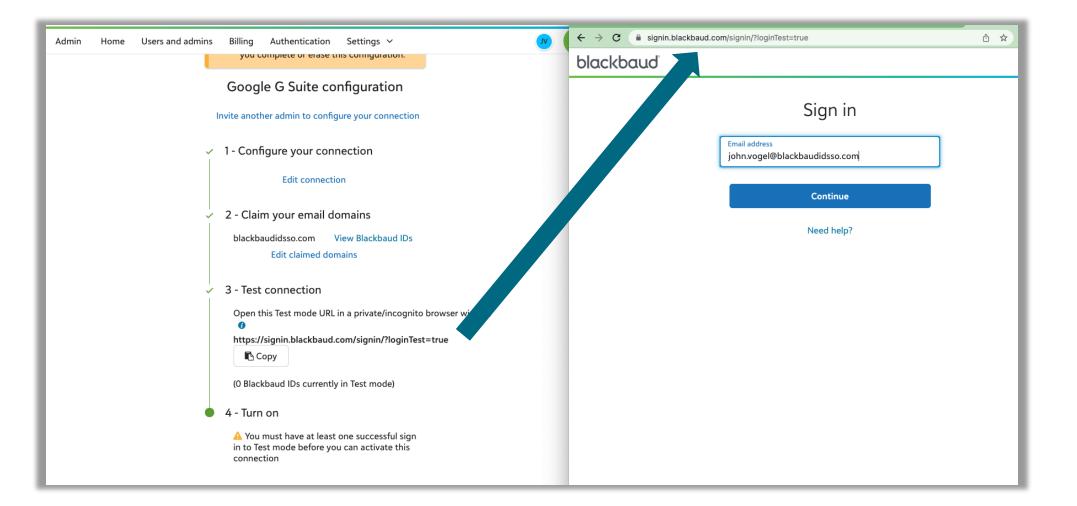
Enter DNS record details



Email domain Verified



Test Connection

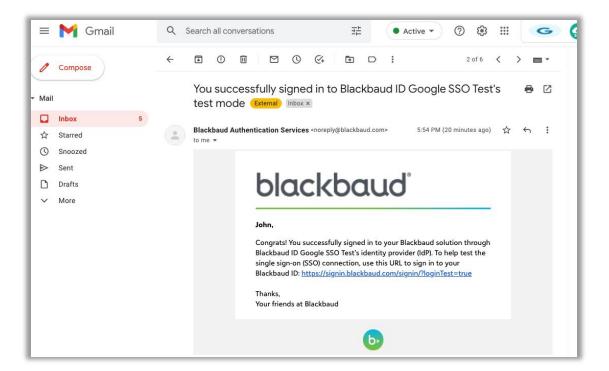


Select and authenticate with your Google account

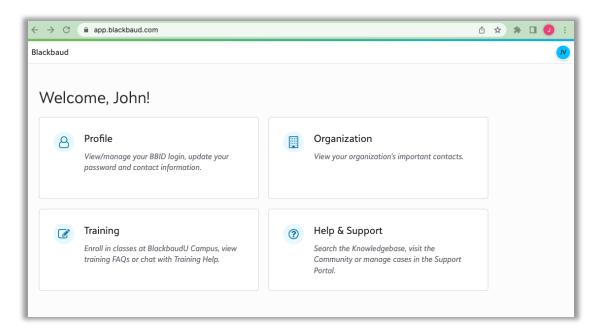
0	accounts.google.com/o/oauth2/auth/oauthchooseaccount?login_hint=john.vogel%4	0bla	Ô	☆
	G Sign in with Google			
	Choose an account from blackbaudidsso.com to continue to Blackbaud (or provide a name contextual to your users) John Vogel John.vogel@blackbaudidsso.com			
	② Use another account			
	To continue, Google will share your name, email address, language preference, and profile picture with Blackbaud (or provide a name contextual to your users).			
	English (United States) - Help Privacy Term	3		

Test connection successful!

