

01. XWiki Basic and Intermediate

19 June 2025 12:17 PM

Total Exp	Skills & Tools	Last Proj
Carinus edwin h	Sec. • Net F/W	Sec.
Garl	• Net/ PHP/JS NG/	XWiki
Johan.	• Net NG.	
Marco	• Net	
SKippie	- Ops - SE	- AWS - Azure
Yazeed	NG	

1

Mujahed Hussaini
22 Years
17 Programming Languages
National Level
Windows 3.1 --> VB --> MS.Net

Facebook
Discovery
Sony
Disney
MTData

PSF Member

D - Development & Operations
FSD
o MEAN, MERN
o MS.Net
o Python

Agenda

- System
- Deployment
- Xwiki Features
- Installations

Dev + Ops

Operations:

- Deploy Project(Xwiki)

Xwiki:

- PL - Java 17
 - Development - JDK
 - Runtime - JRE (JVM)
- Database - RDBMS
 - MySQL
- Servlet Container
 - Apache Tomcat
 - Jetty
- Download WAR
 - <https://www.xwiki.org/xwiki/bin/view/Main/Download>
- Configure Files
 - Database(Username, Database name)
 - Server(Port, IP)
 - Xwiki specific Configuration - XWIKI/webapps/xwiki/WEB-INF/xwiki.cfg
 - SMTP Mail server(Optional)

XYZ:

- PL - .Net
 - Development = C#.Net
 - Runtime = Framework, CLR

\$ sudo apt install docker.io -y

CpWAZVW7rmRzDyu

```
$ sudo su
# apt update
```

Installation of Docker:

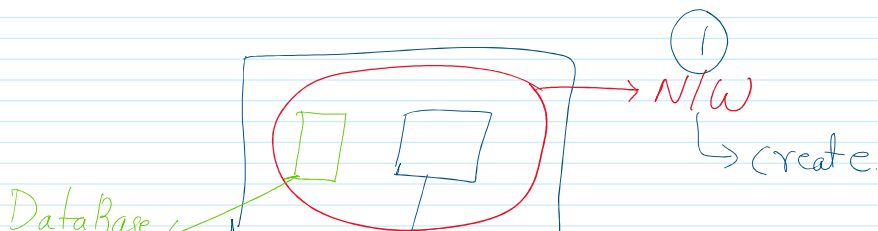
```
# sudo apt install -y apt-transport-https ca-certificates curl software-properties-common gnupg
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
```

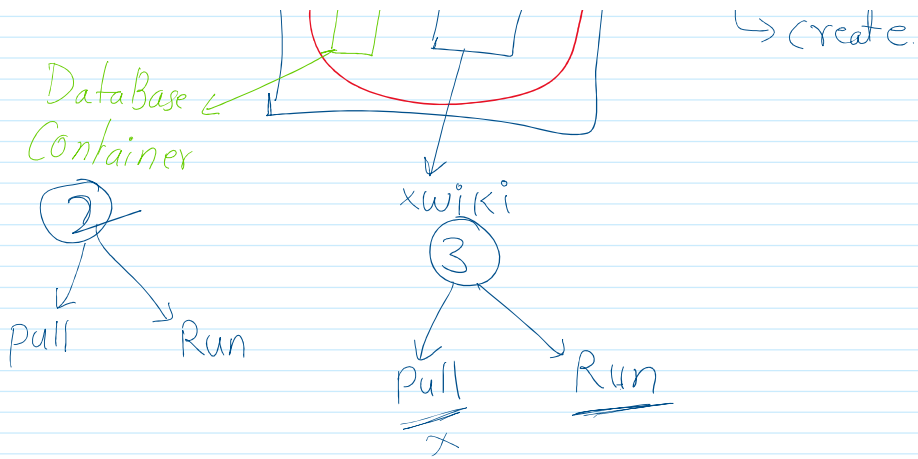
```
# echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
```

```
sudo apt update
```

```
sudo apt install -y docker-ce docker-ce-cli containerd.io
```

```
sudo chmod 777 /var/sock/docker*
```





