“SSO (Single Sign On) with WSO2 Identity Server”

By

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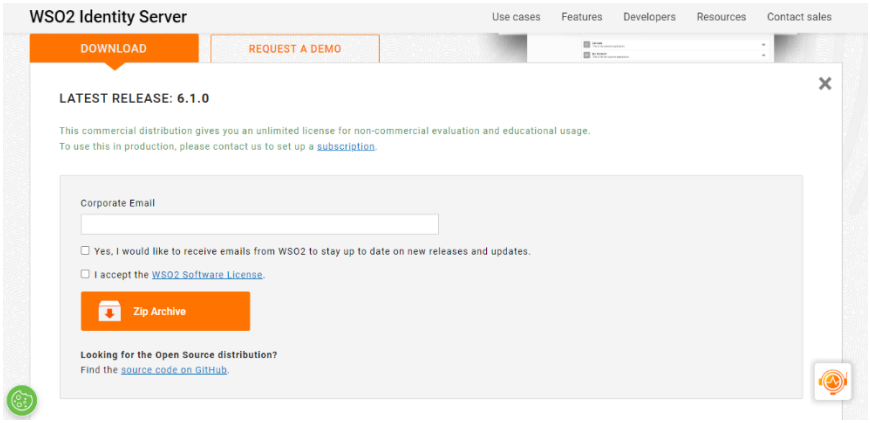
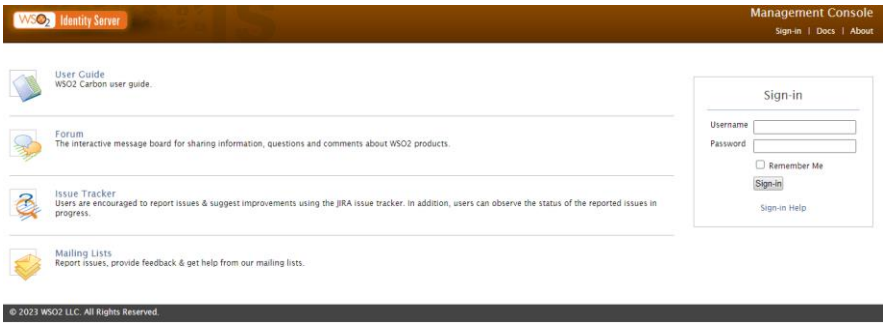
- Required tools and technology:
  - ✓ WSO2 Identity Server.
  - ✓ ELK (Optional)

- System Requirements:
  - ✓ CPU: 4vCPUs(x86_64 Architecture)
  - ✓ Memory: 4 GB RAM
  - ✓ Disk: ~ 10 GB disk space, excluding space allocated for log files and databases.
  - ✓ JDK Version: Oracle JDK 11 or 17

- Configuration:
  - ✓ WSO2 Identity Server:
    1) Download Identity Server from Identity server official site (https://wso2.com/identity-server/)

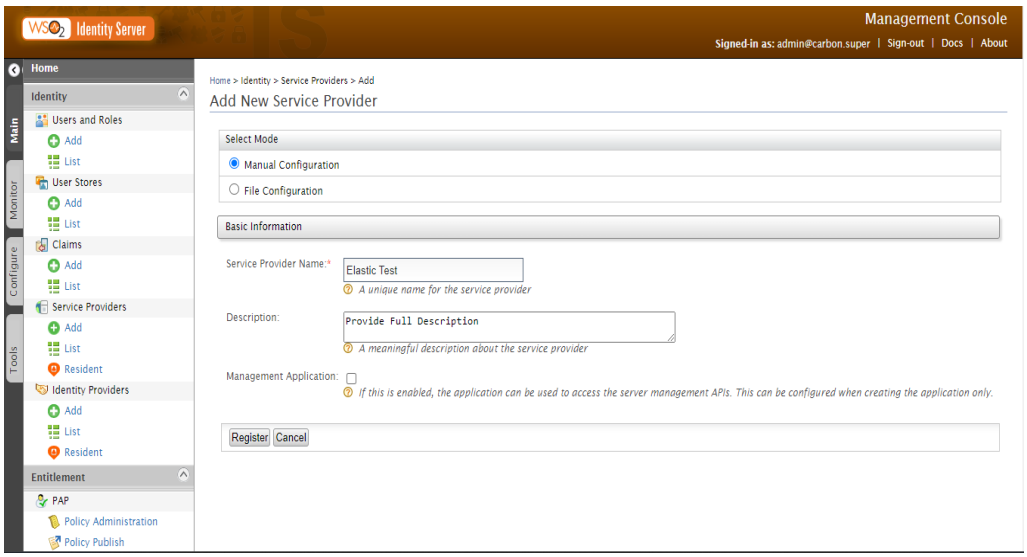


    2) All the Installation related information is given in this link (https://is.docs.wso2.com/en/latest/deploy/get-started/install/)
    3) Download JDK-11 and set System variable named JAVA_HOME = <JDK path> (ex. C:\Program Files\Java\jdk-11.0.16)
    4) Run Identity Server:
       C:\Program Files\WSO2\Identity Server\6.0.0\bin> wso2server.bat (wso2server.sh for Linux)
    5) Go to the browser and enter this url: (user: admin/pass: admin) https://10.11.200.117:9443/carbon