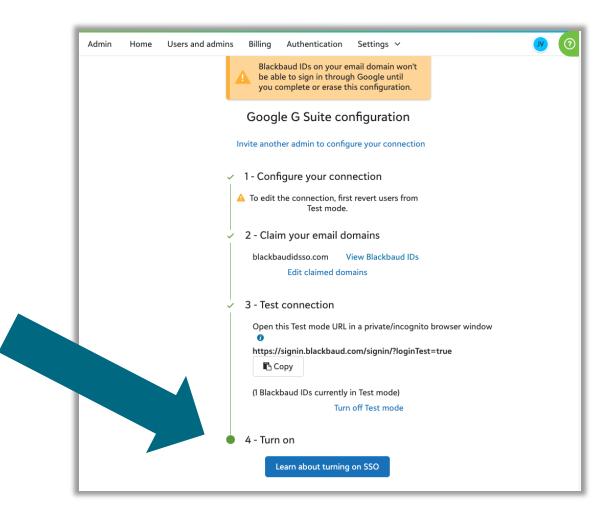
EMAIL CONFIRMING SIGN IN



WELCOME PAGE AFTER SIGNING IN

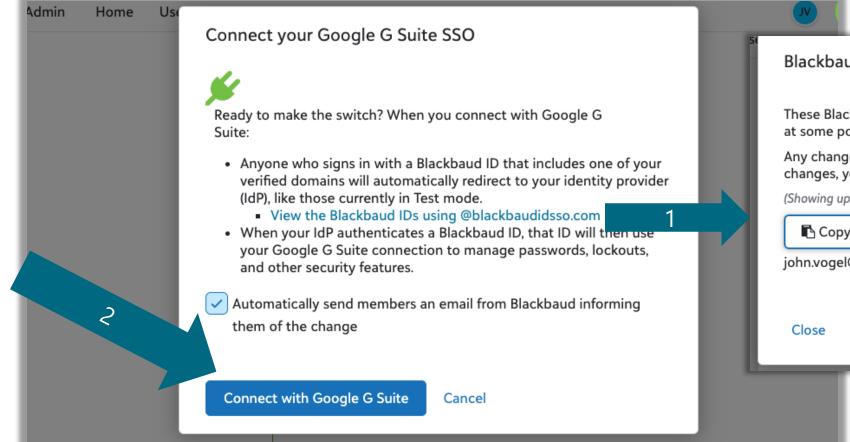


Turn on SSO





Confirm any impact & Connect SSO

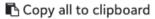


Blackbaud IDs

These Blackbaud IDs all signed in with your domain in their email address at some point.

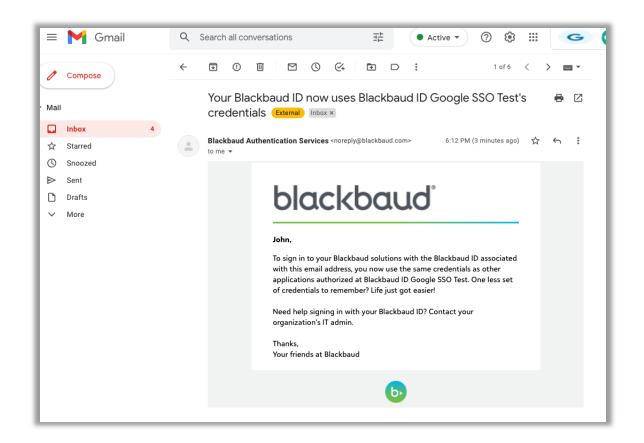
Any changes to your SSO settings affect these users. To notify them of changes, you can copy and paste this list as email recipients.