A. Create Docker Network for Xwiki

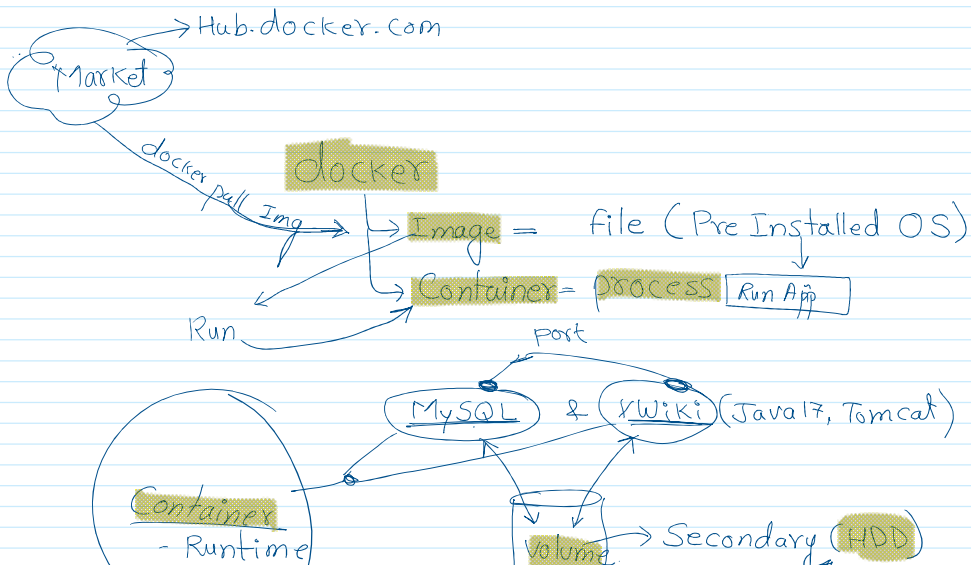
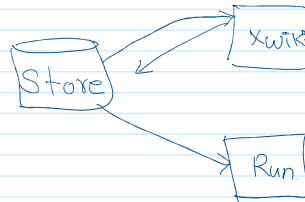
- \$ docker network ls
- \$ docker network create xwiki-nw || true
- \$ docker network ls

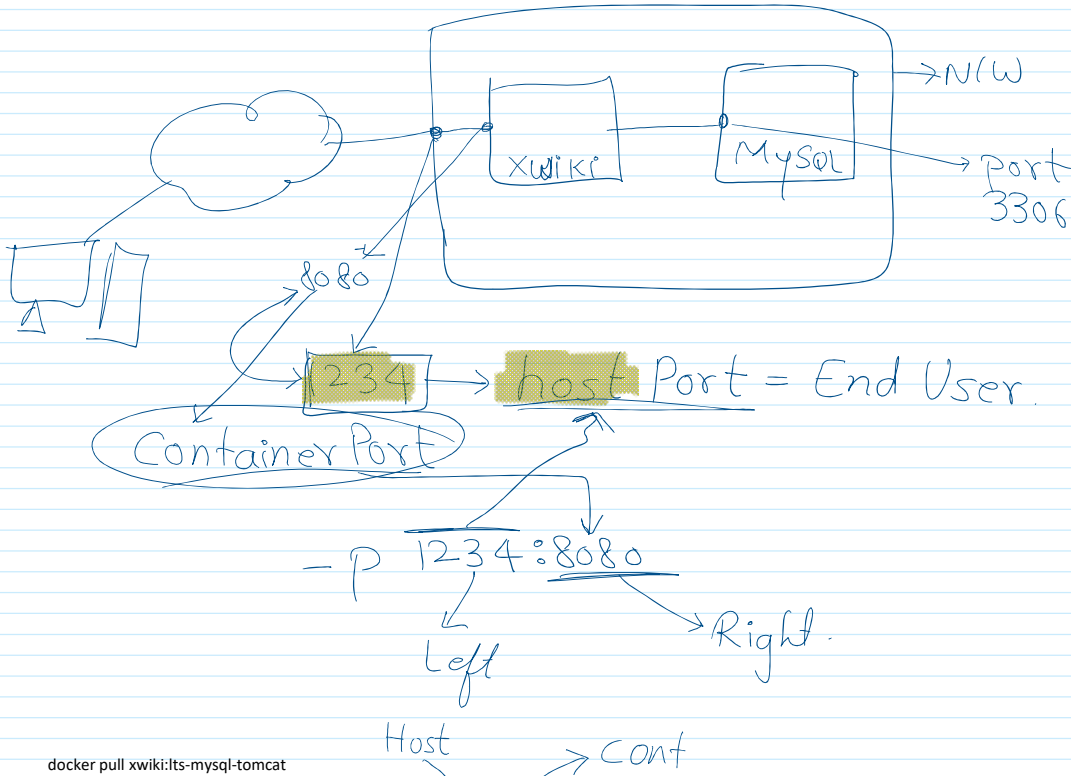
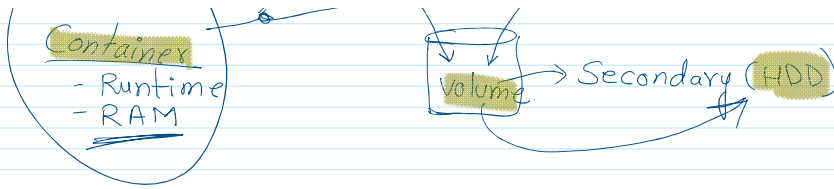
B. Create Database(MySQL - 5.7) Container(Pull --> Run)

