Kinvey MIC setup to common authsources

(Warning: this is an informal document only, 3rd-party information might be out-of-date. Use as reference example only)

Current as per April 2017

Changelog:

- 1.0: First version, SAML: ivo 2015-09-25
- 1.1: Updated for new console, Add google oauth: ivo 2016-12-20
- 1.2: Ping: ivo 2017-01-05
- 1.3: SFDC: ivo 2017-04-10
- 1.4: ADFS: ivo 2018-02-01
- 1.5 Azure OpenID: rlh 2018-02-06
- 1.6 Azure SAML: rlh 2018-02-09
- 1.7 Update ADFS: rlh 2018-02-15

Table of contents:

1. Azure SAML integration (old Azure console)	3	
Set up connected application in the Azure console	3	
Parameters in Kinvey Console	5	
Assign users to use this connected app	6	
2. ADFS SAML integration	8	
Add a Relying Party Trust	8	
3. Azure SAML integration	17	
Create a new application	17	
Configure App ID URI	19	
Configure Reply URLs	20	
Configure the permissions	21	
Configure Kinvey		
4. Azure OpenID connect integration	26	
Create a new application	26	
Configure Reply URLs	28	
Configure the permissions	29	
Create the Client Secret	31	

Configure Kinvey		
5. Google OAuth2 integration	34	
Set up connected app in Google Developer Console	34	
Parameters in Kinvey Console	35	
Enable API's to use this Connected App	38	
Testing the MIC config via the Console	40	
6. Salesforce authentication integration	42	
Set up connected app in Salesforce	42	
Parameters in Kinvey Console	43	
Forward Salesforce attributes to your datalink	45	
Testing the MIC config via the Console		
7. Ping integration (NOT WORKING CURRENTLY!)	48	
Set up connected app in Google Developer Console	48	
Parameters in Kinvey Console	48	
In your app	49	
Testing the MIC config via the Console	49	

1. Azure SAML integration (old Azure console)

Set up connected application in the Azure console

In Azure (<u>https://manage.windowsazure.com/</u>), go to your AD instance, and click on "Applications"

Micro	soft Azure 🛛 🗸			⊕	sharetest@kinvey.onmicrosoft.com
Ⅲ �	$\langle \bullet \rangle$	kinvey Lucenses groups av Lucenses	PPLICATIONS DOMAINS	DIRECTORY INTEGRATION	CONFIGURE REPORTS
0	Kinvey				
		Show Applications my compa	iny uses 📀 Se	earch	\checkmark
		NAME	PUBLISHER	ТҮРЕ	APP URL
		Kinvey-staging			
		kinvey \rightarrow		Web application	
		Microsoft Intune	Microsoft Corporation	Web application	http://www.microsoft.com/en-u
		Office 365 Exchange Online	Microsoft Corporation	Web application	http://office.microsoft.com/outl
		Office 365 Management APIs	Microsoft Corporation	Web application	
		Office 365 SharePoint Online	Microsoft Corporation	Web application	http://office.microsoft.com/shar

At the bottom, click on "Add" and choose "Add an Application from the gallery"



Use "Custom" and give it a name.

APPLICATION GALLERY × Add an application for my organization to use ρ FEATURED APPLICATIONS (15) NAME Add an unlisted application my CUSTOM Kinvey organization is using ALL (2496) Enter the name of an application you are **BUSINESS MANAGEMENT (97)** using, and add it to explore single sign-on COLLABORATION (288) integration options. CONSTRUCTION (3) **CONTENT MANAGEMENT (86)**

Click on "Configure Single Sign-on"



Use "Microsoft Azure AD Single Sign-On"



In the "Configure App Settings" screen, check "Show Advanced Settings" Use these urls:

- Sign On URL: https://auth.kinvey.com/
- Issuer/Identifier URL: https://auth.kinvey.com/kinvey-mobile-identity-connect
- Reply URL: https://auth.kinvey.com/v2/saml/assertion

NOTE: Replace with dedicated instance url if needed, e.g. https://<instance>-auth.kinvey.com...

CONFIGURE SINGLE STGN-ON		× .
Configure App Set	ings	
Enter the settings of kinvey application b	ow. Learn more	
SIGN ON URL (OPTIONAL)	0	
https://auth.kinvey.com/		
IDENTIFIER	0	
https://auth.kinvey.com/kinvey-mobi	e-identity-co	
REPLY URL	0	
https://auth.kinvey.com/v2/saml/asse	tion	
Show advanced settings (optional).		
Configure the certificate used for fede	ated single sign-on (optional).	

Parameters in Kinvey Console

In the next screen, observe the windows.net url and certificate you will now configure in the Auth Provider settings screen into the Kinvey console:

- Create a new SAML-Redirect configuration
- MS Issuer URL -> ignore in Kinvey console
- Kinve Provider URI -> MS Single Sign On Service URL
- Kinvey Logout URI -> MS Single Sign Out Service URL
- MS Certificate: Download Base64, open in text editor, paste certificate into Kinvey Certificate field
- Kinvey Name ID Format URI: literal: "urn:oasis:names:tc:SAML:1.1:nameid-format:emailAddress"
- Set your redirect URI's as per your front-end requirements.
- Allowed attributes:
 - You must include "id" and "audience" minimally as allowed attributes

Provider Configuration		
Type of Provider	SAMI-Parlifect	
Which auth service do you want to use?		
Provider URI	https://login.windows.net/631d3418-d713-4a95-bd54-636109555	
Redirect URI's	https://console.kinvey.com	×
The URI that is invoked to pass an authorization grant code back to your app.		
	kinveyLetolest://	×
	+ ADD REDIRECT U	RI
Logout URI		
The Logout URI provided by the SAML Identity Provider	nttps://iogin.windows.net/631d3418-d713-4a95-bd54-636109555	
Certificate Text		A
The X.509 Certificate text provided by the SAML	BEGIN CERTIFICATE MIIC8DCCAdigAwIBAgIQPKDr91GizKBL0tQnWTr02DANBgk	
Identity Provider	qhkiG9w0BAQsFADA0MTlwMAYDVQQD	-
	XJ0aWZbY2F0ZTAeFw0xNTA5MiMx0DU0	h
Name ID Format URI		
The format that Kinvey expects for the auth identifying NameID	um:oasis:names:tc:SAML:1.I:nameid-format:emailAddress	
Enable Proxy?	No Yes	
Allowed attributes		
Anowed attributes	id	
	audience	

This completes the configuration.

Assign users to use this connected app

To allow specific users to use this SAML option, click on "Assign Users to Kinvey"



For each user you want to give access, highlight that user and click "Assign" at the bottom:

		kinvey						
	\bigcirc	42 DASHBOARD	USERS ATTRIB	UTES CONFIGUE	RE			
-	Kinvey	DISPLAY NAME	USER NAME	JOB TITLE	DEPARTMENT	ACCESS	METHOD	Q
~	Kinvey-staging	Ivo Janssen	ivo@kinvey.onmicr			Νο	Unassigned	
	Microsoft Intune	Jikku Venkat	sharetest@kinvey.o	8		No	Unassigned	
	Office 365 Exchang							
	Office 365 Manage							
+	NEW		ASSIGN		D LOGO		2	0

For Azure AD, you must use MIC API version 2

- iOS: Client.sharedClient.micApiVersion = .v2
- Xamarin: Client.SharedClient.MICApiVersion = "v2";
- Javascript: user.loginWithMIC('http://localhost:8100', \$kinvey.AuthorizationGrant.AuthorizationCodeLoginPage, {version: "v2"});

2. ADFS SAML integration

Add a Relying Party Trust

Begin by launching your instance of ADFS. Start the Add Relying Party Trust wizard.