(Showing up to 1,000)



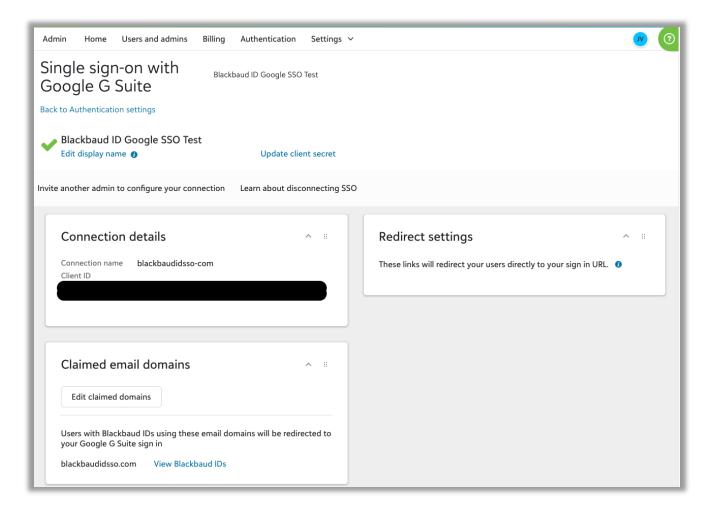
john.vogel@blackbaudidsso.com

Confirmation email



Sent to users that previously had a Blackbaud ID on the claimed domain(s) used with the SSO connection

