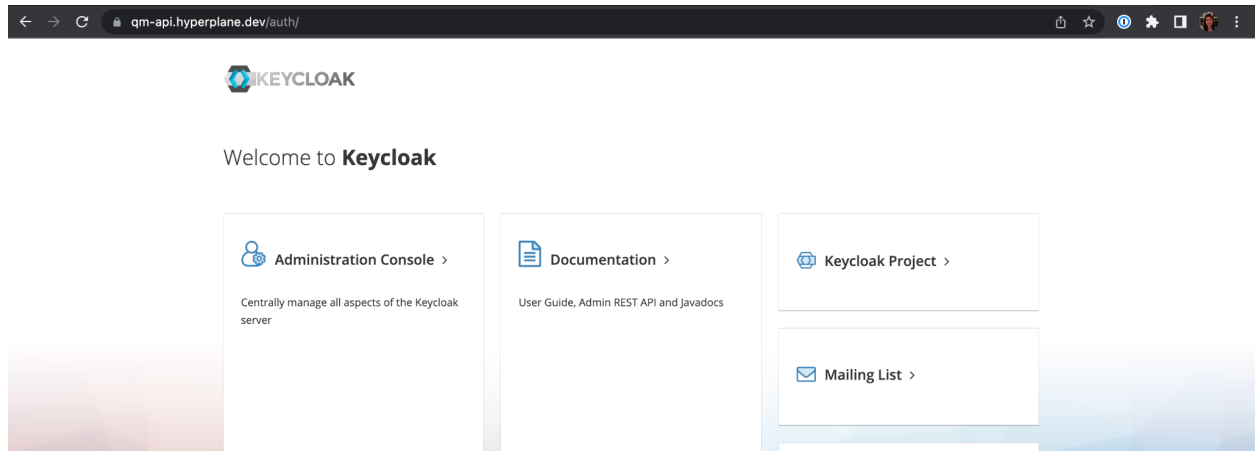


# Shakudo cluster configuration guide

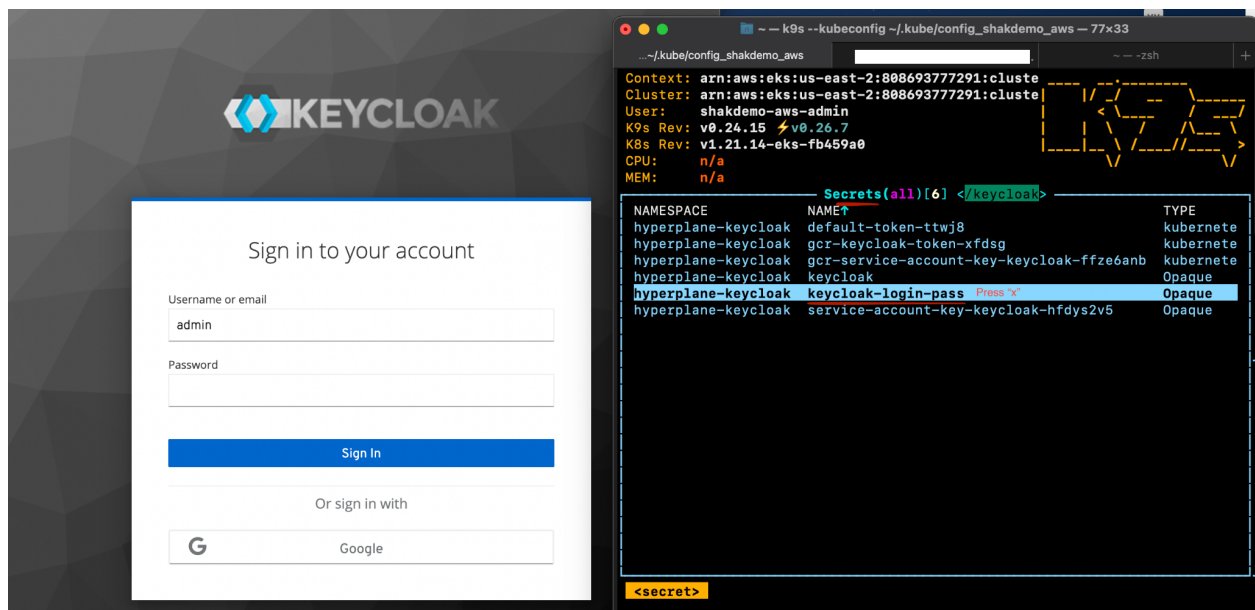
## Keycloak configuration

To configure your keycloak, first visit your keycloak manager (e.g. [replicant-aii.hyperplane.dev/auth/](http://replicant-aii.hyperplane.dev/auth/))