This starts the configuration wizard for a new trust. Press Start

φ.	Add Relying Party Trust Wizard
Welcome	
Steps Welcome Select Data Source Configure Multifactor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Welcome to the Add Relying Party Trust Wizard This wizard will help you add a new relying party trust to the AD FS configuration database. Relying parties consume claims in security tokens that are issued by this Federation Service to make authentication and authorization decisions. The relying party trust that this wizard creates defines how this Federation Service recognizes the relying party and issues claims to it. You can define issuance transform rules for issuing claims to the relying party or complete the wizard.
	< Previous Start Cancel

Enter data about relying part manually. Press Next>

W	Add Relying Party Trust Wizard
Select Data Source	
Steps Welcome Select Data Source Specify Display Name Choose Profile Configure Cettificate Configure URL Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Select an option that this wizard will use to obtain data about this relying party: Import data about the relying party published online or on a local network. Use this option to import the necessary data and certificates from a relying party organization that publishes its federation metadata address (host name or URL): Example: fs.contoso.com or https://www.contoso.com/app Import data about the relying party from a file Use this option to import the necessary data and certificates from a relying party organization that has exorted its federation metadata to a file. Ensure that this file is from a trusted source. This wizard will not validate the source of the file. Federation metadata file location: Every file data about the relying party manually Use this option to manually input the necessary data about this relying party organization.
	< Previous Next > Cancel

49	Add Kelying Party Trust Wizard
Specify Display Nam	ne
Steps	Enter the display name and any optional notes for this relying party.
Welcome	Display name:
Select Data Source	Kinvey ADFS
Specify Display Name	Notes:
Choose Profile	
Configure Certificate	
Configure URL	
Configure Identifiers	
Configure Multi-factor Authentication Now?	
 Choose Issuance Authorization Rules 	
Ready to Add Trust	
Finish	
	< Previous Next > Cancel

Display name that you'll recognize in the future. Press Next>

Select AD FS profile. Press Next>

\$	Add Relying Party Trust Wizard
Choose Profile	
Choose Profile Steps Welcome Select Data Source Specify Display Name Choose Profile Configure Certificate Configure URL Configure URL Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Ready to Add Trust	 This wizard uses configuration profiles to aid in creating the relying party trust. Choose the appropriate configuration profile for this relying party trust. AD FS profile This profile supports relying parties that are interoperable with new AD FS features, such as security token encryption and the SAML 2.0 protocol. AD FS 1.0 and 1.1 profile This profile supports relying parties that are interoperable with AD FS 1.0 and 1.1.
 Finish 	< Previous Next > Cancel

Leave the certificate settings at their defaults. Press Next>

\$	Add Relying Party Trust Wizard	x
Configure Certificate		
Steps Welcome Select Data Source Specify Display Name Configure Certificate Configure URL Configure Identifiers Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Specify an optional token encryption certificate. The token encryption certificate is used to encrypt the claims that are sent to it. To specify the certificate, click Browse Issuer: Subject: Effective date: Expiration date: Wew Browse	
	< Previous Next > Cancel	

Enable support for the SAML 2.0 WebSSO protocol. Service URL provided by Kinvey Metadata URI. Press Next>

V	Add Relying Party Trust Wizard
Configure URL	
Steps Welcome Select Data Source Specify Display Name Choose Profile Configure Certificate Configure URL Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	AD FS supports the WS-Trust, WS-Federation and SAML 2.0 WebSSO protocols for relying parties. If WS-Federation, SAML, or both are used by the relying party, select the check boxes for them and specify the URLs to use. Support for the WS-Trust protocol is always enabled for a relying party.
	< Previous Next > Cancel

Enter Relying party trust identifier. Press Next>

Steps Relying parties may be identified by one or more unique identifier strings. Specify the identifiers for this relyin party trust. Select Data Source Relying party trust identifier: Specify Display Name Image: Choose Profile Configure Cettificate Relying party trust identifiers: Configure URL Relying party trust identifiers: Configure Identifiers Relying party trust identifiers: Choose Issuance Relying party trust identifiers: Ready to Add Trust Ready to Add Trust	\$	Add Relying Party Trust Wizard	
Steps Relying parties may be identified by one or more unique identifier strings. Specify the identifiers for this relying party trust. Select Data Source Specify Display Name Choose Profile Configure Certificate Configure URL Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish Ready to Add Trust	Configure Identifiers		
Choose Profile Example: https://fs.contoso.com/adfs/services/trust Configure Certificate Relying party trust identifiers: Configure URL Configure Identifiers Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Steps Welcome Select Data Source Specify Display Name	Relying parties may be identified by one or more unique identifier strings. Specify the identifiers for the party trust. Relying party trust identifier:	ni s relying Add
Configure Certificate Configure URL Configure Identifiers Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Choose Profile	Example: https://fs.contoso.com/adfs/services/trust	
Configure Identifiers Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Configure Centricate Configure URL	Helying party trust identifiers: https://auth.kinvey.com/kinvey-mobile-identify-connect	Remove
Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	Configure Identifiers		
	 Configure Multi-factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish 		

Leave the configure multi-factor at their defaults. Press Next>

¢.	Add Relying Party Trust Wizard	X
Steps Welcome Select Data Source	Configure multi-factor authentication settings for this relying party tr there is a match for any of the specified requirements.	ust. Multi-factor authentication is required if
Specify Display Name	Multi-factor Authentication	Global Settings
 Choose Profile Configure Certificate Configure URL Configure Identifiers Configure Multi factor Authentication Now? 	Requirements Users/Groups Not configured Device Not configured Location Not configured	
 Choose Issuance Authorization Rules Ready to Add Trust Finish 	 I do not want to configure multi-factor authentication settings fo Configure multi-factor authentication settings for this relying part You can also configure multi-factor authentication settings for the Authentication Policies node. For more information, see <u>Configure</u> 	or this relying party trust at this time. ty trust. nis relying party trust by navigating to the uring Authentication Policies.
	< Pr	revious Next > Cancel

Select the Permit all users to access this relying party radio button. Press Next>

\$	Add Relying Party Trust Wizard
Choose Issuance Au	thorization Rules
Steps Welcome Select Data Source Specify Display Name Choose Profile Configure Certificate Configure URL Configure Identifiers Configure Identifiers Configure Multi factor Authentication Now?	 Issuance authorization rules determine whether a user is permitted to receive claims for the relying party. Choose one of the following options for the initial behavior of this relying party's issuance authorization rules. Permit all users to access this relying party The issuance authorization rules will be configured to permit all users to access this relying party. The relying party service or application may still deny the user access. Deny all users access to this relying party The issuance authorization rules will be configured to deny all users access to this relying party. You must later add issuance authorization rules to enable any users to access this relying party. You must later add issuance authorization rules for this relying party trust by selecting the relying party trust
 Choose Issuance Authorization Rules Ready to Add Trust Finish 	and clicking Edit Claim Rules in the Actions pane.
	< Previous Next > Cancel

On the final screen use the Close button to exit and open the Claim Rules editor.

\$	Add Relying Party Trust Wizard
Finish	
Steps Welcome Select Data Source Choose Profile Configure Certificate Configure URL Configure Identifiers Configure Multi factor Authentication Now? Choose Issuance Authorization Rules Ready to Add Trust Finish	The relying party trust was successfully added to the AD FS configuration database. You can modify this relying party trust by using the Properties dialog box in the AD FS Management snap-in. ✓ Open the Edit Claim Rules dialog for this relying party trust when the wizard closes
	Close

Click Add Rule... to launch the wizard. Use Send LDAP Attributes as Claims for your Claim rule template, and click Next to proceed.

	Add Transform Claim Rule Wizard
Configure Rule	
Steps Choose Rule Type Configure Claim Rule	You can configure this rule to send the values of LDAP attributes as claims. Select an attribute store from which to extract LDAP attributes. Specify how the attributes will map to the outgoing claim types that will be issued from the rule. Claim rule name: LDAP outgoing Rule template: Send LDAP Attributes as Claims Attribute store: Active Directory
	LDAP Attribute (Select or type to add more) Outgoing Claim Type (Select or type to add more)
	SAM-Account-Name V E-Mail Address
	* V
	< Previous Finish Cancel

Add another Rule, this time selecting Transform an Incoming Claim as the template.