Completed connection page





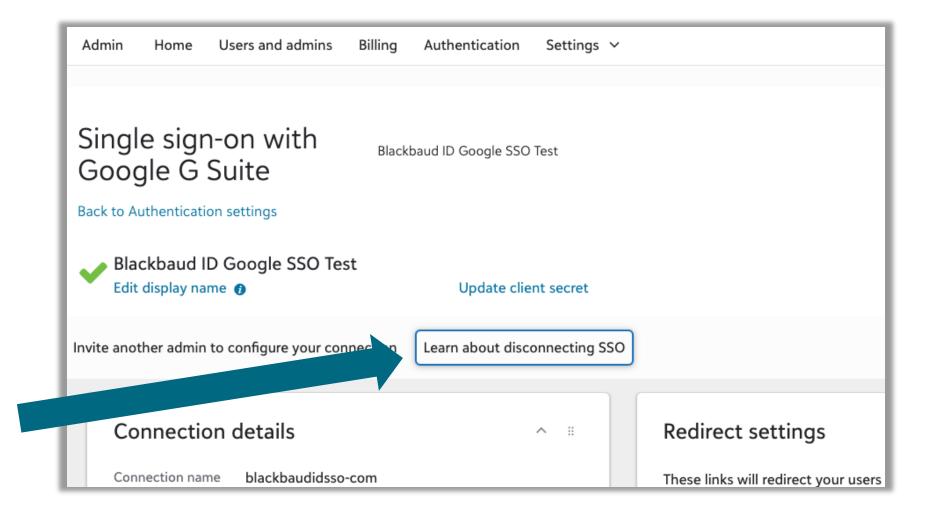
Thank you

john.vogel@blackbaud.com

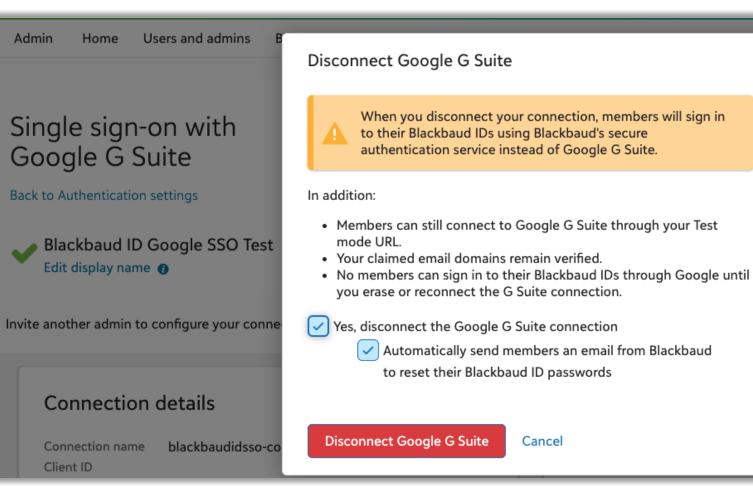


Disconnecting SSO

Disconnecting SSO

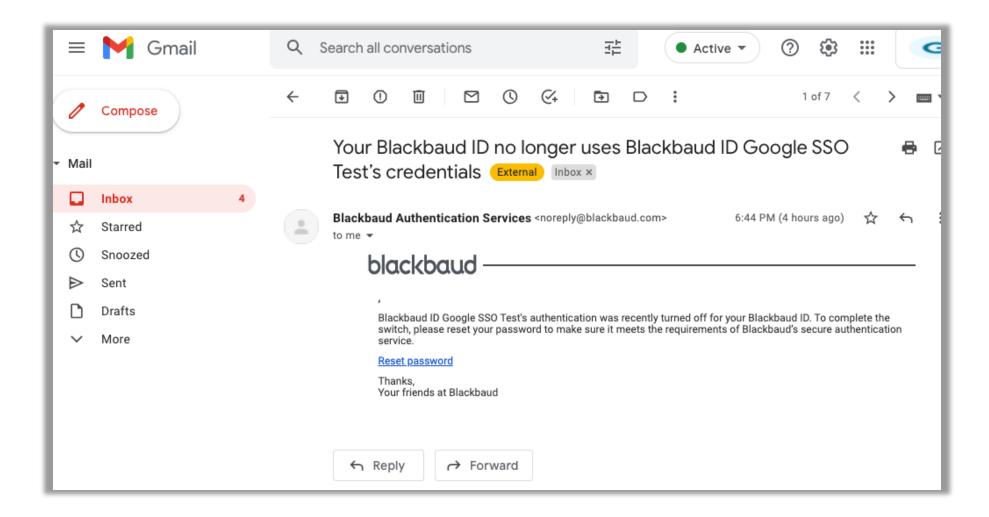