- \$ docker images
- \$ docker pull mysql:5.7
- \$ docker images
- \$ docker ps -a
- \$ docker run -d --name **xwiki-mysql-mujahed** --network xwiki-nw \
 - e MYSQL_ROOT_PASSWORD=XwikiSecurep@55 \
 - e MYSQL_DATABASE=xwiki \
 - e MYSQL_USER=xwiki \
 - e MYSQL_PASSWORD=XwikiSecurep@55 \
 - v xwiki-mysql-data:/var/lib/mysql \
 - p **3311:3306** \
 mysql:5.7
- \$ docker ps -a
- \$ docker ps

C. Create Xwiki Container

- \$ docker images
- \$ docker pull xwiki:its-mysql-tomcat
- \$ docker images
- \$ docker ps
- \$ docker run -d --name xwiki --network xwiki-nw -p 8080:8080 \
 - e DB_USER=xwiki \
 - e DB_PASSWORD=XwikiSecurep@55 \
 - e DB_DATABASE=xwiki \
 - e DB_HOST=xwiki-mysql \
 - v xwiki-data:/usr/local/xwiki \
 xwiki:its-mysql-tomcat
- \$ docker ps





docker pull xwiki:its-mysql-tomcat

```
docker run -d --name xwiki-mujahed --network xwiki-nw -p 8080:8080 \
-e DB_USER=xwiki \
-e DB_PASSWORD=XwikiSecurep@55 \
-e DB_DATABASE=xwiki \
-e DB_HOST=xwiki-mysql \
-v xwiki-data:/usr/local/xwiki \
xwiki:its-mysql-tomcat
```