14	Add Transf	orm Claim Rule Wizard			
Configure Rule					
Steps Choose Rule Type Configure Claim Rule	You can configure this rule to also map an incoming claim v outgoing claim type and whet Claim rule name:) map an incoming claim type to an outgoing claim ralue to an outgoing claim value. Specify the incor ther the claim value should be mapped to a new c	type. As an option, you can ning claim type to map to the laim value.		
	Email transform				
	Rule template: Transform an	Incoming Claim			
	Incoming claim type:	E-Mail Address	~		
	Incoming name ID format:	Unspecified	×		
	Outgoing claim type:	Name ID 🗸			
	Outgoing name ID format:	Email	~		
	 Pass through all claim value Replace an incoming claim 	ues m value with a different outgoing claim value			
	Incoming claim value:				
	Incoming claim value: Outgoing claim value:		Browse		
	Incoming claim value: Outgoing claim value: O Replace incoming e-mail s	suffix claims with a new e-mail suffix	Browse		
	Incoming claim value: Outgoing claim value: O Replace incoming e-mail s New e-mail suffix:	suffix claims with a new e-mail suffix	Browse		

Finally, click **Finish** to create the claim rule. In the Endpoints tab, click on add SAML to add a new endpoint.

Monitoring	Identifiers E	Encryption	Signat	ure Acc	epted Claim
Organization	Endpoints	Proxy End	lpoints	Notes	Advance
opecify the en	dpoints to use fo	r SAML and	WS-Fed	erationPassi	ve protocol
URL				Index	Binding
SAML Ass	sertion Consum	ner Endpoir	nts		
https://a	uth.kinvey.com/	v3/saml/as	sertion	1	POST
https://a	ath kinvey com/	V3/saml/ass	ention	0	Redirect
				U	- Hedreet
				U	- Houriou
<					
<					

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3. Azure SAML integration

Create a new application

Login to Microsoft Azure at <u>https://portal.azure.com</u> and choose Azure Active Directory from the sidebar.



Select App registrations. Then click on the +New application registration button to add a new application.

	rheineygmail (default director	ory) - App registrations
+ New	Overview	+ New application registration
All resources	Quick start	To view and manage your registrations for converged applications, please visit the Microsoft Application Console.
Resource groups		Search by name or AppID My apps
App Services	MANAGE	DISPLAY NAME APPLICATION TYPE APPLICATION ID
Function Apps	Enterprise applications	No results.
SQL databases	Devices	
Azure Cosmos DB	App registrations	
Virtual machines	Application proxy	
Load balancers	Licenses	
Storage accounts	Azure AD Connect	
Virtual networks	🔁 Custom domain names	
Azure Active Directory	Mobility (MDM and MAM)	_
Monitor	Password reset	
Advisor	Company branding	_
	User settings	
Security Center	HI Properties	

Enter a name for the application, select Web app/API as the Application Type, and for Sign-on URL enter https://auth.kinvey.com/.

М	icrosoft Azure	heineygmail (default directory) - App registra	ations > Create
		Create	×
Ŧ	New	* Name O	
	All resources	Enter the name of the applicatio	n
	Resource groups	Application type 0	
~	Ann Convisor	Web app / API	\sim
	App Services	* Sign-on URL 🛛	
\$	Function Apps	Enter the sign-on URL of the app	plication
2	SQL databases		
1	Azure Cosmos DB		
	Virtual machines		
Ŷ	Load balancers		
	Storage accounts		
$\langle \cdots \rangle$	Virtual networks		
•	Azure Active Directory		
-	Manifer		
	Monitor		
•	Advisor		
٢	Security Center		
	d		

Configure App ID URI

Then click on Settings and Properties.



Set App ID URI to https://auth.kinvey.com/kinvey-mobile-identity-connect

≡		Azure Saml Registered app	* ×	Settings	×	Properties 🗖
+	New	🍄 Settings 💉 Manifest 📋 Delete				🔚 Save 🗙 Discard
	Dashboard	Display name Azure Saml	Application ID b3c923fc-cb7c-495e-930f-e3130f7b3c65	GENERAL		* Name 🛛
	All resources	Web app / API	d7d8652e-5e52-4c94-935e-616c670aa032	III Properties	>	Object ID B
۲	Resource groups	Home page https://auth.kinvey.com	Managed application in local directory Azure Saml	📃 Reply URLs	>	d7d8652e-5e52-4c94-935e-616c670aa032
8	App Services		^	2 Owners	>	Application ID 0 b3c923fc-cb7c-495e-930f-e3130f7b3c65
\$	Function Apps			API ACCESS		* App ID UR
8	SQL databases			🔏 Required permissions	>	https://auth.kinvey.com/kinvey-mobile-ident.
2	Azure Cosmos DB			📍 Keys	>	Logo
	Virtual machines			TROUBLESHOOTING + SUPPORT		AS
-	Load balancers			🗙 Troubleshoot	>	
	Storage accounts			New support request	>	Upload new logo 🛛
~>	Virtual networks					Select a file
•	Azure Active Directory					https://auth.kinvey.com
0	Monitor					Logout URL
	Advisor					Privacy URL 🖲
0	Security Center					
	Cost Management + Dilling					Terms of service URL

Configure Reply URLs

Then click on Settings and Reply URLs.



Set Reply URLs to https://auth.kinvey.com/v3/saml/assertion/

	* ×	Settings	×	Reply URLs	
+ New				R Save X Discard	
🔲 Dashboard	olication ID :923fc-cb7c-495e-930f-e3130f7b3c65 🗅	GENERAL		https://auth.kinvey.com/v3/saml/assertion/	
All resources	ject ID 18652e-5e52-4c94-935e-616c670aa032	Properties	>		
📦 Resource groups	naged application in local directory ure Saml	Ξ Reply URLs	>		
Services		Numers	>		
Function Apps		API ACCESS			
👼 SQL databases		🔏 Required permissions	>		
🬌 Azure Cosmos DB		📍 Keys	>		
Virtual machines		TROUBLESHOOTING + SUPPORT			
💠 Load balancers		X Troubleshoot	>		
Storage accounts		New support request	>		
↔ Virtual networks					
Azure Active Directory					
Monitor					
🌩 Advisor					
i Security Center					
More services					

Configure the permissions

Then click on Settings and Required permissions.



Then click on Windows Azure Active Directory.

Microsoft Azure kinvey > Settings > Required permissions			ନ ⊈ି≻_ ଛି ©	(?) rheiney@gmail.com RHEINEYGMAIL (DEFAULT DIR
= * ×	Settings	×	Required permissions	
+ New			🕂 Add 🛛 🔹 Grant Permissions	
All resources cation ID .788-4feb-4b00-b307-b71ff6adc0db	GENERAL		API	APPLICATION PERMI DELEGATED PERMIS
Resource groups t ID 7323-9a89-4687-b769-16d9eb95efa2	Properties	>	Windows Azure Active Directory	0 3
S App Services ged application in local directory	🚝 Reply URLs	>		
🌾 Function Apps	🝰 Owners	>		
SQL databases	API ACCESS			
Azure Cosmos DB	🔏 Required permissions	>		
🧟 Virtual machines	📍 Keys	>		
Icoad balancers	TROUBLESHOOTING + SUPPORT			
Storage accounts	★ Troubleshoot	>		
··· Virtual networks	New support request	>		
Azure Active Directory				
Monitor				
Advisor				
Security Center				
More sealings ps://portal.azure.com/#blade/HubsExtension/Resources/resourceType/Microsoft.Web%2Fsi	tes			

Check Access the directory as the signed-in user, Read all users basic profiles and Sign in and read user profile under Delegated Permissions.