Disconnecting SSO



directly to your

Disconnection Email to Users

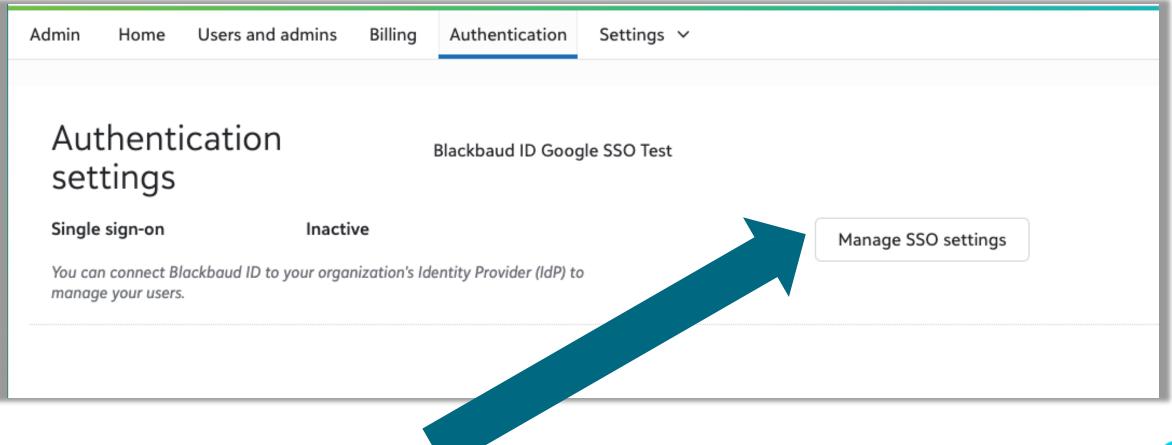


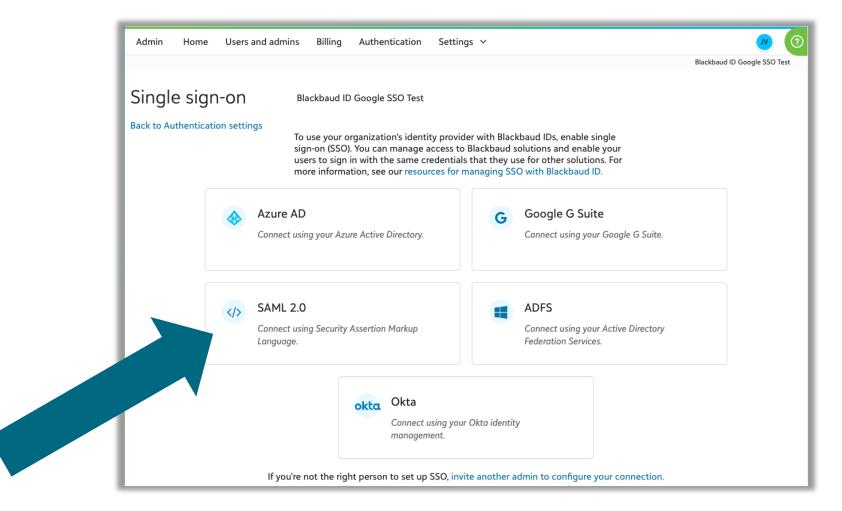


Google SSO using SAML