Package Manager

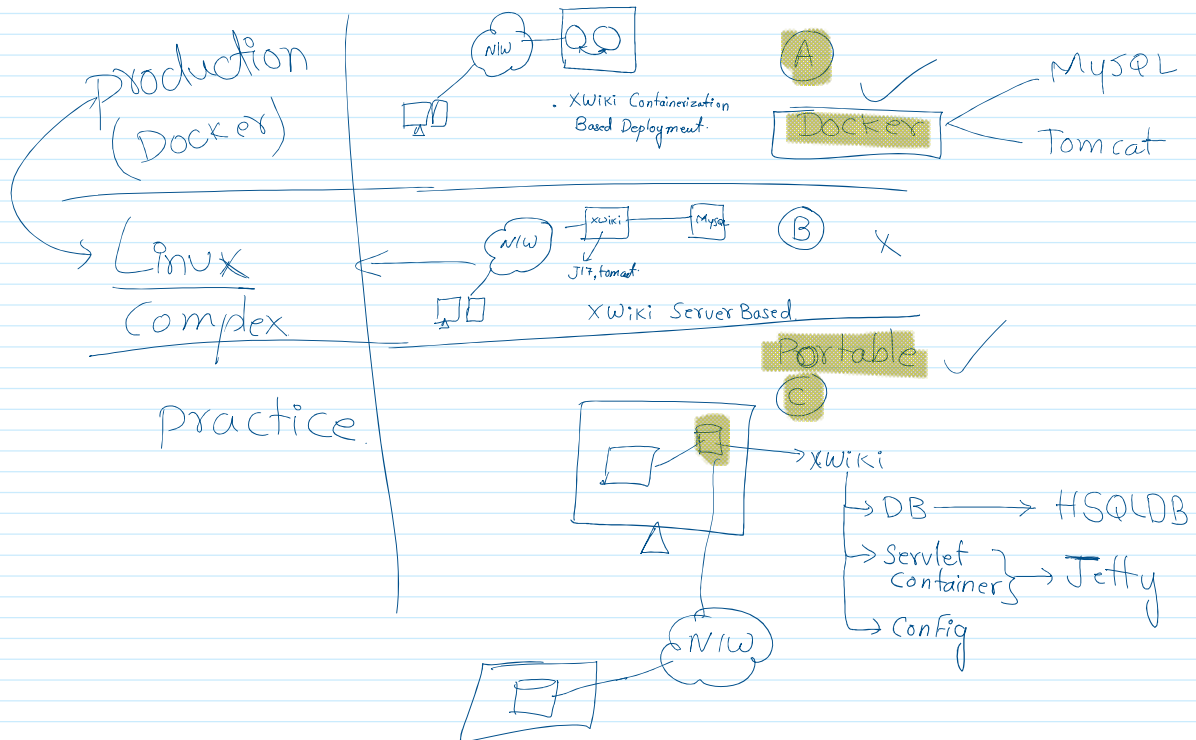
Dont Ask Directly Install

package

Runtime

community Edition

```
root@vivek-etww:/home/student/Desktop#
root@vivek-etww:/home/student/Desktop#
root@vivek-etww:/home/student/Desktop# sudo apt install -y docker-ce docker-ce-cli containerd.io
```



1. Check Container
 - a. `$ docker ps`
2. Remove Running Containers
 - a. `$ docker rm ContainerID --force`
3. Check Downloaded Image
 - a. `$ docker images`
4. Delete it
 - a. `$ docker rmi IMG:TAG`

Sinelihle - <http://34.133.74.201:8080/bin/view/Main/>

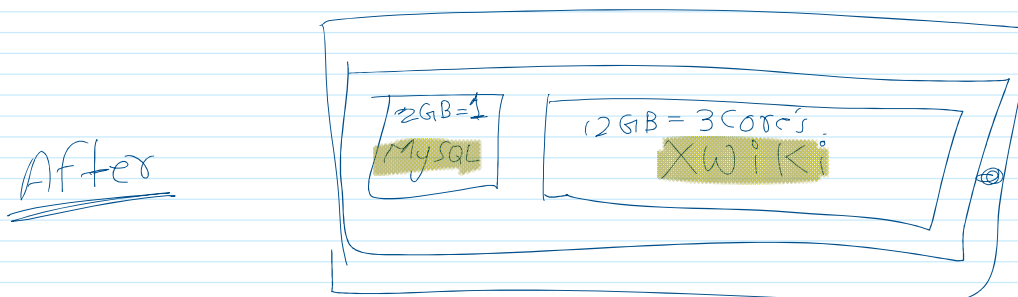
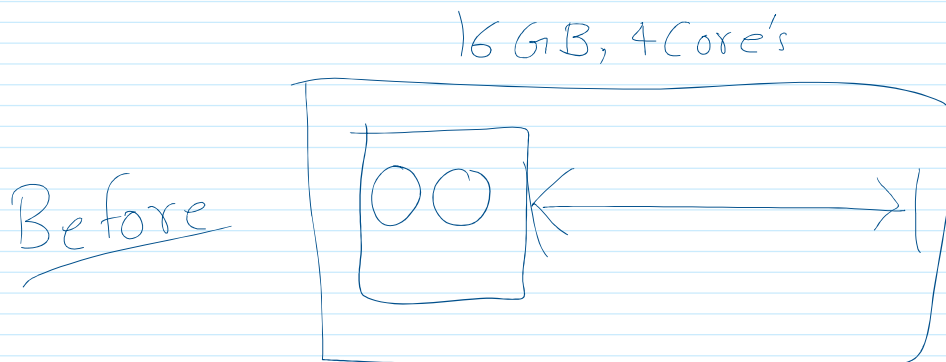
Ubuntu 24.04 LTS
 { Memory = 15 GB
 { CPU# = 4 Cores