Microsoft Azure kinvey	> Settings > Required permissions > Ena	ble Access		ନ ⊈ି≻_ 🕸 😳 ଡ	rheiney@gmail.com RHEINEYGMAIL (DEFAULT DIR
≡	Required permissions		×	Enable Access Windows Azure Active Directory	
+ New	🕂 Add 🛛 🖛 Grant Permissions			Rave Delete	
All resources				Read and write directory data	Yes
Resource groups	API	APPLICATION PERMI DELEGATED P	ERMIS	Read and write devices	🥺 Yes
🚳 Ann Services	Windows Azure Active Directory	0 3		Read all hidden memberships	📀 Yes
				Manage apps that this app creates or owns	🥝 Yes
Function Apps				Read and write all applications	🥝 Yes
SQL databases				Read and write domains	🥝 Yes
🬌 Azure Cosmos DB					
Virtual machines				DELEGATED PERMISSIONS	THE REQUIRES ADMIN
🚸 Load balancers				Access the directory as the signed-in user	No
Storage accounts				Read directory data	📀 Yes
				Read and write directory data	📀 Yes
Virtual networks				Read and write all groups	🥝 Yes
Azure Active Directory				Read all groups	📀 Yes
Monitor				Read all users' full profiles	🔮 Yes
🗣 Advisor				Read all users' basic profiles	No
Security Center				Sign in and read user profile	No
More services >				Read hidden memberships	😋 Yes

Select App registrations. Then click on the =Endpoints button to display urls for getting metadata.

Microsoft Azure rheiney	gmail (default directory) - App registrations		ىر	D >_ ॐ	(:) (?) meiney@gmail.com RheineyGmail.(deFault dir
	rheineygmail (default director Azure Active Directory	y) - App registrations			* ×
+ New	1 Overview	+ New application registration	Endpoints 🗙 Tro	oubleshoot	
All resources	Quick start	To view and manage your registration	s for converged applica	ations, please visit the Mic	rosoft Application Console.
Resource groups	and the second sec	Search by name or AppID	My apps	\checkmark	
🔇 App Services	MANAGE	DISPLAY NAME		APPLICATION TYPE	APPLICATION ID
Function Apps	g ^R Users and groups	No results.			
📓 SQL databases	Enterprise applications				
Azure Cosmos DB	Devices				
Virtual machines	App registrations				
	Application proxy				
	Azura AD Connect				
Storage accounts	Azure AD connect				
Virtual networks					
Azure Active Directory	Mobility (MDM and MAM)				
Monitor	Password reset				
🔷 Advisor	Company branding				
a Security Center	User settings				
	HI Properties				

Copy FEDERATION METADATA DOCUMENT and paste url into browser window or Postman to view metadata. Also **copy** SAML-P SIGN-ON ENDPOINT this url is used for Provider URI in next section.

When osone Azure memeye	mail (default directory) - App registrations / those	
=	Endpoints ×	
+ New	FEDERATION METADATA DOCUMENT	
🛄 Dashboard	https://login.microsoftonline.com/e740	
All resources	WS-FEDERATION SIGN-ON ENDPOINT	
🗊 Resource groups	https://login.microsoftonline.com/e740	
🔇 App Services	SAML-P SIGN-ON ENDPOINT	
Function Apps	https://login.microsoftonline.com/e740	
👼 SQL databases	SAML-P SIGN-OUT ENDPOINT	
🥒 Azure Cosmos DB	https://login.microsoftonline.com/e740	
Virtual machines	MICROSOFT AZURE AD GRAPH API ENDPOINT	
💠 Load balancers	https://graph.windows.net/e740b2e9-e	
Storage accounts	OAUTH 2.0 TOKEN ENDROINT	
💮 Virtual networks	https://login.microsoftonline.com/e740	
Azure Active Directory		
Monitor	https://login.microsoftonline.com/e740	
🍨 Advisor		
Security Center		
Cost Management + Dilling		
More services		
protocol Support Enumeration * Keybescriptor use="signi * KeyInfo xmlnas"inttp:// * <cosdata * COSData * COSData * COSData * (KeyDescriptor use="signi * KeyEnfo xmlnas"http:// * <kosdcortificate> * <kosdcortificate> * (XSOSCortificate> * (XSOSCortificate> </kosdcortificate> </kosdcortificate> * <kostantbookse> * <kostantbookse> * <kostantbookse> </kostantbookse> </kostantbookse> </kostantbookse> <th><pre>"http://docs.casis-open.org/wsfed/federati mp"> mw.w3.org/2000/09/xmldsig#"> CQUJ7yBxXEM7tBeqcRTMBhh7AxBgkqhkiG9w0BAQsFX ng"> mg"> my.w3.org/2000/09/xmldsig#"> CQBHJvVNxPlo204HYKh+rypDAxBgkqhkiG9w0BAQsFX emlns:wsa="http://www.w3.org/2005/08/addres net/o740b2e9-edad-4444-9ec5-7330f2c3fd12/ > dpoint> mins:wsa="http://www.w3.org/2005/08/addres</pre></th><th>nn/200766"> DALMSewKQYDVQQDEyJhY2NvdW50cy5hY2N1c3Njb250cm9sLndpbmRvd3MubmV0MB4XDTE4MDEwODAwMDAwMFoXDTIwMDEwOTAwMDAwMFowLTErWCKQAI DAJMSEwHwYDVQQDExhsb2dpbi5taWHyb3NvZnRvbmxpbmUudXHwHhcNMTYxHTE2MDgwMDAwWhcNMTgxMTE2MDgwMDAwWjAjMSEwHwYDVQQDExhsb2dpbi sing"></th></cosdata 	<pre>"http://docs.casis-open.org/wsfed/federati mp"> mw.w3.org/2000/09/xmldsig#"> CQUJ7yBxXEM7tBeqcRTMBhh7AxBgkqhkiG9w0BAQsFX ng"> mg"> my.w3.org/2000/09/xmldsig#"> CQBHJvVNxPlo204HYKh+rypDAxBgkqhkiG9w0BAQsFX emlns:wsa="http://www.w3.org/2005/08/addres net/o740b2e9-edad-4444-9ec5-7330f2c3fd12/ > dpoint> mins:wsa="http://www.w3.org/2005/08/addres</pre>	nn/200766"> DALMSewKQYDVQQDEyJhY2NvdW50cy5hY2N1c3Njb250cm9sLndpbmRvd3MubmV0MB4XDTE4MDEwODAwMDAwMFoXDTIwMDEwOTAwMDAwMFowLTErWCKQAI DAJMSEwHwYDVQQDExhsb2dpbi5taWHyb3NvZnRvbmxpbmUudXHwHhcNMTYxHTE2MDgwMDAwWhcNMTgxMTE2MDgwMDAwWjAjMSEwHwYDVQQDExhsb2dpbi sing">
<pre>v<wsa:address> https://login.micros </wsa:address></pre>	oftonline.com/e740b2e9-edad-44d4-9ec5-7330	2c3fd12/wsfed
w <fed:passiverequestorendp< th=""><th>> ndpoint> oint></th><th></th></fed:passiverequestorendp<>	> ndpoint> oint>	
<pre>v<wsa:endpointreference> v<wsa:address> https://login.microspin.</wsa:address></wsa:endpointreference></pre>	mlns:wsa="http://www.w3.org/2005/08/addres	sing"> 201fdl2/wnfed
 <th>> point></th> <th>2.3.112/#5.00</th>	> point>	2.3.112/#5.00
<th>upportEnumeration="urn:oasis:names:tc:SAML</th> <th>2.0:protocol"></th>	upportEnumeration="urn:oasis:names:tc:SAML	2.0:protocol">
<pre>* <keydescriptor http:="" use="sign:
* <KeyInfo xmlns=" v<br="">* <x509data></x509data></keydescriptor></pre>	www.w3.org/2000/09/xmldsig#">	
<pre>v<x509certificate> MIIDBTCCAe2gAwIBAgI </x509certificate></pre>	IQHJ7yHxNEM7tBeqcRTMBhhTANBgkqhkiG9w0BAQsFA	DALMSswKQYDVQQDEyJhY2NvdW50cy5hY2Nlc3Njb250cm9sLndpbmRvd3MubmV0MB4XDTE4NDEwODAwMDAwMEoXDTIwMDEwOTAwMDAwMFowLTErMCKGAI
<pre>v<keydescriptor use="signi:</pre></th><th>ng"></keydescriptor></pre>		

Configure Kinvey

Add Auth Service for SAML redirect.



