우분투 24.04 LTS

php 8.1.29 (apache2handler)

**wiki 1.39.8.**

**해볼만한거**

**1. (기존버전유지한채) wiki 세팅할 때. 필수 플러그인만(Abuse Filter 확인해보기)**

**2. mediawiki 1.35= PHP 7.3.19 or later(7.4) =SMW 4.0.x**

**<https://www.php.net/supported-versions.php>**

**<https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/tests/README.md>**

**Package phpunit/php-token-stream is abandoned, you should avoid using it. No replacement was suggested.**

**<https://zetawiki.com/wiki/%EB%AF%B8%EB%94%94%EC%96%B4%EC%9C%84%ED%82%A4_%EC%98%A4%EB%A5%98_%EB%A9%94%EC%8B%9C%EC%A7%80_%ED%91%9C%EC%8B%9C>**

**$wgShowExceptionDetails = true;**

**error\_reporting( -1 );**

**ini\_set( 'display\_errors', 1 );**

**Error: Class "Wikimedia\Equivset\Equivset" not found**

# 0.기본 환경

미디어위키 세팅에서 기본적으로 LTS 선택

<https://www.mediawiki.org/wiki/Download/ko>

MediaWiki 1.39.8 (.zip 다운로드, .tar.gz 다운로드) - 장기 지원 (LTS)

Semantic MediaWiki 4.1.3 / 2024.07.18. 기준 최신 버전

<https://www.semantic-mediawiki.org/wiki/Semantic_MediaWiki_4.1.3>

최적화 지원 = MediaWiki 1.39 and PHP 8.1

<https://www.semantic-mediawiki.org/wiki/Help:Compatibility>

<https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/docs/COMPATIBILITY.md>

<https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/docs/INSTALL.md>

## 참조: 린지 세팅

<http://ekch.org/wiki/index.php?title=Special:Version>

**MediaWiki 1.35.0**

PHP 7.3.23 (fpm-fcgi)

MariaDB 5.5.68-MariaDB

**Semantic MediaWiki 3.2.1**

Semantic Compound Queries 2.1.0 (75e8b38) 16:34, 18 August 2019

Semantic Drilldown 2.1 (9ef81a4) 10:37, 4 November 2020

Semantic Result Formats 3.2.0 (ecbf369) 17:44, 27 August 2020

Semantic Scribunto 2.1.0 (2d31857) 16:48, 18 August 2019

AWS 최대 강점은 시간당으로 비용 계산이 되고, 테스트 단계에서 무한 리셋 가능

# 1. 서버 삭제

# 2. 서버 재생성

# 3. MediaWiki 1.39.8 설치

3.1. 대응 환경 구축: <https://wikidocs.net/179453>

3.2. 미디어위키 설치

sudo chmod 777 /var/www/html/swiki/images

sudo mv /var/www/html/swiki/images/.htaccess /var/www/html/swiki/images/.htaccess\_disabled

3.3. 미디어위키 기본 테스트

# 

# 4. SMW 4.1.3 설치:

<https://www.semantic-mediawiki.org/wiki/Semantic_MediaWiki_4.1.3>

4.1. 컴포저 설치

vim composer.local.json

composer update --no-dev --optimize-autoloader

sudo systemctl restart apache2

4.2. 미디어위키 로컬세팅 변경 및 업데이트

로컬세팅.php

wfLoadExtension( 'SemanticMediaWiki' );

enableSemantics( 'dhkorea.org' );

**sudo php maintenance/update.php**

4.3. 테스트

<https://www.semantic-mediawiki.org/wiki/Help:Verify_the_installation>

[**https://www.semantic-mediawiki.org/wiki/Help:Verify\_the\_installation**](https://www.semantic-mediawiki.org/wiki/Help:Verify_the_installation)

**Property test: [[Property name::Property value]]**

**<https://www.semantic-mediawiki.org/wiki/Help:Semantic_search>**

**[https://www.semantic-mediawiki.org/wiki/Help:Inline\_queries#Parser\_function\_.23ask](https://www.semantic-mediawiki.org/wiki/Help:Inline_queries" \l "Parser_function_.23ask)**

