

Add This Feature Before Marketing Your B2B App

Wifi: Alphabet-Guest

Install Node v18+

git clone -b **scim-workshop-start**

<https://github.com/oktadev/okta-enterprise-ready-workshops>

Hello!

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bit.ly/scim-workshop-slides

Agenda

- What problem we're trying to solve
- About SCIM
- Add SCIM support in a sample app
- Connect with Okta
- Learn more

You will have parts where you follow instructions from a separate sheet of paper

Agenda

- What problem we're trying to solve
- About SCIM
- Add SCIM support utilizing Okta in a sample app
- Learn more

You will follow workshop instructions from a separate sheet of paper



Work on the written instruction
section matching the slide section

I have this great idea for a B2B app!

Does it have the features big customers
want?

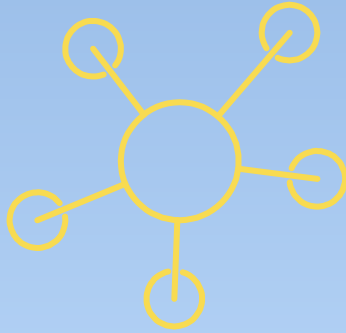
User management overhead

Enterprise companies have many employees.

Syncing them into a B2B app is expensive.



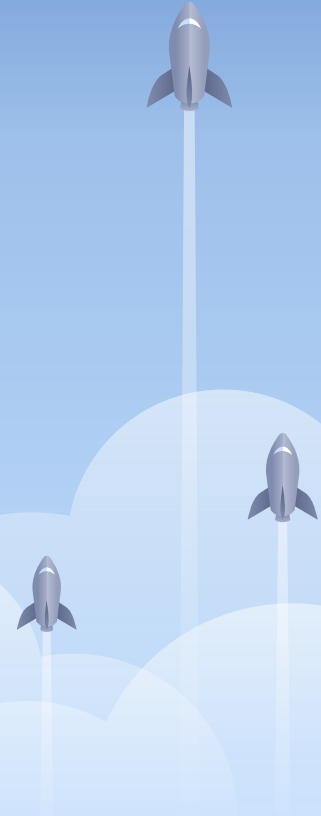
Enterprise customers want



Centralized

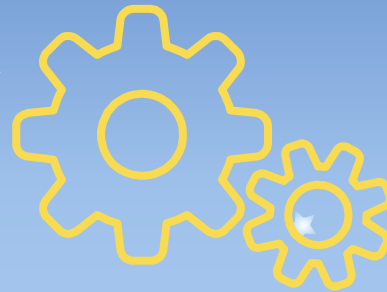
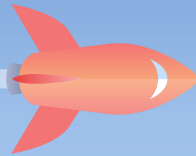


Updated



How do we address this need?





We automate it

Automatically synchronize user across domains using an open standard supported by reputable user and identity software

Identity Providers

Centralizes users

Manage users in a central place

Conforms to standards

Many Identity Providers support standard mechanisms for authentication, identity, and user management

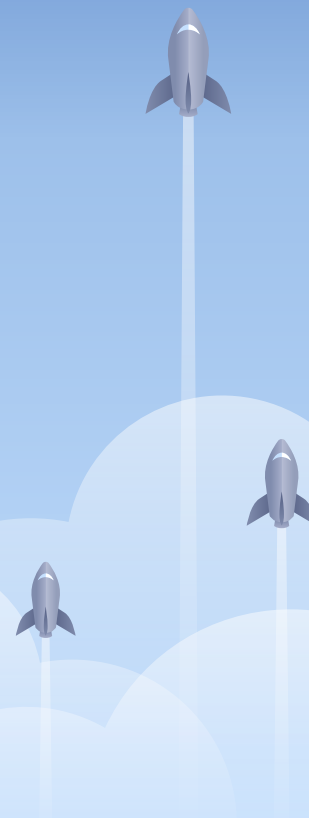
Used by large organizations

Your app should connect with Identity Providers to sell to enterprise customers



An open protocol to manage identities

- System for Cross-domain Identity Management (SCIM)
- Open standard by IETF
- Reduces cost and complexity of user lifecycle management



How SCIM works

Any SCIM compliant
Identity Provider
(IdP, SCIM client)



SCIM client request



SCIM server response



SCIM server for
your app



SCIM server for
other apps
supporting the
protocol

Restful API endpoints

- GET, POST, PUT, PATCH, DELETE
 - ▷ my-api/scim/v2/users
- Standard schema representing users

3.