SAML- Azure AD Saml	Description	Description	
« Return to environment		Ā	
	Provider URI	https://login.microsoftonline.com/e740b2e9-edad-44d4-9ec5-733	
	Scope	ENVIRONMENT Starting the Journey : Development	
	Redirect URI's The URI that is invoked to pass an authorization grant code back to your app.	http://iscalhost:3000 × + ADD REDIRECT URI	
	Certificate Text The X.509 Certificate text provided by the SAML Identity Provider	MIIDBTCCAa2gAwiBAgiOHJ7yHxNEM7iBag2RTMBihTANBg kqhkiG9w0BAGsFADAiMSswKQYDVQQDEyJhY2NvdW50cy5 hY2NicSNj9250cm9sLndpbmFvdSMbur0V0MBXDTE4MDEw ODAwMD5vXDTWMDEwOTAwMDbwTowIDAwMFowLTEMCKaA 1UEAxMIYWNj93VudHMuYVNj2XNzY29udHJvbCS3aW5ko3	
	Name ID Format URI The format that Kinvey expects for the auth identifying NameID	um:oasis:names:tc:SAML:11:nameid-format:emailAddress	

Provider URI	The single sign-on service URL provided by the SAML Identity Provider in the endpoint section SAML-P SIGN-ON ENDPOINT
Redirect URI's	The OAuth 2.0 redirect URI to be used by the client app - example http://localhost:3000
Certificate Text	The X.509 Certificate text provided by the SAML Identity Provider from FEDERATION METADATA DOCUMENT located in previous endpoint section. <keydescriptor use="signing"> in metadata.</keydescriptor>
Name ID Format URI	The format that Kinvey expects for the auth identifying NameID urn:oasis:names:tc:SAML:1.1:nameid-format:emailAddress

4. Azure OpenID connect integration

Create a new application

Login to Microsoft Azure at <u>https://portal.azure.com</u> and choose Azure Active Directory from the sidebar.



Select App registrations. Then click on the +New application registration button to add a new application.

	rheineygmail (default director	ory) - App registrations
+ New	Overview	+ New application registration
All resources	Quick start	To view and manage your registrations for converged applications, please visit the Microsoft Application Console.
Resource groups		Search by name or AppID My apps
App Services	MANAGE	DISPLAY NAME APPLICATION TYPE APPLICATION ID
Function Apps	Enterprise applications	No results.
SQL databases	Devices	
Azure Cosmos DB	App registrations	
Virtual machines	Application proxy	
Load balancers	Licenses	
Storage accounts	Azure AD Connect	
Virtual networks	🔁 Custom domain names	
Azure Active Directory	Mobility (MDM and MAM)	_
Monitor	Password reset	
Advisor	Company branding	_
	User settings	
Security Center	HI Properties	

Enter a name for the application, select Web app/API as the Application Type, and for Sign-on URL enter https://auth.kinvey.com/.

М	icrosoft Azure	heineygmail (default directory) - App registra	ations > Create
		Create	×
Ŧ	New	* Name O	
	All resources	Enter the name of the applicatio	n
	Resource groups	Application type 0	
~	Ann Convisor	Web app / API	\sim
	App Services	* Sign-on URL 🛛	
4>	Function Apps	Enter the sign-on URL of the app	plication
2	SQL databases		
1	Azure Cosmos DB		
	Virtual machines		
Ŷ	Load balancers		
	Storage accounts		
$\langle \cdots \rangle$	Virtual networks		
•	Azure Active Directory		
-	Manifer		
	Monitor		
•	Advisor		
٢	Security Center		
	d		

Configure Reply URLs

Then click on Settings and Reply URLs.



Set Reply URLs to https://auth.kinvey.com/oidc/redirect

Microsoft Azure kinvey > Settings > Reply URLs		
= <u>*</u> ×	Settings ×	Reply URLs
+ New		Rave X Discard
All resources Application ID e48c4788-4feb-4b00-b307-b71ff6adc0db	GENERAL	https://auth.kinvey.com/oidc/redirect
Resource groups Object ID 4b3d7323-9a89-4687-b769-16d9eb95efa2	Properties >	
S App Services Managed application in local directory kinvey		
Function Apps	🗳 Owners 📏	
SQL databases	API ACCESS	
🧭 Azure Cosmos DB	A Required permissions	
Virtual machines	Ŷ Keys >	
🚸 Load balancers		
Storage accounts		
🐡 Virtual networks	Iroubleshoot	
Azure Active Directory		
Monitor		
Advisor		
Security Center		
More services >		

Configure the permissions

Then click on Settings and Required permissions.



Then click on Windows Azure Active Directory.

Microsoft Azure kinvey > Settings > Required permissions			ନ ⊈ି≻_ ଛି ©	(?) rheiney@gmail.com RHEINEYGMAIL (DEFAULT DIR
= * ×	Settings	×	Required permissions	
+ New			🕂 Add 🛛 🔹 Grant Permissions	
All resources cation ID .788-4feb-4b00-b307-b71ff6adc0db	GENERAL		API	APPLICATION PERMI DELEGATED PERMIS
Resource groups t ID 7323-9a89-4687-b769-16d9eb95efa2	Properties	>	Windows Azure Active Directory	0 3
S App Services ged application in local directory	🚝 Reply URLs	>		
🌾 Function Apps	🝰 Owners	>		
SQL databases	API ACCESS			
Azure Cosmos DB	🔏 Required permissions	>		
🧟 Virtual machines	📍 Keys	>		
Icoad balancers	TROUBLESHOOTING + SUPPORT			
Storage accounts	★ Troubleshoot	>		
··· Virtual networks	New support request	>		
Azure Active Directory				
Monitor				
Advisor				
Security Center				
More sealings ps://portal.azure.com/#blade/HubsExtension/Resources/resourceType/Microsoft.Web%2Fsi	tes			

Check Access the directory as the signed-in user, Read all users basic profiles and Sign in and read user profile under Delegated Permissions.

Microsoft Azure kinvey	> Settings > Required permissions > Enat	le Access		୍∕ ⊈ ≻_ 🕸 🙄 ⑦	rheiney@gmail.com
≡	Required permissions		×	Enable Access Windows Azure Active Directory	•
+ New	🕂 Add 🛛 🔹 Grant Permissions			R Save 🛍 Delete	
All resources				Read and write directory data	🔮 Yes
Resource groups	API	APPLICATION PERMI DELEGATED PERMIS		Read and write devices	🤣 Yes
🔕 App Services	Windows Azure Active Directory	0 3		Read all hidden memberships	📀 Yes
				Manage apps that this app creates or owns	📀 Yes
Function Apps				Read and write all applications	🔮 Yes
SQL databases				Read and write domains	🥝 Yes
🥭 Azure Cosmos DB					
Virtual machines				DELEGATED PERMISSIONS	T4 REQUIRES ADMIN
Load balancers				 Access the directory as the signed-in user 	No
Storage accounts				Read directory data	📀 Yes
				Read and write directory data	😋 Yes
Virtual networks				Read and write all groups	🔮 Yes
Azure Active Directory				Read all groups	📀 Yes
Monitor				Read all users' full profiles	🥝 Yes
🗣 Advisor				Read all users' basic profiles	O No
Security Center				Sign in and read user profile	No
More services >				Read hidden memberships	🔮 Yes

Create the Client Secret

Next you will need to create a key which will be used as the Client Secret in Provider Configuration. Press Keys from the Settings menu



Set description and expiration. Press Save and the key will be displayed. Make sure to copy the value of this key before leaving this screen.