**[[like::ruru]]**

**[[like::마루]]**

**{{#ask: [[김바로]] |?like}}**

**{{#ask: [[김바로]]**

**[[like::+]]**

**|?like**

**}}**

[cafe24\_semantic wiki](https://drive.google.com/drive/u/0/folders/19AbnZ-EXUz9pgoiQbAPa3bNFpssgzEFU) —> LocalSettings.php

**ssl 접속(putty)**

175.125.21.135 22

cafe24\_dhkorea

**root / 암호**

**<https://www.semantic-mediawiki.org/wiki/Sites_using_Semantic_MediaWiki>**

**<https://bookowners.online/index.php?title=Thomas_Sheppard_d.1763&action=edit>**

**<https://bookowners.online/Special:Browse/Thomas_Sheppard_d.1763>**

**<https://bookowners.online/index.php?title=Special:ExportRDF/Thomas_Sheppard_d.1763&syntax=rdf>**

# 

# 

# 백업 세팅

**mv swiki/ swiki\_backup01/**

**mysql -u root -p**

**show databases;**

**drop database swiki;**

**exit**

미디어 위키 설치

cd /var/www/html

wget <https://releases.wikimedia.org/mediawiki/1.39/mediawiki-1.39.5.zip>

unzip [mediawiki-1.39.5.zip](https://releases.wikimedia.org/mediawiki/1.39/mediawiki-1.39.5.zip)

mv [mediawiki-1.39.5](https://releases.wikimedia.org/mediawiki/1.39/mediawiki-1.39.5.zip) swiki

**sudo systemctl restart apache2**

**cd /var/www/html/**

**vim .htaccess**

**<IfModule mod\_rewrite.c>**

**RewriteEngine On**

**RewriteBase /**

**RewriteRule ^(swiki)($|/) - [L]**

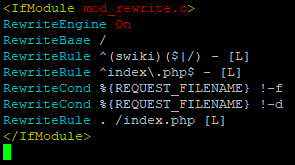
**RewriteRule ^index\.php$ - [L]**

**RewriteCond %{REQUEST\_FILENAME} !-f**

**RewriteCond %{REQUEST\_FILENAME} !-d**

**RewriteRule . /index.php [L]**

**</IfModule>**

****

**service apache2 restart**

service apache2 status

<https://dhkorea.org/swiki/>

mysql -u root -p

CREATE DATABASE swiki;

CREATE USER 'swikiadmin'@'localhost' IDENTIFIED by 'rurudao01!';

GRANT ALL PRIVILEGES ON swiki .\* TO 'swikiadmin'@'localhost';

FLUSH PRIVILEGES;

exit

swiki

swikiadmin

암호

cd swiki

wget --load-cookies ~/cookies.txt "https://docs.google.com/uc?export=download&confirm=$(wget --quiet --save-cookies ~/cookies.txt --keep-session-cookies --no-check-certificate 'https://docs.google.com/uc?export=download&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej' -O- | sed -rn 's/.\*confirm=([0-9A-Za-z\_]+).\*/\1\n/p')&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej" -O LocalSettings.php && rm -rf ~/cookies.txt

sudo chmod 777 /var/www/html/swiki/images

sudo mv /var/www/html/swiki/images/.htaccess /var/www/html/swiki/images/.htaccess\_disabled

**#wfLoadExtension( 'AbuseFilter' );**

**<https://dhkorea.org/swiki/>**

# 시맨틱위키설치 update composer

**<https://medium.com/techvblogs/update-composer-in-ubuntu-4138e36205eb>**

**sudo apt-get update**

**sudo apt install php-xml**

**sudo apt-get install php-mbstring**

**sudo apt-get install php-intl**

**sudo apt-get install php-mysql**

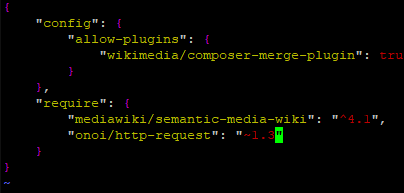
**sudo apt-get install php-curl**

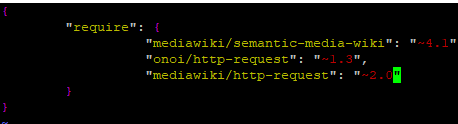
**sudo apt-get install** php-common php-mysql php-xml php-xmlrpc php-curl php-gd php-imagick php-cli php-dev php-imap php-mbstring php-bcmath php-soap php-zip php-redis php-intl