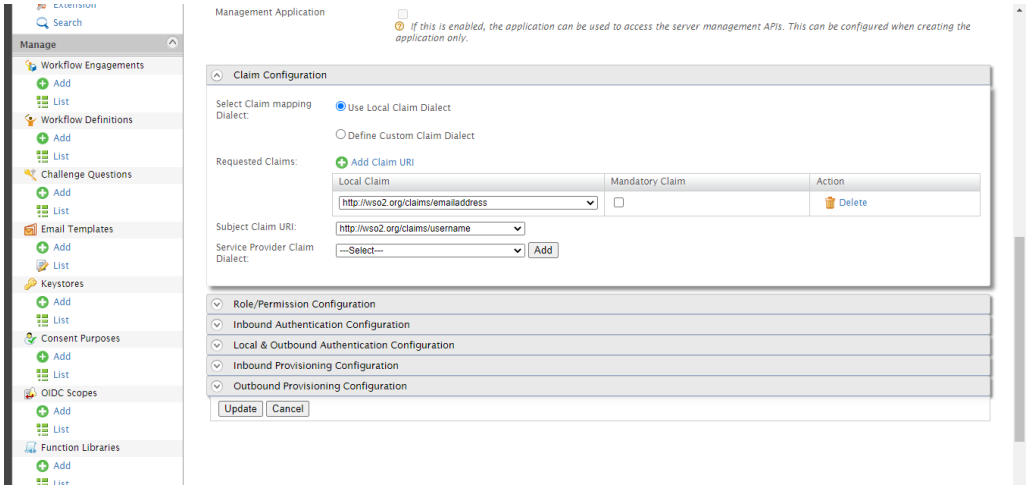


- User and Role Creation: Create a User and Role for identification by selecting User and Roles in Identity Server.
- Create Service Provider: Create a Service Provider by selecting Service Provider Option.

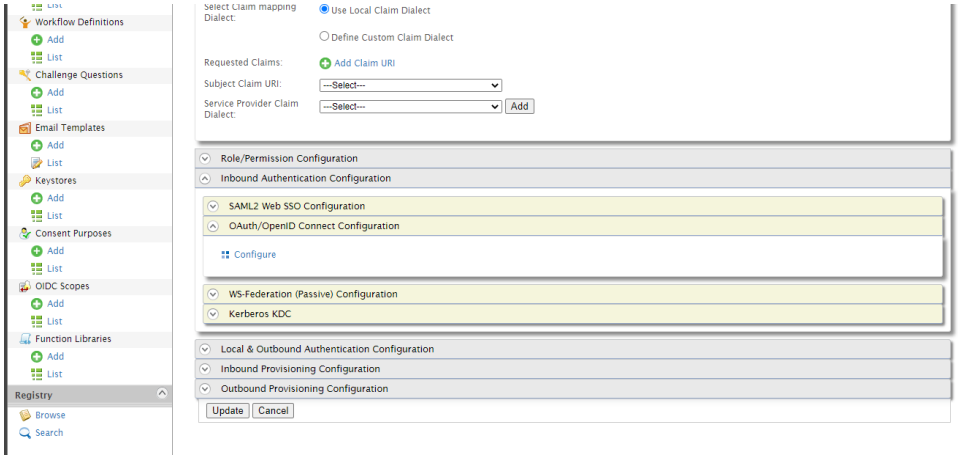
1) Click Add Button and Provide some Information –



2) Click Register Button and Provide Claim Configuration info.



3) Select Inbound Authentication Configuration>OAuth/OpenID Connect Configuration>Configure



4) Now Provide Callback Url*
(regexp=(http://10.11.200.117:5601/api/security/oidc/callback|http://10.11.200.117:5601/security/logged_out)) based on your kibana config.
Everything remain same.