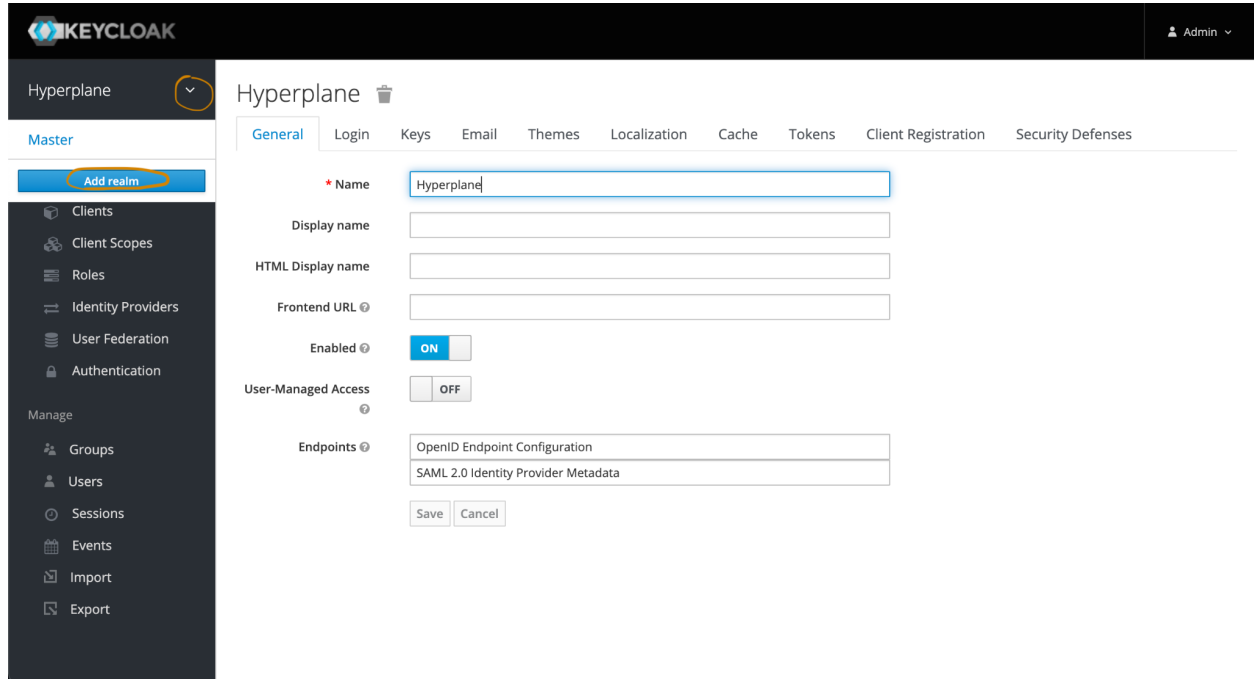
Click on “Administration Console”

You will need to log in with username “admin”, and fill in the password with the contents of the “keycloak-login-pass” k8s **secret** . Press “x” on the secret to get the decoded password.



## Realm

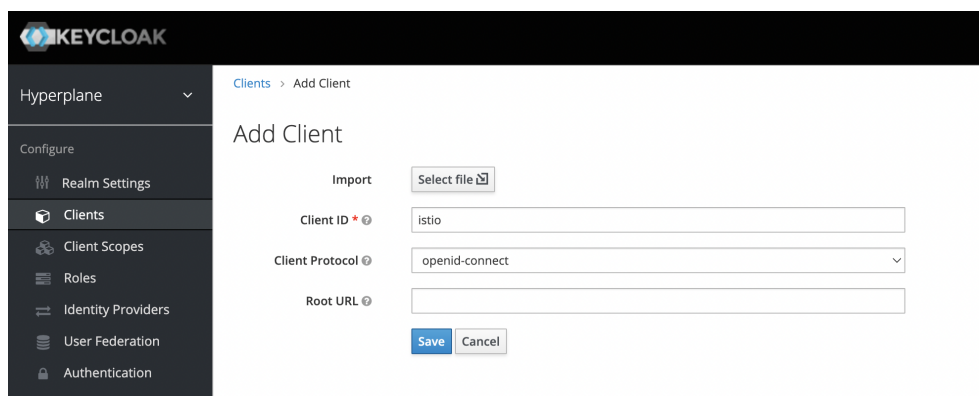
Once you are logged into keycloak, you will need to click the top left arrow to add a new realm. Fill in the *Name* field with “Hyperplane”.



