# Introduction

Task 1 is to deploy WordPress with SSO & SAML on any platform and Configure the Word press with SSO through Okta.

For this task I used AWS as the platform to deploy the WordPress site.

## Procedure and Choices

### WordPress deployment & SAML SSO config

* To deploy the WordPress site to AWS I have used Terraform scripts. The reasons are,
  + I can define desired AWS resources, such as EC2 instances, VPCs, security groups in an easy way.
  + It is easy to deploy and destroy the AWS resources I created.
* Using Terraform deployed required VPC, security groups instances and added additional configuration to install and configure WordPress instance including add SSO/SAML plugins in [user\_data.tpl](https://github.com/titan213/Tests/blob/main/Task1/user_data.tpl) file. The reason behind this is to its easy to automate this configuration.
* Added wp plugin members for role-based access configuration.
* Once the instance creation is complete. Added another script execution to SAML integration in WP with okta using metadata file.
* Also added create a login page using PHP which integrates with okta for login in the [saml-conf.sh](https://github.com/titan213/Tests/blob/main/Task1/saml-conf.sh) file.

### Okta integration

* For Okta integration logged into developer account using Gmail and had to create manual SAML integration to get the metadata file required for integration.
* Created API token to use with terraform integration.
* Created a Terraform [script](https://github.com/titan213/Tests/blob/main/Task1/okta.tf) to create the 2 Admin users and 3 normal users in and assign the role mappings.
  + This method is ideal if you have large number of user creation this would be the best solution.

### Result:

I was able to successfully deploy the WordPress site with the configuration but could not able to successfully add rule based setup to wp instance.

### Problems:

* Encountered errors when automating WordPress plugin configuration due to IdP errors.
* Had trouble running saml-conf.sh as remote exec in terraform configuration. Had to move the files into WP EC2 instance and execute.

CodeBase: <https://github.com/titan213/Tests/tree/main/Task1>