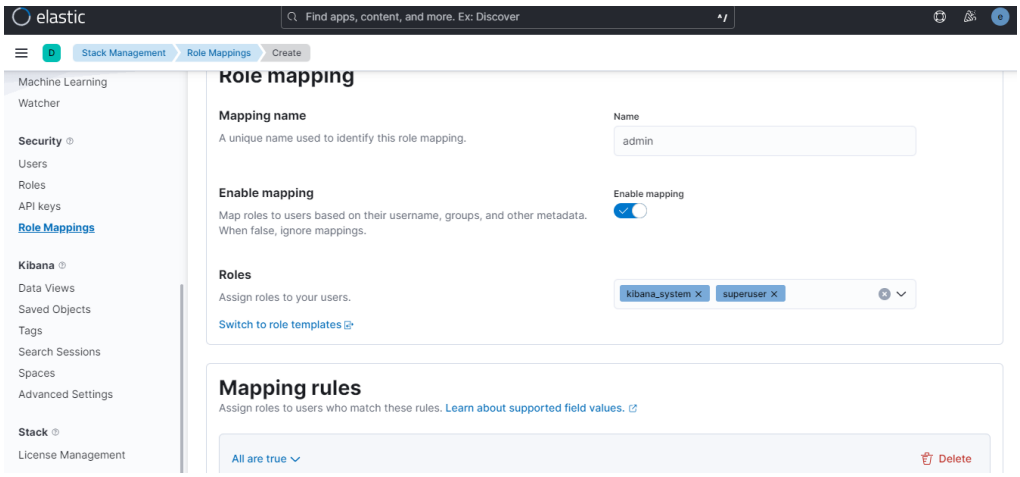
- Elasticsearch Configuration: Open elasticsearch.yml file and do some change add below configuration.

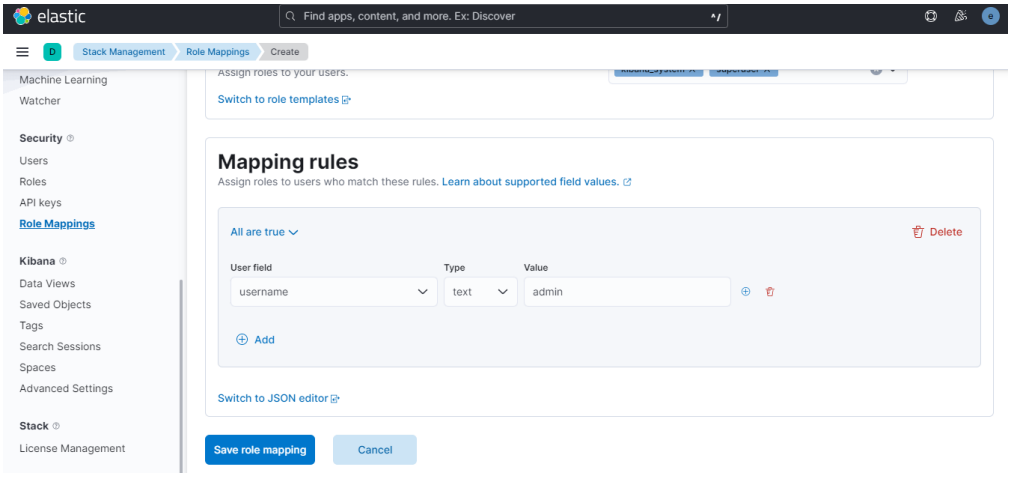
```
xpack.security.authc.token.enabled: true
xpack.security.authc.realms.oidc.oidc1:
  order: 2
  rp.client_id: "b2ttVQkmLbk72X2YvKKR1UbNlkEa"
  rp.response_type: code
  rp.redirect_uri: "http://10.11.200.117:5601/api/security/oidc/callback"
  op.issuer: "https://localhost:9443/oauth2/token"
  op.authorization_endpoint: "https://localhost:9443/oauth2/authorize"
  op.token_endpoint: "https://localhost:9443/oauth2/token"
  op.jwkset_path: "https://localhost:9443/oauth2/jwks"
  op.endsession_endpoint: "https://localhost:9443/oidc/logout"
  op.userinfo_endpoint: "https://localhost:9443/oauth2/userinfo"
  rp.post_logout_redirect_uri: "http://10.11.200.117:5601/security/logged_out"
  #ssl.certificate_authorities: ["oidc/amincer.cer"]
  #rp.requested_scopes: ["profile","email","usergroups"]
  ssl.verification_mode: none
  claims.principal: sub
  claims.groups: groups
  claims.name: name
  claims.mail: email
```

- Kibana Configuration: Open kibana.yml file and do some change add below configuration.

```
xpack.security.authc.providers:
  oidc.oidc1:
    order: 2
    realm: "oidc1"
    description: "Log in with WSO2"
  basic.basic1:
    order: 1
```

- Kibana Role Mapping: Open Kibana Dashboard then go to Stack management > Stack > License Management menu and activate license. After activation you will find a menu (Security > Role Mappings) click on it and complete the setup.





- Wso2 Identity server API Document:

  Url: https://is.docs.wso2.com/en/latest/apis/overview/