**cd /var/www/html/swiki**

**COMPOSER=composer.local.json php composer.phar require --no-update mediawiki/semantic-media-wiki**

**vim composer.local.json**

****

****

[**https://github.com/onoi/http-request**](https://github.com/onoi/http-request)

**sudo systemctl restart apache2**

**composer update --no-dev**

**sudo systemctl restart apache2**

composer update --prefer-source

php composer.phar update --no-dev

php composer.phar update --prefer-source

**wfLoadExtension( 'SemanticMediaWiki' );**

**enableSemantics( 'dhkorea.org' );**

**cd /var/www/html/swiki**

**wget --load-cookies ~/cookies.txt "https://docs.google.com/uc?export=download&confirm=$(wget --quiet --save-cookies ~/cookies.txt --keep-session-cookies --no-check-certificate 'https://docs.google.com/uc?export=download&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej' -O- | sed -rn 's/.\*confirm=([0-9A-Za-z\_]+).\*/\1\n/p')&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej" -O LocalSettings.php && rm -rf ~/cookies.txt**

**php maintenance/update.php**

php maintenance/update.php --skip-external-dependencies

# 데이터 업데이트

[**https://github.com/WikiValley/RDFIO**](https://github.com/WikiValley/RDFIO)

[**https://packagist.org/packages/rdfio/rdfio**](https://packagist.org/packages/rdfio/rdfio)

**cd /var/www/html/swiki**

**vim composer.local.json**

vim composer.lock

vim composer.json

composer require rdfio/rdfio --update-no-dev

**sudo systemctl restart apache2**

**composer update --no-dev**

**sudo systemctl restart apache2**

**cd /var/www/html/swiki**

**php maintenance/update.php**

<https://dhkorea.org/swiki/Special:RDFIOAdmin>

**https://dhkorea.org/swiki/index.php?title=%ED%8A%B9%EC%88%98:%EB%A1%9C%EA%B7%B8%EC%9D%B8**

**<https://github.com/rdfio/rdf2smw>**

**wget <https://github.com/rdfio/rdf2smw/releases/download/v0.6/rdf2smw_v0.6_linux64.gz>**

**gzip -d rdf…..**

**wget --load-cookies ~/cookies.txt "https://docs.google.com/uc?export=download&confirm=$(wget --quiet --save-cookies ~/cookies.txt --keep-session-cookies --no-check-certificate 'https://docs.google.com/uc?export=download&id=109I7RA3SS\_ttqnFDRV9Ks4IwbwAjeRYH' -O- | sed -rn 's/.\*confirm=([0-9A-Za-z\_]+).\*/\1\n/p')&id=109I7RA3SS\_ttqnFDRV9Ks4IwbwAjeRYH" -O test.nt && rm -rf ~/cookies.txt**

**<https://drive.google.com/file/d/109I7RA3SS_ttqnFDRV9Ks4IwbwAjeRYH/view?usp=sharing>**

**./**

**go run rdf2smw --in test.nt --out smw.xml**

# 기본 동작 테스트

[**https://www.semantic-mediawiki.org/wiki/Help:Verify\_the\_installation**](https://www.semantic-mediawiki.org/wiki/Help:Verify_the_installation)

**Property test: [[Property name::Property value]]**

**<https://www.semantic-mediawiki.org/wiki/Help:Semantic_search>**

**[https://www.semantic-mediawiki.org/wiki/Help:Inline\_queries#Parser\_function\_.23ask](https://www.semantic-mediawiki.org/wiki/Help:Inline_queries" \l "Parser_function_.23ask)**