Configure Kinvey

Add Auth Service for OpenID Connect.

O Apps Service Catalo	9		Learn Support R-
S Starting the Jo Development	Mobile Identity Connect		
Dashboard	Environment	Active	Users of this app can authenticate with:
Live Service IDENTITY	salesforce mic	✓ Make Default 🌣	Google view docs
MIC Mobile Identity Connect	AUTH SERVICE ID: 6e7dd48808f64efaa39c76b5aa94f23f		Facebook view docs
Roles DATA Collections	Azure AD C AUTH SERVICE ID: 55e054cabacd4f90abb610628646862c	✓ Default ✿	Twitter View docs
Files API Console	+ Add Auth Service		View docs Salesforce View docs
* BUSINESS LOGIC			
Collection Hooks U Custom Endpoints () Common Code (V) Scheduled Code			Auth Services allow you to integrate Kinvey with your own authentication provider (e.g. Active Directory, SAML, LDAP, etc.) so users can log in to your app via your existing identity management system.

Add the following fields specified on next page.

New OpenID Connect Service	Provider Configuration	
🏚 Setup	Name • What do you want to call this Service?	Service name
	Description	Description
	Provider URI	e.g. Idap-service.my-company.com
	Scope •	Environment
	Choosing an environment will make this service accessible to only that environment.	App Starting the Journey
	Choosing an organization will make it accessible to any app in that organization.	Environment

This information can be obtained by the send a request using your tenant https://login.microsoftonline.com/{tenant}/.well-known/openid-configuration

For more information see

https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-protocols-openi d-connect-code

Provider URI	The token endpoint provided by the OpenID Connect Provider - token_endpoint in openid-configuration
Redirect URI's	The OAuth 2.0 redirect URI to be used by the client app - example http://localhost:3000
Grant Endpoint	The authorization grant endpoint provided by the OpenID Connect provider - authorization_endpoint in openid-configuration
Client Id	The client id supplied by the OpenID Connect provider - Application ID from Azure settings
Client Secret	The client secret supplied by the OpenID Connect provider - Client Secret saved previously in Azure settings
Issuer Identifier	The issuer identifier supplied by the OpenID Connect provider - issuer in openid-configuration
Scope	Any scope attributes as defined by the OpenID Connect provider. Include multiple scopes by inserting a space between each scope. profile email

5. Google OAuth2 integration

Set up connected app in Google Developer Console

- Go to the Google developer portal at <u>https://console.developers.google.com/</u>
- Optionally, create new project



• Click on "Credentials" on the left, then "Create Credentials" and "OAuth Client ID"

=	Google APIs oauth-kin	/ey-test 🔻	a	2	Ĩ	Ø	0	1
API	API Manager	Credentials						
ب	Dashboard Library	Credentials OAuth consent screen Domain ver	rification					
0+	Credentials	API key Identifies your project us For APIs like Google Tran OAuth client ID Requests user consent s For APIs like Google Cale Service account key Enables server-to-server, For use with Google Clou Help me choose Asks a few questions to Create credentials	ing a simple API key nslate. o your app can acce endar. app-level authentic: Jd APIS. help you decide whi	y to ch ess the ation u	e user's using ro	ota and a data. obot acc	counts.	b .

- If needed, follow the Configure Consent Screen. There are no Kinvey-required settings here, you can fill out the consent screen as you like
- Select "Web Application", and set the Authorized Redirect URI to: <u>https://auth.kinvey.com/oauth2/redirect</u> (or use the appropriate uri for your dedicated instance, e.g. https://com-us1-auth.kinvey.com/oauth2/redirect)



• Now copy down your client ID and secret from the result screen.

OAuth client	
Here is your client ID	
377503800353-qgcskrj9ssb1ckhrodij3kticdgdj8t5.apps.googleuserco	ontent.com
Here is your client secret	
MIbjnZH5EpVoCZCSafRE6six	ū
	OK
	UK

Parameters in Kinvey Console

Now you can fill out the Kinvey MIC configuration screen:

- Type of provider: OAuth2
- Provider URI: <u>https://www.googleapis.com/oauth2/v3/token</u>
- Redirect URI: <u>https://console.kinvey.com</u> (or use your dedicated console url, e.g. <u>https://com-us1-console.kinvey.com</u>). DO NOT add a trailing slash.

- Grant Type: Authorization Code
- Grant Endpoint: <u>https://accounts.google.com/o/oauth2/auth</u>
- Client ID / Client Secret: As per the parameters received in the previous section
- User ID Attribute: leave blank
- User ID Endpoint: leave blank
- Scope: Add the API's that you have enabled for use with this MIC setup, e.g. "https://mail.google.com/ openid profile email". (see next section)
- Include client ID/secret in token request?: No
- Allowed attributes:
 - You must include "id" and "audience" minimally as allowed attributes

Provider Configuration		
Type of Provider Which auth service do you want to use?	OAuth2	~
Provider URI	https://www.googleapis.com/oauth2/v3/token	
Redirect URI's	https://console.kinvey.com	×
code back to your app.	kinveyTest://	×
	+ ADD REDIR	ECT URI
Grant Type The OAuth 2.0 Grant Type to be used.	Authorization Code	~
Grant Endpoint The OAuth 2.0 authorization grant endpoint provided by the OAuth2 provider	https://accounts.google.com/o/oauth2/auth	
Client ID The client id supplied by the OAuth2 provider.	377503800353-qgcskrj9ssb1ckhrodij3kticdgdj8t5.apps.google	euserci
Client Secret The client secret supplied by the OAuth2 provider	MlbjnZH5EpVoCZCSafRE6six	
User ID Attribute The attribute to be used to obtain the userId. If no		
User Id endpoint is supplied, the service will look for the specified attribute in the id_token attribute of the token response. If a User Id endpoint is supplied, a request will be made to that endpoint and the User Id will be obtained from the specified attribute.	adminbob	

User ID Endpoint An endpoint from which to obtain the User Id, found in many OAuth2 implementations.	http://adminbob.example.com	
Scope Any scope attributes as defined by the OAuth2 provider.	https://mail.google.com/ openid profile email https://www.googleapis	
Include client id in token request? This will include the client id in the body of the	No Yes	
OAuth2 token request instead of in the Authorization header.		
Include client secret in token request?		
This will include the client secret in the body of the OAuth2 token request instead of in the Authorization header.	No Yes	
Allowed attributes	id	
	audience	

Enable API's to use this Connected App

- Go back to your main Dashboard by clicking on "Dashboard" in the left tab
- Enable some API's

API	API Manager	Dashboard	+ ENABLE API
\$	Dashboard	Enabled APIs	
Ш	Library	No APIs are enabled	
0-	Credentials		

Each API has a corresponding "scope" that can be found in the documentation. This scope must be added to the "scope" list in the MIC config if you want to use this API in subsequent data access.

As an example, we'll enable the GMail API so that you can see your google mail via Kinvey connectors:

API	API Manager	Library
* #	Dashboard Library Credentials	Go. gmait Ga, gmait Back to popular APIs Name Description Gmail API The Gmail API lets you view and manage Gmail mailbox data like threads, messages, and labels.
API	API Manager	Comail API
÷	Dashboard Library Credentials	About this API Documentation Try this API in APIs Explorer The Gmail API lets you view and manage Gmail mailbox data like threads, messages, and labels.
		Using credentials with this API Accessing user data with Acuth 2.0 You can access user data with this API on the Credentials page, create an OAuth 2.0 client ID. A client ID expects user consents to that your app can access user data. Include that client ID when making your API call to Google. Learn more Vour app User consent User data

Click on the "Try this API in APIs Explorer" to quickly learn about scopes. In the APIs Explorer screen, click on "Authorize requests using OAuth 2.0". You will be presented with an overview of all scopes relevant to the GMail API. Confusingly enough, some of these scopes start with https://. Copy these scopes into your MIC config screen.