The screenshot shows the Keycloak Admin Console interface. On the left sidebar, the 'Add realm' button is highlighted with a yellow circle. The main content area shows the 'Hyperplane' realm configuration page. The 'Name' field is filled with 'Hyperplane'. Other fields like 'Display name', 'HTML Display name', and 'Frontend URL' are empty. The 'Enabled' toggle is set to 'ON'. The 'User-Managed Access' toggle is set to 'OFF'. The 'Endpoints' section shows 'OpenID Endpoint Configuration' and 'SAML 2.0 Identity Provider Metadata'. At the bottom, there are 'Save' and 'Cancel' buttons.

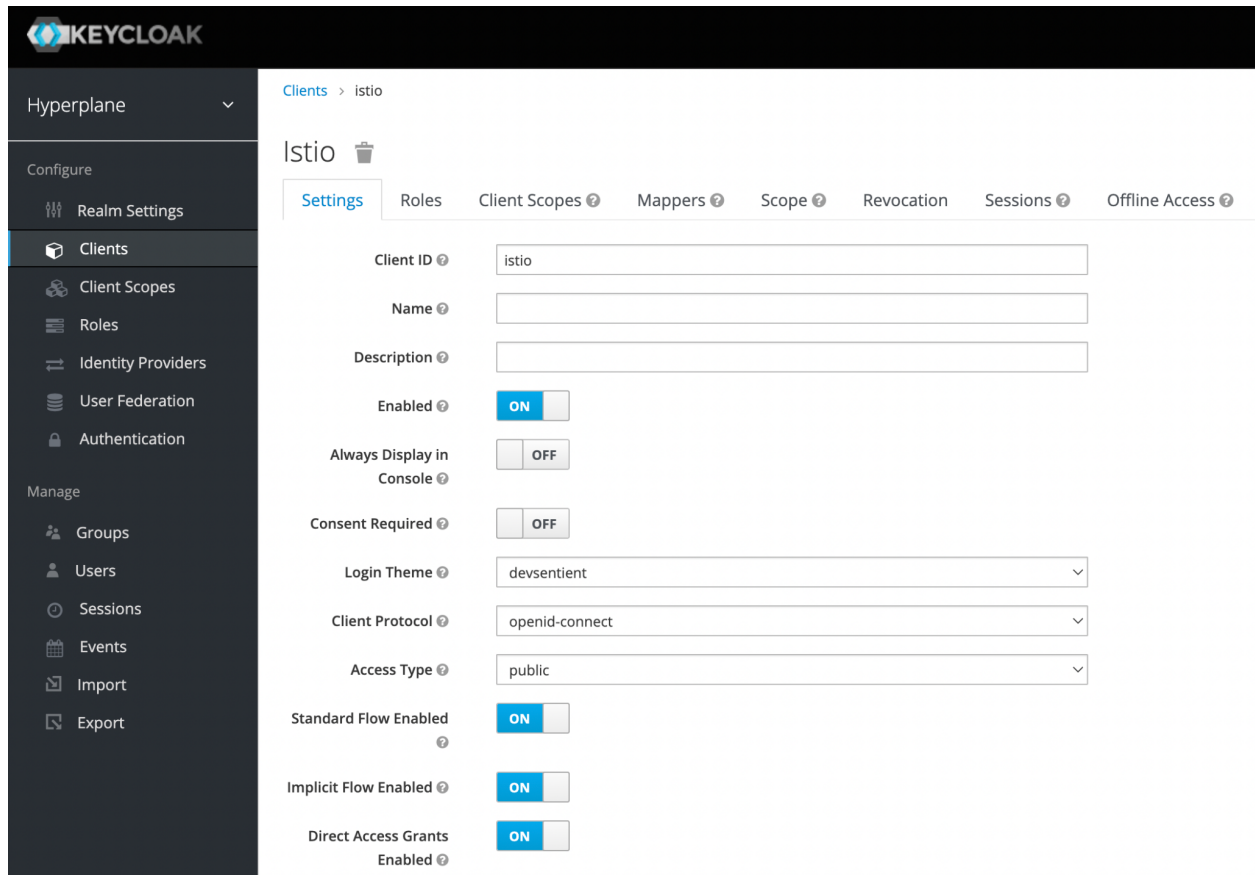
## Client

Next, you will need to configure a Client. Click into the *Clients* tab on keycloak and click *Create*. Fill in the Client ID field with “istio” and leave the rest as is.



