



# **SUNBIRD-INSTALLATION**



# Prerequisites

- A system, running Ubuntu server 16.04 LTS.
- Ekstep API keys to access the Ekstep content repository.
- Create a common linux user having root privileges (e.g. deployer) on all the servers.

# How to generate Ekstep API key

- Go to [ga.ekstep.in](https://ga.ekstep.in) and request for API access to the Ekstep admin
- After we get response from the admin to our notified mail, We can Generate new credentials.
- From there we generate key and secret.
- Then go to [JSON Web Tokens - jwt.io](https://jwt.io) to generate API key

HEADER: ALGORITHM & TOKEN TYPE	
<pre>{   "alg": "HS256",   "typ": "JWT" }</pre>	ALGORITHM USED HS256
PAYLOAD: DATA	
<pre>{   "key" : "YOUR GENERATED KEY" }</pre>	YOUR GENERATED KEY
VERIFY SIGNATURE	
<pre>HMACSHA256(   base64UrlEncode(header) + "." +   base64UrlEncode(payload),   YOUR GENERATED SECRET ) <input type="checkbox"/> secret base64 encoded</pre>	



# Creating a common linux User

- Need to connect the servers using ssh.
- Generate a public key in the linux user

```
$ ssh-keygen -t rsa
```

```
$ cd home/ekstep/.ssh
```

```
ekstep@VM_IP:~/ssh$ cat id_rsa.pub >> ~/.ssh/authorized_keys
```



# Install git and clone the project

```
apt-get update -y && apt-get install git -y
```

```
git clone https://github.com/project-sunbird/sunbird-devops.git
```

```
cd sunbird-devops/deploy
```



# Fill up the config file

```
$ vi config
```

```
env: dev # Name of the environment you are deploying.  
implementation_name: ntp # Name of your sunbird implementation.  
ssh_ansible_user: ekstep # Ssh user for accessing all servers, who must be a sudo user  
sudo_passwd: 123 # If user have sudo password, else please skip it  
ansible_private_key_path: /home/ekstep/.ssh/id_rsa
```



# Missing those days ?

Next, Next, Agree, Install





# Installation stages

## 9 stages:

sanity, deps, config, dbs, apis, proxy, keycloak, badger, core

Run each step with command:

```
$ ./sunbird_install.sh -s <stage_name>
```





# Installation stages

Stage 0 - sanity: `$. /sunbird_install.sh -s sanity`

Stage 1 - deps : `$. /sunbird_install.sh -s deps`

Stage 2 - config : `$. /sunbird_install.sh -s config`

Stage 3 - dbs : `$. /sunbird_install.sh -s dbs`

Stage 4 - apis : `$. /sunbird_install.sh -s apis`



# Installation stages

Stage 5 - proxy :

```
$ ./sunbird_install.sh -s deps
```

Stage 6 - keycloak :

```
$ ./sunbird_install.sh -s deps
```

Stage 7 - badger :

```
$ ./sunbird_install.sh -s deps
```

Stage 8 - core :

```
$ ./sunbird_install.sh -s deps
```



# Verify the installation

[https://\[domain-name\]](https://[domain-name])

[domain-name] = <host address>



# Consumption of APIs

- Organization Management
- User Management
- Roles Assignment



# API Consumption using Postman tool



# 15 Roles Available in Sunbird

- ORG\_ADMIN
- COURSE\_MENTOR
- CONTENT\_REVIEWER
- ADMIN
- TEACHER\_BADGE\_ISSUER
- BOOK\_CREATOR
- BOOK\_REVIEWER
- OFFICIAL\_TEXTBOOK\_BADGE\_ISSUER



# 15 Roles Available in Sunbird

- COURSE\_CREATOR
- COURSE\_ADMIN
- ORG\_MODERATOR
- PUBLIC
- CONTENT\_CREATOR
- ANNOUNCEMENT\_SENDER
- FLAG\_REVIEWER



**QUESTIONS ?**





**Thank You !!!**