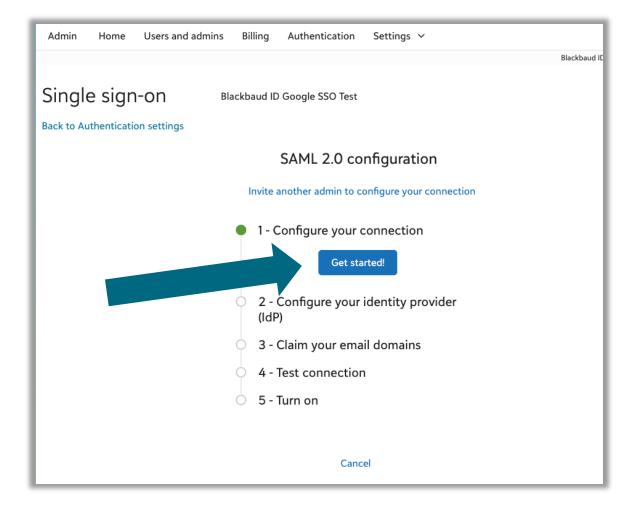


Blackbaud Admin

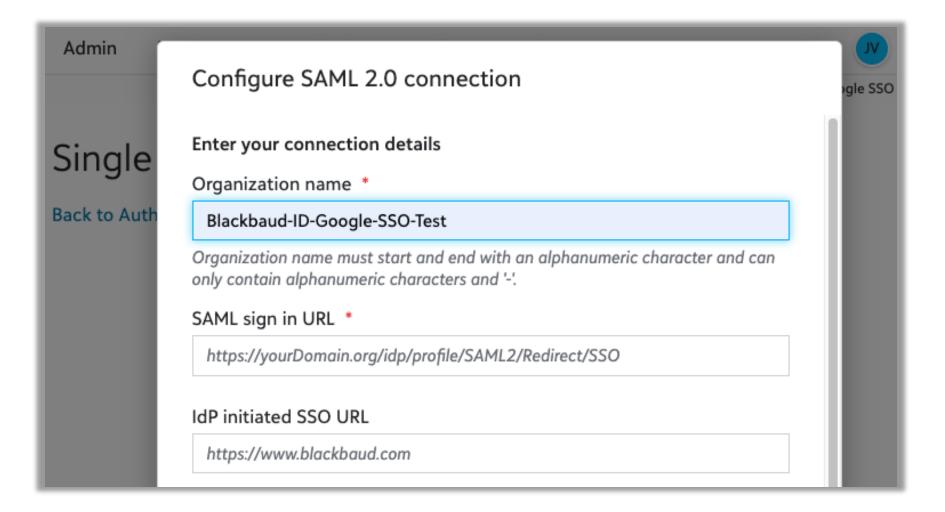




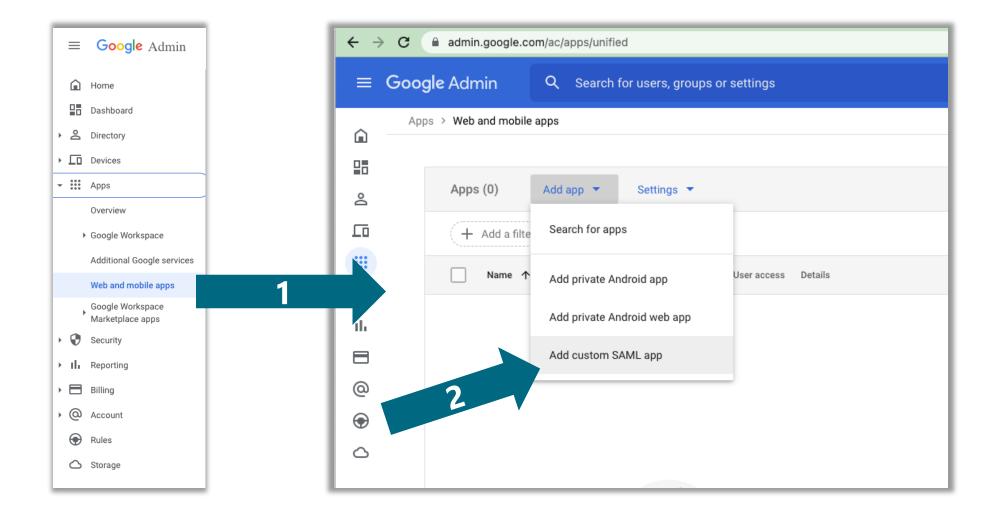
Configure your connection



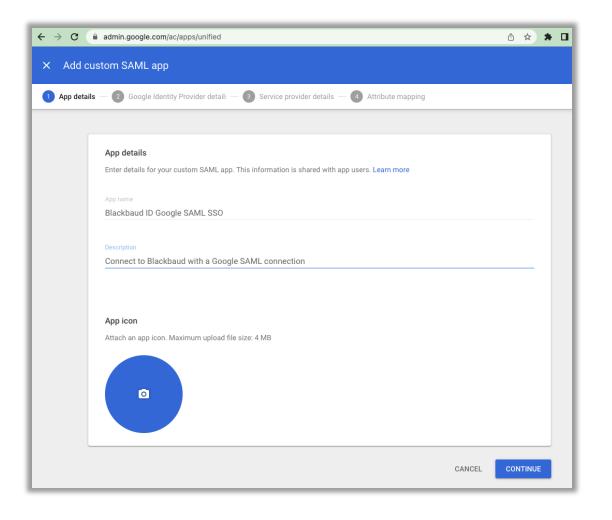