**[[like::ruru]]**

**[[like::마루]]**

**{{#ask: [[김바로]] |?like}}**

**{{#ask: [[김바로]]**

**[[like::+]]**

**|?like**

**}}**

# sparql 세팅

**// 들어오는 링크 표시 안함**

$smwgBrowseShowAll = false;

[**https://www.semantic-mediawiki.org/wiki/Help:Using\_SPARQL\_and\_RDF\_stores#Configuring\_SMW**](https://www.semantic-mediawiki.org/wiki/Help:Using_SPARQL_and_RDF_stores#Configuring_SMW)

**Compatibility**

[**https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/docs/COMPATIBILITY.md**](https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/docs/COMPATIBILITY.md)

**cd /var/www/html/swiki**

**wget --load-cookies ~/cookies.txt "https://docs.google.com/uc?export=download&confirm=$(wget --quiet --save-cookies ~/cookies.txt --keep-session-cookies --no-check-certificate 'https://docs.google.com/uc?export=download&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej' -O- | sed -rn 's/.\*confirm=([0-9A-Za-z\_]+).\*/\1\n/p')&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej" -O LocalSettings.php && rm -rf ~/cookies.txt**

**php maintenance/update.php**

**<https://dhkorea.org/swiki/>**

**<http://dhkorea.org:3030>**

**[https://github.com/gbv/fuseki.deb#fuseki-debian-package](https://github.com/gbv/fuseki.deb" \l "fuseki-debian-package)**

**wget https://github.com/gbv/fuseki.deb/releases/download/v4.9.0-1/fuseki\_4.9.0-1\_all.deb**

**sudo dpkg --install ./**[**fuseki\_4.9.0-1\_all.deb**](https://github.com/gbv/fuseki.deb/releases/download/v4.9.0-1/fuseki_4.9.0-1_all.deb) **&& sudo apt install -f**

**sudo systemctl enable fuseki**

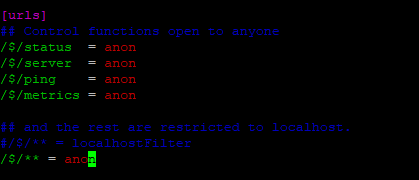
**sudo systemctl restart fuseki**

**vim /etc/systemd/system/fuseki.service**

**sudo systemctl restart apache2**

**vim /etc/fuseki/fuseki.service**

**vim /etc/fuseki/shiro.ini**

****

[**http://dhkorea.org:3030**](http://dhkorea.org:3030)

**cd /opt/fuseki/**

**cd /etc/fuseki/**

# 데이터 리셋 정제

**sudo systemctl restart apache2**

**cd /var/www/html/swiki**

**wget --load-cookies ~/cookies.txt "https://docs.google.com/uc?export=download&confirm=$(wget --quiet --save-cookies ~/cookies.txt --keep-session-cookies --no-check-certificate 'https://docs.google.com/uc?export=download&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej' -O- | sed -rn 's/.\*confirm=([0-9A-Za-z\_]+).\*/\1\n/p')&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej" -O LocalSettings.php && rm -rf ~/cookies.txt**

**cd /var/www/html/swiki**

**php maintenance/update.php**

**cd /var/www/html/swiki**

**php /var/www/html/swiki/maintenance/runJobs.php --maxjobs 1000**

**cd /var/www/html/swiki**

**touch LocalSettings.php**

**cd /var/www/html/swiki/extensions/SemanticMediaWiki/maintenance/**

**php rebuildData.php -v -d 50**

**cd /var/www/html/swiki**

**touch LocalSettings.php**

**cd /var/www/html/swiki**

**php /var/www/html/swiki/maintenance/runJobs.php --maxjobs 1000**

**sudo systemctl restart apache2**

# 완전 리셋

**sudo systemctl restart apache2**

**cd /var/www/html/swiki**

**wget --load-cookies ~/cookies.txt "https://docs.google.com/uc?export=download&confirm=$(wget --quiet --save-cookies ~/cookies.txt --keep-session-cookies --no-check-certificate 'https://docs.google.com/uc?export=download&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej' -O- | sed -rn 's/.\*confirm=([0-9A-Za-z\_]+).\*/\1\n/p')&id=1978lnO--iNcAUosgUjSAGT0JldFgF3Ej" -O LocalSettings.php && rm -rf ~/cookies.txt**