Select OAuth 2.0 scopes:					
Scopes are used to grant an application different levels of access to data on behalf of the end user. Each API may declare one or more scopes. <u>Learn</u> <u>more about OAuth 2.0</u>					
Gmail API declares the following scopes. Select which ones you want to grant to APIs Explorer.					
https://mail.google.com/ View and manage your mail					
https://www.googleapis.com/auth/gmail.compose Manage drafts and send emails					
https://www.googleapis.com/auth/gmail.insert Insert mail into your mailbox					
https://www.googleapis.com/auth/gmail.labels Manage mailbox labels					
https://www.googleapis.com/auth/gmail.metadata View your email message metadata such as labels and headers, but not the email body					
https://www.googleapis.com/auth/gmail.modify View and modify but not delete your email					
https://www.googleapis.com/auth/gmail.readonly View your emails messages and settings					
https://www.googleapis.com/auth/gmail.send Send email on your behalf					
https://www.googleapis.com/auth/gmail.settings.basic Manage your basic mail settings					
https://www.googleapis.com/auth/gmail.settings.sharing Manage your sensitive mail settings, including who can manage your mail					
Add additional scopes (optional):					
Authorize Cancel					

Testing the MIC config via the Console

In the API console, you can attempt a MIC login:

- Go to the API console.
- Click on "Show Options"
- Click on "Authentication", and select "Mobile Identity Connect".
 - You can leave the API version to its default (currently v3)
- Click "Login with Mobile Identity Connect"
- You will now be entered into a MIC login flow utilizing your new setup. You should see your "connected app name" near the top, and the scopes you selected are available for review in the consent screen:

Google	ivo@kinvey.com 👻
 Kinvey test would like 	e to:
View and manage your mail	(i)
View your emails messages and settings	s (i)
Know your age range and language	(j)
View your email address	(i)
View your basic profile info	(j)
By clicking Allow, you allow this app and Google to use yo accordance with their respective terms of service and priva change this and other Account Permissions at any time.	ur information in acy policies. You can
	Deny Allow

- Click "Allow". You are now logged in to Kinvey via MIC.
- You can verify the successful login by inspecting your user record in the Users collection:

ivotest oauthtest	:	Users				Colle
Dashboard		Q Filter collections	1 of 1 users		+ Colu	imn + User 💋 C
Dashboard		_id •	_acl	_kmd	_socialIdentity	username
IDENTITY		586be4543260b045382a420.	{"creator":"586be454326	{"lmt":"2017-01-03T17:5	{"kinveyAuth":{"access	"6d69529f-4b4d-4e6a-b99!
Lusers						

• Click on the "_socialIdentity" pop-out to inspect further properties of your login:

1	("kinveyAuth":
	<pre>{{access_token:':'026ade9081a2/278ccbac0f54ce06399650d5bef', refresh_token:':'06f54906055566341b210a5c80566347e72452', "audience':'kid_kbmgHvtle', "id':'104144628994578148602', "client_token':'</pre>
	('isis\':'accounts.google.com\',\'isis\':14834655610\''exp\':1483469410,\'at hash':'\'nabzhByV9orgesc@Mai_4g\',\'aud\':'j77593808355-
	ageskrj9ssbickhodij3kticdgij8t5.apps.gogleusercontent.com\",\"sub\":\"10414462893453148662\",\"email_verified\":true,\"azy\":\"37758388853-
1	ugcskr)pssbitknrouijskittugujsts.apps.googieusertontent.com/ // no/ :/ kinvey.com/ // emaii/ :/ ivogkinvey.com/ // , access_token_secret :muiij
	에는 것은 것은 것이 다 것이야지는 것에서는 것이야지 못한다. 이번 것은 것은 것은 것은 것이 가지 않는 것이 가지 않는 것이 가지 않는 것이 가지 않는 것이 있는 것이 것이다. 것이 가 있는 것이 가

6. Salesforce authentication integration

Set up connected app in Salesforce

- Log in to Salesforce (Classic Mode explained here) as a System Administrator role
- Search for "Apps" in the QuickFind menu. Click "Build -> Create -> Apps"



- Scroll down to "Connected Apps" near the bottom and click "New"
- Fill out Basic Information.
- Click "Enable OAuth Settings". Use these settings:
 - Enable for Device Flow: no
 - Callback URL: <u>https://auth.kinvey.com/oauth2/redirect</u> (or use the appropriate uri for your dedicated instance, e.g. <u>https://com-us1-auth.kinvey.com/oauth2/redirect</u>)
 - Use digital signatures: no
 - Selected OAuth Scopes: minimum required
 - Access and manage your data (api)
 - Access your basic information (id, profile, email, address, phone)
 - Allow access to your unique identified (openid)
 - Require Secret for Webserver: yes
 - Include ID token: yes
 - Include Standard claims: yes
 - Enable Asset tokens: no

Your screen will look like this:

 API (En 	able OAuth Settings)
Enable	OAuth Settings 🕢
Enable for Device Flow	
Callback URL 🥥	https://auth.kinvey.com/oauth2/redirect
Use digital signatures	
Selected	Available OAuth Scopes Selected OAuth Scopes
Scopes	Access and manage your Chatter data (chatter api)
	Access and manage your Eclair data (eclair_api) Access your basic information (id, profile, email, address, phone)
	Access and manage your Wave data (wave_ap) Add Allow access to your unique identifier (openid)
	Full access (full)
	Perform requests on your behalf at any time (refresh_token, offline_access)
	Provide access to oustom applications (visualitore)
	Torde access to your data his the web (web)
	× *
Require Secret for Web Server Flow	
Include ID	×
Token 🌍	Include Standard Claims
	Include Custom Attributes
	Include Custom Permissions
Enable Asset Tokens	

• In the resulting screen, copy the "Consumer Key" and "Consumer Secret"

▼ API (Enable C	DAuth Settings)		
Consumer Key	3MVG9Kl2HHAq33RwE.RGCS1JtHX4AuZnbdLNvSfgbauetuRopF07jByf.X3z4A03LyEukTYFtzR8lCqnMLZB3	Consumer Secret	6149602006980979952
Selected OAuth Scopes	Access your basic information (id, profile, email, address, phone) Access and manage your data (api) Allow access to your unique identifier (openid)	Callback URL	https://auth.kinvey.com/oauth2/redirect
Enable for Device Flow		Require Secret for Web Server Flow	¢.
Token Valid for	0 Hour(s)	Include Custom Attributes	
Include Custom Permissions			

Parameters in Kinvey Console

Now you can fill out the Kinvey MIC configuration screen:

- Type of provider: OAuth2
- Provider URI: <u>https://login.salesforce.com/services/oauth2/token</u>
- Redirect URI: <use your redirect URI that you define in the MIC SDK call in your app here>
- Grant Type: Authorization Code
- Grant Endpoint: https://login.salesforce.com/services/oauth2/authorize
- Client ID / Client Secret: As per the parameters received in the previous section
- User ID Attribute: leave blank

- User ID Endpoint: leave blank
- Scope: Add the API's that you have enabled for use with this MIC setup, e.g. "id api openid". (see next section)
- Include client ID/secret in token request?: YES on both
- Allowed attributes:
 - You must include "id" and "audience" minimally as allowed attributes

Your screen will look like this:

Provider Configuration	
Type of Provider Which auth service do you want to use?	OAuth2 🗸
Provider URI	https://login.salesforce.com/services/oauth2/token
Redirect URI's	http://localhost:8100 ×
The URI that is invoked to pass an authorization grant code back to your app.	+ ADD REDIRECT URI
Grant Type	Authorization Code
Grant Endpoint	
The OAuth 2.0 authorization grant endpoint provided by the OAuth2 provider	https://login.salesforce.com/services/oauth2/authorize
Client ID	3MVG9KI2HHAn33RwF RGCS1JtHX4Au7nhdl NvSfobauetuRopFO7iRvf X3z4AO3LvFukTYFI
The client id supplied by the OAuth2 provider.	
Client Secret	
The client secret supplied by the OAuth2 provider	6149602006980979952
User ID Attribute	
is supplied, the service will look for the specified attribute in the id_token attribute of the token response. If a User Id endpoint is	adminbob
supplied, a request will be made to that endpoint and the User Id will be obtained from the specified attribute.	