Get going with sample project

Get the Todo app going locally

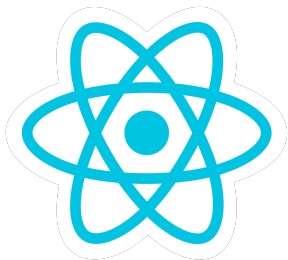


Let's check it out!

A Todo app



Sample Todo app



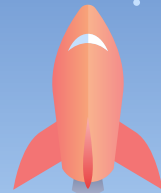
Express



SQLite



Prisma



Set up application

Follow instructions on the sheet to download the project, install dependencies, seed the database, and run the API. The GitHub branch is `scim-workshop-start`.

4.

Sample app overview

Existing implementation of note



prisma/schema.prisma

```
model User {  
  id      Int      @id @default(autoincrement())  
  email    String  
  password String?  
  name     String  
  Todo     Todo[]  
  org      Org?     @relation(fields: [orgId], references: [id])  
  orgId    Int?  
  externalId String?  
  active   Boolean?  
  @@unique([orgId, externalId])  
}
```

prisma/schema.prisma

```
model Org {  
  id      Int      @id @default(autoincrement())  
  domain  String    @unique  
  issuer   String    @default("")  
  authorization_endpoint String @default("")  
  token_endpoint String @default("")  
  userinfo_endpoint String @default("")  
  client_id String    @default("")  
  client_secret String @default("")  
  apikey   String  
  Todo     Todo[]  
  User     User[]  
}
```

prisma/seed_script.ts

```
async function main() {  
  const org = await prisma.org.create({  
    data: {  
      domain: 'portal.example',  
      apikey: '131313'  
    }  
  });  
  
  // remaining implementation  
}
```

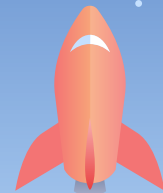
apps/api/src/main.ts

```
// authenticate HTTP requests using Bearer tokens
import passportBearer from 'passport-http-bearer';

// body-parser is required to accept the content-type (application/scim+json)
import bodyParser from 'body-parser';

// log http requests
import morgan from 'morgan';

// all SCIM routes defined in scim.ts
import { scimRoute } from './scim';
```



Look at SCIM routes

Inspect `apps/api/src/main.ts`. Most user management endpoints are there, but it is missing the code to support POST users

5.

Connect with an Identity Provider

Set up a free Okta Developer account and connect the Todo app to Okta

Identity Providers

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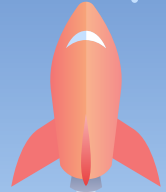
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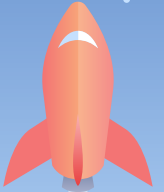
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Connect with Okta

Follow the written instructions to connect with Okta,
an Identity Provider that supports SCIM



Time to code!

Follow the written instructions to run your app, connect with Okta, and add the SCIM endpoint to create users

Connect with Okta SCIM server configuration

SCIM

SCIM 2.0 Test App (Header Auth)

Active

[View Logs](#) [Monitor Imports](#)

i

Once you have a working SCIM integration, submit it for Okta review to use in production and to publish in the OAN.

[Submit your app for review](#)

General

Sign On

Provisioning

Import

Assignments

Push Groups

Settings

To App

To Okta

Integration

Integration

[Edit](#)

☒ Enable API integration

Enter your SCIM 2.0 Test App (Header Auth) credentials to enable user import and provisioning features.

[Test API Credentials](#)

Base URL

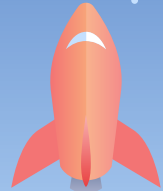
https://cold-words-unite.loca.lt/scim/v2

API Token

6.

Code POST endpoint

Implement the POST endpoint for your
SCIM server



Implement POST

Follow written instructions to add code to the existing POST endpoint. Test the endpoint by adding a user in Okta.

Syncing achieved



Enterprise-level features

Learn more

Next steps with SCIM, additional resources
and links

Learn more



**Step through
on-demand
workshops**



Reach out at @AlisaDuncan. Connect with us
at @OktaDev on YouTube or Twitter. Check out
developer.okta.com