Resource	MySQL	XWiki	Reserved for Host
Memory	2 GB	12 GB	~1 GB
CPU	1 core	3 cores	~0.5-1 core

```
# Run MySQL with resource limits
docker run -d --name xwiki-mysql --network xwiki-nw \
--memory="2g" \
--cpus="1.0" \
-e MYSQL_ROOT_PASSWORD=XwikiSecurep@55 \
-e MYSQL_DATABASE=xwiki \
-e MYSQL_USER=xwiki \
-e MYSQL_PASSWORD=XwikiSecurep@55 \
-v xwiki-mysql-data:/var/lib/mysql \
mysql:5.7
```

echo ">>> Running XWiki container..."

```
# Run XWiki with most of the remaining system resources
docker run -d --name xwiki --network xwiki-nw -p 8080:8080 \
--memory="12g" \
--cpus="3.0" \
-e DB_USER=xwiki \
-e DB_PASSWORD=XwikiSecurep@55 \
-e DB_DATABASE=xwiki \
-e DB_HOST=xwiki-mysql \
-v xwiki-data:/usr/local/xwiki \
xwiki:its-mysql-tomcat
```



+91 7219851089

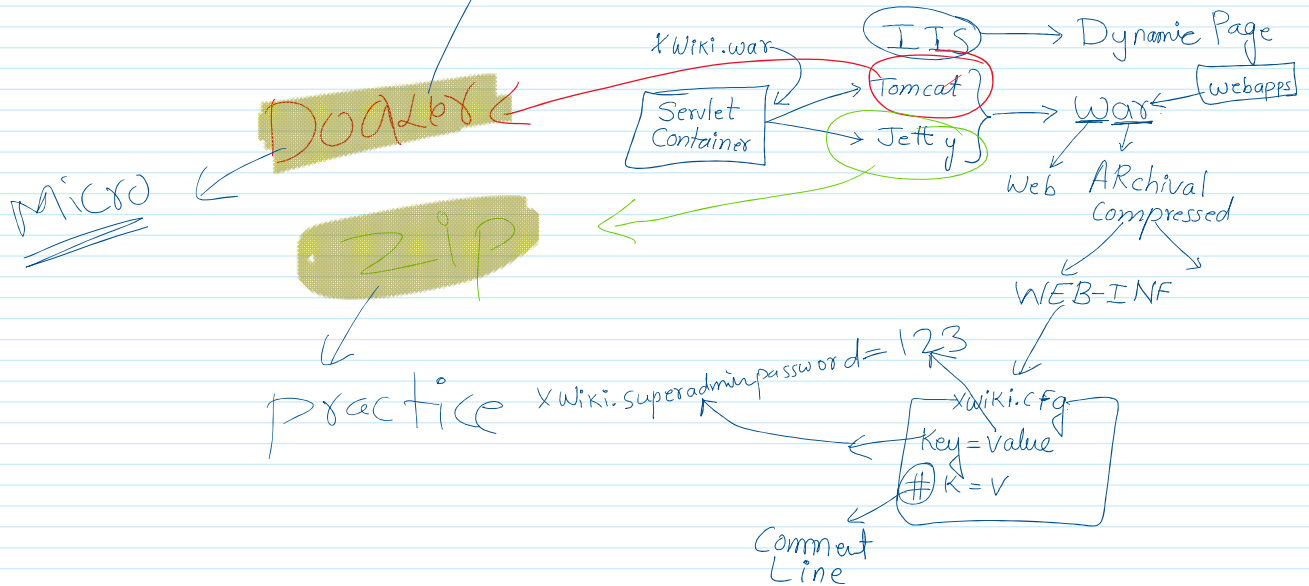
http → https
Let's Encrypt
CSSLP
CEH

```
mkdir -p /home/user1/xwiki-data/mysql
mkdir -p /home/user1/xwiki-data/xwiki

# Run MySQL with specific resource limits and host volume
docker run -d --name xwiki-mysql --network xwiki-nw \
--memory="2g" \
--cpus="1.0" \
-e MYSQL_ROOT_PASSWORD=XwikiSecurep@55 \
-e MYSQL_DATABASE=xwiki \
-e MYSQL_USER=xwiki \
-e MYSQL_PASSWORD=XwikiSecurep@55 \
-v /home/user1/xwiki-data/mysql:/var/lib/mysql \
mysql:5.7
```

echo ">>> Running XWiki container..."

```
# Run XWiki with specific resource limits and host volume
docker run -d --name xwiki --network xwiki-nw -p 8080:8080 \
--memory="12g" \
--cpus="3.0" \
-e DB_USER=xwiki \
-e DB_PASSWORD=XwikiSecurep@55 \
-e DB_DATABASE=xwiki \
-e DB_HOST=xwiki-mysql \
-v /home/user1/xwiki-data/xwiki:/usr/local/xwiki \
xwiki:its-mysql-tomcat
```



① xWiki.Cfg.