User ID Endpoint An endpoint from which to obtain the User Id, found in many OAuth2 implementations.	http://adminbob.example.com	
Scope Any scope attributes as defined by the OAuth2 provider.	id api openid	
Include client id in token request? This will include the client id in the body of the OAuth2 token request instead of in the Authorization header.	No Yes	
Include client secret in token request? This will include the client secret in the body of the OAuth2 token request instead of in the Authorization header.	No Yes	
Allowed attributes	id	×
	audience	×

Forward Salesforce attributes to your datalink

• If you use RAPID, then you can simply enable "Use MIC" in the RAPID definition.

Kinvey needs to be able to connect to Salesforce to use it as a Data Source. Add your connection info below. If you aren't sure what these settings are, try contacting Salesforce administrator.				
Host * Enter the host address	https://login.salesforce.com			
Kinvey also needs to be able to authenticate	with Salesforce to ensure it can access the relevant data.			
Authenticate via	 Mobile Identity Connect (MIC) Service Account Service Account OAuth 			
	Destroy Save			

• If you use a custom datalink, and you need to forward the Salesforce token and instance_url to the backend, then you'll need to map these two attributes for forwarding to the DLC:

0	client	token	to X-Kinvey-AuthToken

0	Instance	url t	o	X-Kinve	v-Salesforce	-eURI
~	THOCUNCC	- ui ± i		V IVENIAC	y Surcsionee	CONC

Data Link Header Mappings	client_token	X-Kinvey-AuthToken
	instance_url	X-Kinvey-Salesforce-eURL

Testing the MIC config via the Console

In the API console, you can attempt a MIC login:

- Go to the API console.
- Click on "Show Options"
- Click on "Authentication", and select "Mobile Identity Connect".
 - You can leave the API version to its default (currently v3)
- Click "Login with Mobile Identity Connect"
- You will now be entered into a MIC login flow utilizing your new setup. You should see your "connected app name" near the top (in this case just "test"), and the scopes you selected are available for review in the consent screen:

ဳ Login Salesforce - Google Chrome 🦳 🗌 🗙	Allow Access? Salesforce - Google Chrome
▲ Secure https://login.salesforce.com/?ec=302&startURL=%2Fsetu	Secure https://kinveydemo-dev-ed.my.salesforce.com/setup/secur/
salesforce	salesforce
Username	Allow Access?
ivo@kinvey.com.demo	test is asking to:
Password	Access your basic information
	Allow access to your unique identifier Access and manage your data
Log In	Do you want to allow access for ivo@kinvey.com.demo? (Not you?)
Remember me	Deny Allow
Forgot Your Password? Use Custom Domain	To revoke access at any time, go to your personal settings.

- Click "Allow". You are now logged in to Kinvey via MIC.
- You can verify the successful login by inspecting your user record in the Users collection:



1.5	
	2 "kinveyAuth": {
	access_token": "678cb5e287ae1c0c39dd05af087ab6e2247a5b61",
	4 "refresh_token": "6b717f1bc70a3af0507a2b46767f24474ecb8253",
	id": "https://login.salesforce.com/id/00D61000000I0xjEAG/00561000002L5qxAAC",
	audience": "kid_B1VsiQFT1",
	7 "client_token": "
	{\"access_token\":\"00D61000000I0xj!ASAAQIBsW0bfovk5_eaM_618Zn9DshsdMu0.FBcFkjtUHfiISixHARSdz0.5CpatVnjds_tz7eNGaMiShz0P1fLZALN
	openid id api\",\"id_token\":{\"at_hash\":\"ad7etdSUTPL5J-
	PHb5LGOg\",\"sub\":\"https://login.salesforce.com/id/00D61000000I0xjEAG/00561000002L5qxAAC\",\"zoneinfo\":\"America/El_Salvador\
	region=null, country=null, postal_code=null}\",\"profile\":\"https://kinveydemo-dev-
	ed.my.salesforce.com/00561000002L5qxAAC\",\"iss\":\"https://login.salesforce.com\",\"preferred_username\":\"ivo@kinvey.com.demo\
	dev-edc.na34.content.force.com/profilephoto/005/F\",\"custom_attributes\":{\"ivoinstanceurl\":\"https://kinveydemo-dev-
	ed.my.salesforce.com/services/Soap/c/38.0/00D61000000I0xjivo@kinvey.com.demo\"},\"aud\":\"3MVG9KI2HHAq33RwE.RGCS1JtHc.12XN9j8iV;
	16:40:12 GMT 2017\",\"nickname\":\"ivo\",\"name\":\"Ivo
] Janssen\",\"phone_number\":null,\"exp\":1491853335,\"iat\":1491853215,\"family_name\":\"Janssen\",\"email\":\"ivo@kinvey.com\"},
	ed.my.salesforce.com\",\"id\":\"https://login.salesforce.com/id/00D61000000I0xjEAG/00561000002L5qxAAC\",\"token_type\":\"Bearer\
	access_token_secret": null
	역 문화 이렇게 하는 것 같은 것 같

7. Ping integration (NOT WORKING CURRENTLY!)

Set up connected app in Google Developer Console

- Go to the Ping admin portal at https://admin.pingone.com
- Click on Applications in the top navbar and select "Add Application", and click on • "Search Application Catalog"



- Click "Setup"
- <NEED MORE INFO HERE>

Parameters in Kinvey Console

Now you can fill out the Kinvey MIC configuration screen. From the PingOne details screen for your newly created application, download the "Signing Certificate" and the "SAML Metadata".

►

Open both in a text editor.

- Type of provider: SAML-Redirect
- Provider URI: Use "*SingleSignOnService*" from the metadata. It looks like this: <u>https://sso.connect.pingidentity.com/sso/idp/SSO.saml2?idpid=abc123-a...</u>
- Redirect URI: <u>https://console.kinvey.com</u> (or use your dedicated console url, e.g. <u>https://com-us1-console.kinvey.com</u>). DO NOT add a trailing slash.
- Logout URI: Use "https://sso.connect.pingidentity.com/sso/SLO.samI2"
- Certificate text: Copy paste text from the Signing Certificate (including the "----" header and footer) into the texbox in the Kinvey console
- Name ID Format URI: Use
 "urn:oasis:names:tc:SAML:1.1:nameid-format:emailAddress"
- Allowed attributes:
 - You must include "id" and "audience" minimally as allowed attributes

In your app

• Make sure to leave the MICApiVersion set to v1 (which is the default for most SDK's, but you must specifically set it to v1 in the Kinvey Console)

Testing the MIC config via the Console

In the API console, you can attempt a MIC login:

- Go to the API console.
- Click on "Show Options"
- Click on "Authentication", and select "Mobile Identity Connect".
 - What is the MIC API versions?
- Click "Login with Mobile Identity Connect"
- You will now be entered into a MIC login flow utilizing your new setup. You should see your "connected app name" near the top, and the scopes you selected are available for review in the consent screen:

(screenshot needed)

- Click "Allow". You are now logged in to Kinvey via MIC.
- You can verify the successful login by inspecting your user record in the Users collection:

(screenshot needed)

• Click on the "_socialIdentity" popout to inspect further properiets of your login: (screenshot needed)