The screenshot shows the 'Add Client' form in the Keycloak Admin Console. The 'Clients' tab is selected in the left sidebar. The form has fields for 'Import' (with a 'Select file' button), 'Client ID' (filled with 'istio'), 'Client Protocol' (set to 'openid-connect'), and 'Root URL' (empty). At the bottom, there are 'Save' and 'Cancel' buttons.

Next, go back to the *Clients* tab. Click on the “istio” Client id link. You will see a form like the below. Please fill in the fields so they match the following:

A screenshot of the Keycloak Admin Console. The left sidebar shows the navigation menu with 'Hyperplane' at the top, followed by 'Configure' (Realm Settings, Clients, Client Scopes, Roles, Identity Providers, User Federation, Authentication) and 'Manage' (Groups, Users, Sessions, Events, Import, Export). The main content area is titled 'Clients > Istio' and shows the 'Settings' tab for the 'Istio' client. The settings include: Client ID (istio), Name (empty), Description (empty), Enabled (ON), Always Display in Console (OFF), Consent Required (OFF), Login Theme (devscentient), Client Protocol (openid-connect), Access Type (public), Standard Flow Enabled (ON), Implicit Flow Enabled (ON), and Direct Access Grants Enabled (ON).

KEYCLOAK

Hyperplane

Configure

- Realm Settings
- Clients
- Client Scopes
- Roles
- Identity Providers
- User Federation
- Authentication

Manage

- Groups
- Users
- Sessions
- Events
- Import
- Export

Clients > Istio

Istio

Settings Roles Client Scopes Mappers Scope Revocation Sessions Offline Access

Client ID istio

Name

Description

Enabled ON

Always Display in Console OFF

Consent Required OFF

Login Theme devscentient

Client Protocol openid-connect

Access Type public

Standard Flow Enabled ON

Implicit Flow Enabled ON

Direct Access Grants Enabled ON

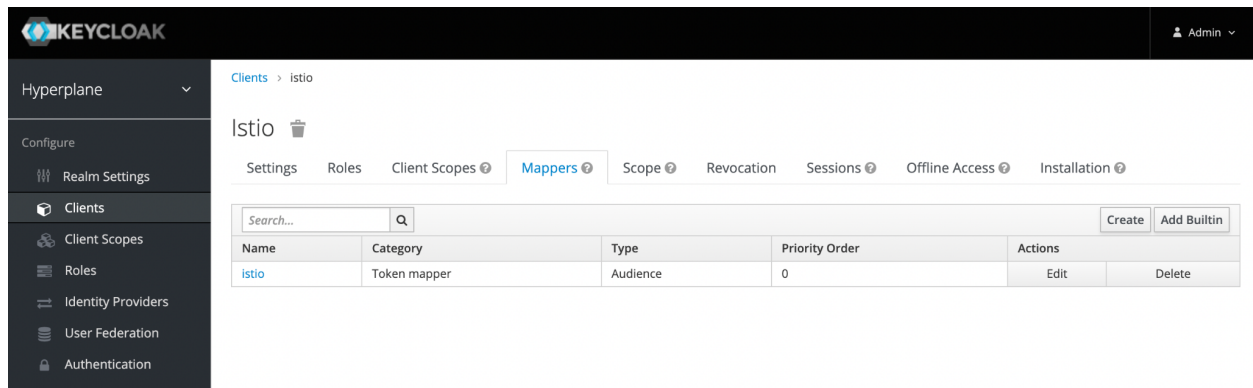
In the *Valid Redirect URIs* field, please create a record for each of the following:

- <https://grafana.replicant-ai.hyperplane.dev/>
- <https://grafana.replicant-ai.hyperplane.dev/>\*
- [https://grafana.replicant-ai.hyperplane.dev](https://grafana.replicant-ai.hyperplane.dev/)
- <https://replicant-ai.hyperplane.dev/>
- <https://replicant-ai.hyperplane.dev/>\*
- [https://replicant-ai.hyperplane.dev](https://replicant-ai.hyperplane.dev/)