Enter your organization name to be used



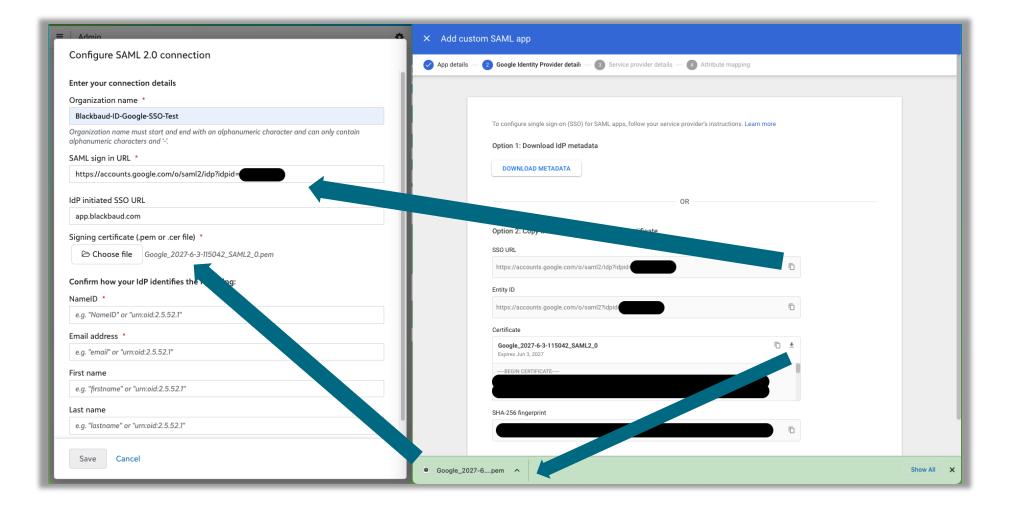
Add a custom SAML App in Google Admin



Enter App details



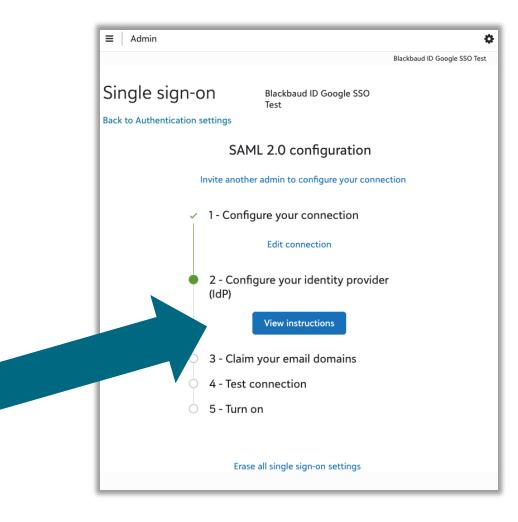
Copy over Sign in URL and attach certificate