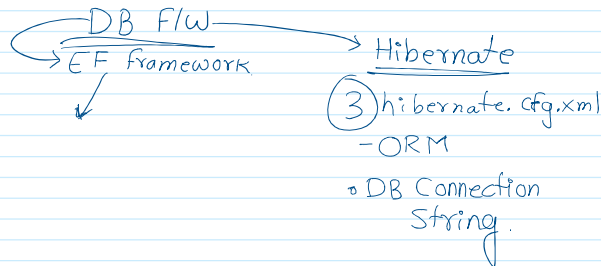
- Core Configuration
 - Authentication
 - Rendering
 - Virtual xWiki

◦ /WEB-INF/xWiki.cfg.

/opt/tomcat/webapps/xwiki/WEB-INF/xwiki.cfg

② xWiki.properties

- Global Configuration
 - Caching
 - Logging
 - Extension Manager



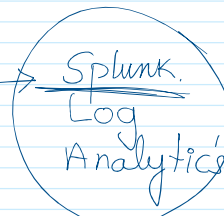
④ Web.xml

- Web App Config
 - Servlet
 - Filters
 - Listener's

⑤ Logback.xml / Logback-test.xml

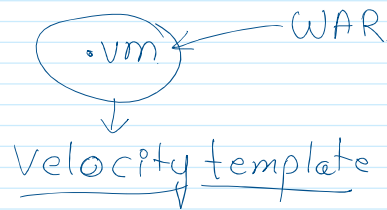
- Logging Configuration

- Formats of Log's



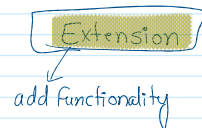
7-10pm

Analytics



✓ Application Resources.properties
↓
Localization

- .War = XWiki
- .XAR = Extension

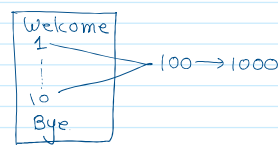


① Application

- Pre Built mini-apps.
 - Meeting Manager.
 - Knowledge base.
 - Blog.
- **AWM** = App Within Minutes.

② Macros

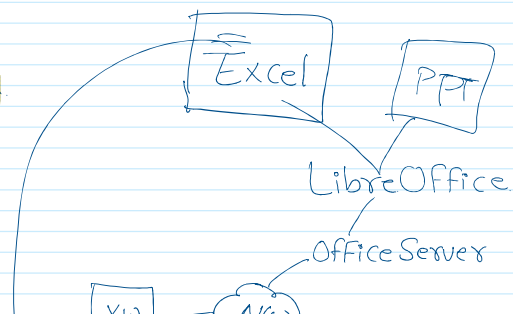
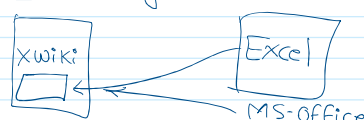
- Reusable piece of Content
↓
Used in Page

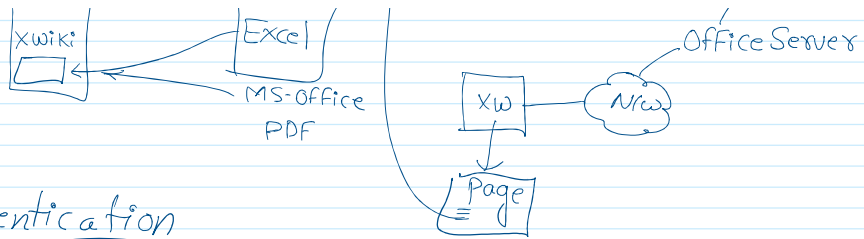


③ Scripting

- **Velocity** / **Groovy** / **Java**

④ OLE Integration





⑤ Authentication

- LDAP
- OAuth
- SSO

⑥ REST API

- post man - curl.