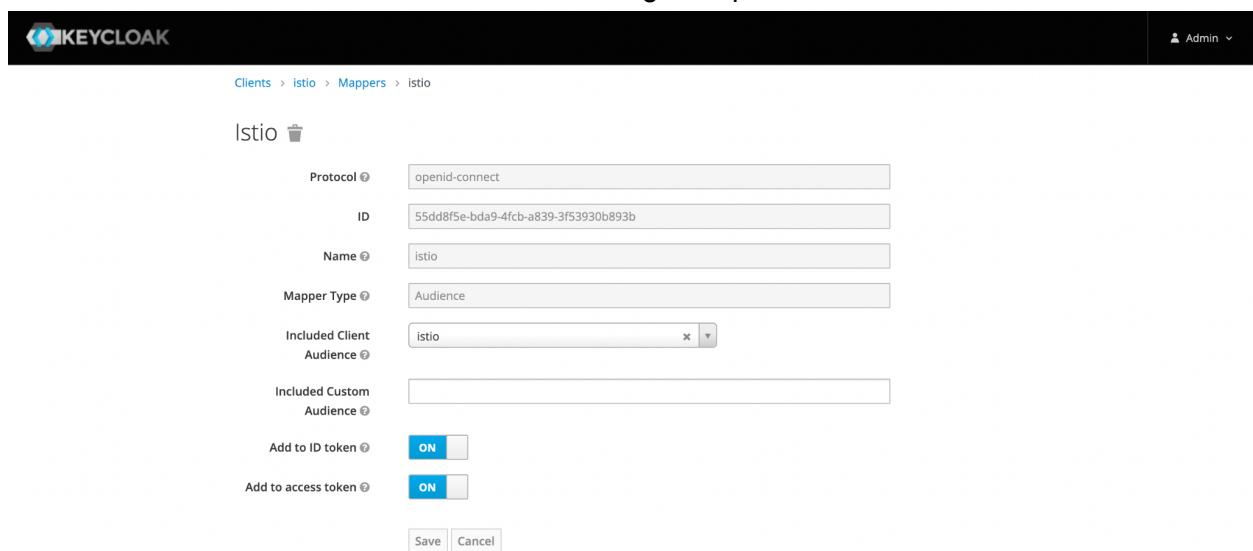
In the *Web Origins* field, add “\*”.

Press **Save**.

Next, you will need to go to the *Mappers* tab within the “istio” client. Click on the *Create* button.



Fill in the form with contents to match the following, and press *Save*.



Your istio client should now be set up! We will configure SSO next.

## **SSO with IDP**

Return to the keycloak home page (e.g. replicant-ai.hyperplane.dev/auth/). Go to the *Identity Providers* tab and click the *Add Provider...* dropdown on the right. Choose “Google” and fill in the form to match the image below:

Keycloak Admin Console - Clients configuration page.

Fields and values:

- Redirect URI: `https://shakdemo2.hyperplane.dev/auth/realm/Hyperplane/broker/google/endpoint`
- Client ID: (empty)
- Client Secret: (masked)
- Hosted Domain: (placeholder: `replace this with your quantummetric.com`)
- Use userip Param: OFF
- Request refresh token: OFF
- Default Scopes: (empty)
- Store Tokens: OFF
- Stored Tokens Readable: OFF
- Enabled: ON
- Accepts prompt=none forward from client: OFF
- Disable User Info: OFF
- Trust Email: OFF
- Account Linking Only: OFF
- Hide on Login Page: OFF
- GUI order: (empty)
- First Login Flow: first broker login
- Post Login Flow: (empty)
- Sync Mode: import

Buttons: Save, Cancel

For the Client ID and Client Secret fields, please contact Shakudo team

You should now be able to access your Shakudo dashboard (e.g. <https://replicant-ai.hyperplane.dev>) and sign in with your Google credentials. The cluster admin will have to manually approve each user on keycloak due to the *Trust Email* in the Google IDP settings turned off.

## Shakudo application creation

To create an application, start by visiting your GraphQL playground (e.g. <https://replicant-ai.hyperplane.dev/graphql>)

In the Playground, paste and run the following mutations to get the graphql and grafana icons on your dashboard:

```
mutation createGrafana {
  createPlatformApp(data: {
    envvarIncludeKey: "INCLUDE_GRAFANA",
    appUrl: "https://grafana.replicant-ai.hyperplane.dev/",
    name: "Grafana Dashboard",
    tooltipDescription: "Grafana Dashboard",
    imageUrl:
"https://seeklogo.com/images/G/grafana-logo-15BA0AFA8A-seeklogo.com.png",
    imageBackgroundColor: "#000000"
  }) {
    id
  }
}

mutation createGraphQL {
  createPlatformApp(data: {
    envvarIncludeKey: "INCLUDE_GRAPHQL",
    appUrl: "/graphql",
    name: "GraphQL",
    tooltipDescription: "GraphQL API endpoint",
    imageUrl:
"https://upload.wikimedia.org/wikipedia/commons/1/17/GraphQL_Logo.svg",
    imageBackgroundColor: "#000000"
  }) {
    id
  }
}
```