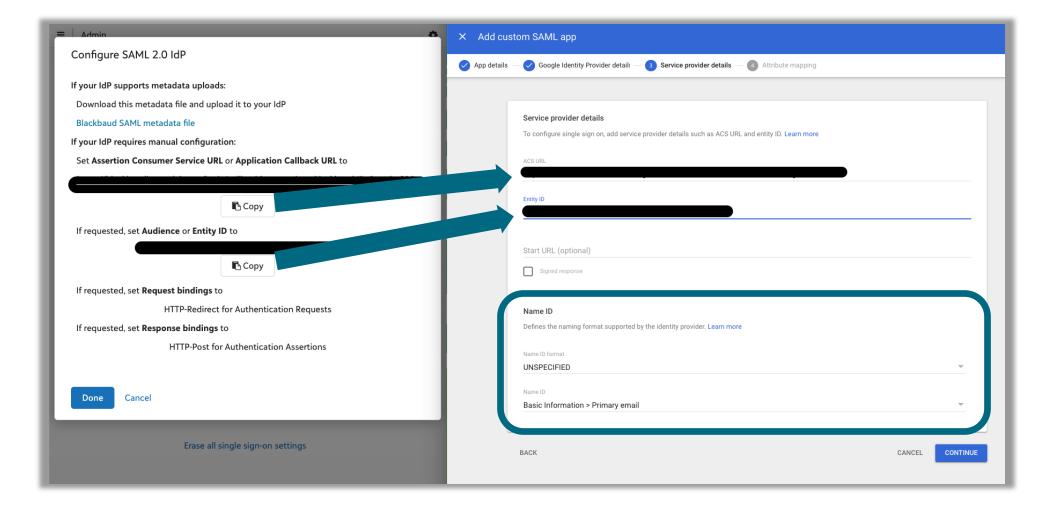
Enter the mappings as detailed in help

Admin Home Users and admins Billing Authentic	Configure SAML 2.0 connection	
Single sign-on Backbaud ID Google SSG Back to Authentication settings	Organization name * Blackbaud-ID-Google-SSO-Test Organization name must start and end with en alphanumeric character and can only contain alphanumeric characters and '.'. SAML sign in URL * https://accounts.google.com/o/saml2/idp?idpid=C03m0b4se IdP initiated SSO URL app.blackbaud.com Signing certificate (pem or .cer file) * (a) Choose file Google_2027-6-3-115042_SAML2_0.pem Confirm how your IdP identifies the following: NameID * emailAddress Email address * emailAddress Ist name given_name sur_name	 f. Under Signing certificate, select Choose file, and then browse to and select the certificate (CER) file downloaded from your <i>Google</i> idP information. g. Enter the attributes <i>Google</i> will use to permanently identify member details: In the NameID and Email address fields, enter emailAddress. In the First name field, enter given_name. In the Last name field, enter sur_name. Note: You'll create these attributes when you configure your <i>Google</i> idP. h. Select Save.

Configure IdP



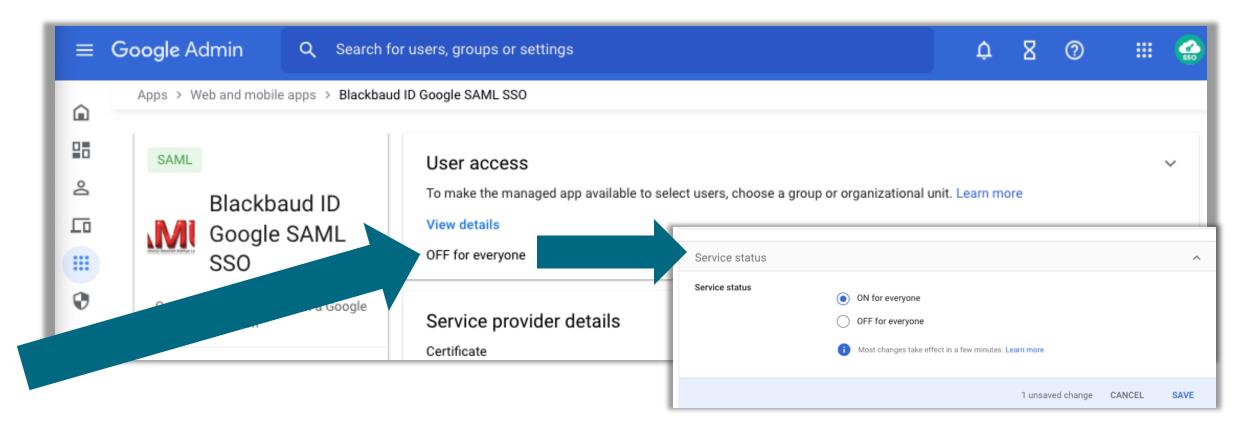
Provide Blackbaud details to Google



Finish app setup

× Add cus	stom SAML app	
🗸 App details	— 🧭 Google Identity Provider detail! — < Service provider details — 4 Attribute mapping	
	Attributes Add and select user fields in Google Directory, then map them to service provider attributes. Attributes marked with * are mandatory. Learn more	
	Google Directory attributes App attributes	
	ADD MAPPING	
	Group membership (optional)	
	Group membership information can be sent in the SAML response if the user belongs to any of the groups you add here. Google groups App attribute	
	Search for a group \rightarrow Groups	
	BACK CANCEL FINISH	

Turn User access ON for everyone



Claim email domain

The remainder of the setup is the same as the Google application setup shown earlier in this presentation. Reference Slide 32 to continue.





Appendix

Consider Cloud Identity