**cd /var/www/html/swiki**

**php maintenance/update.php**

**cd /var/www/html/swiki**

**php /var/www/html/swiki/maintenance/runJobs.php --maxjobs 1000**

**cd /var/www/html/swiki**

**touch LocalSettings.php**

**cd /var/www/html/swiki/extensions/SemanticMediaWiki/maintenance/**

**php rebuildData.php -fpv**

**php rebuildData.php -v**

**cd /var/www/html/swiki**

**touch LocalSettings.php**

**cd /var/www/html/swiki**

**php /var/www/html/swiki/maintenance/runJobs.php --maxjobs 1000**

**sudo systemctl restart apache2**

# sparql 테스트

**PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>**

**PREFIX owl: <http://www.w3.org/2002/07/owl#>**

**PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>**

**PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>**

**SELECT ?subject ?predicate ?object**

**WHERE {**

**?subject rdfs:label '정록1 0093'.**

**?subject ?predicate ?object.**

**}**

**PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>**

**PREFIX owl: <http://www.w3.org/2002/07/owl#>**

**PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>**

**PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>**

**SELECT ?subject ?predicate ?object ?target ?all ?allv**

**WHERE {**

**?subject rdfs:label '정록1 0093'.**

**?subject <http://dhkorea.org/swiki/Special:URIResolver/Property-3A정록-3AAKSPersonID> ?object.**

**?target ?predicat ?object.**

**?target ?all ?allv**

**}**

**PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>**

**PREFIX owl: <http://www.w3.org/2002/07/owl#>**

**PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>**

**PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>**

**SELECT ?subject ?predicate ?object**

**WHERE {**

**?subject rdfs:label '조선왕조실록관력'.**

**?subject ?predicate ?object.**

**}**

윤종훈 기술(시맨틱미디어위키)

호환성

https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/docs/COMPATIBILITY.md

우분투 24.04 LTS

php 8.1.29 (apache2handler)

**wiki 1.39.8.**

**해볼만한거**

**1. (기존버전유지한채) wiki 세팅할 때. 필수 플러그인만(Abuse Filter 확인해보기)**

**2. mediawiki 1.35= PHP 7.3.19 or later(7.4) =SMW 4.0.x**

[**https://www.php.net/supported-versions.php**](https://www.php.net/supported-versions.php)

## 0.기본 환경

미디어위키 세팅에서 기본적으로 LTS 선택

<https://www.mediawiki.org/wiki/Download/ko>

MediaWiki 1.39.8 (.zip 다운로드, .tar.gz 다운로드) - 장기 지원 (LTS)

Semantic MediaWiki 4.1.3 / 2024.07.18. 기준 최신 버전

<https://www.semantic-mediawiki.org/wiki/Semantic_MediaWiki_4.1.3>

최적화 지원 = MediaWiki 1.39 and PHP 8.1

<https://www.semantic-mediawiki.org/wiki/Help:Compatibility>

<https://github.com/SemanticMediaWiki/SemanticMediaWiki/blob/master/docs/COMPATIBILITY.md>

## 

## 

## 1. 기본세팅(아파치2/특정버젼 php / mysql) 설치

sudo apt-**get** **update**

sudo apt-**get** upgrade

*#시스템 업데이트 실행*

sudo apt update && apt upgrade -y

*# php8.1 레파지토리 추가*

sudo apt install software-properties-common

sudo add-apt-repository ppa:ondrej/php

*# php8.1 레파지토리 업데이트*

sudo apt update

*#php8.1 설치*

sudo apt-**get** install apache2 mysql-server php8.1 php8.1-mysql libapache2-mod-php8.1 php8.1-xml php8.1-mbstring

*#버전확인*

php -v

#아파치 재시작

sudo service apache2 **start**

sudo systemctl status apache2

## 2.미디어위키 파일 다운로드/설치/압축해제

cd ../../var/www/html

sudo wget https://releases.wikimedia.org/mediawiki/1.39/mediawiki-1.39.8.tar.gz

sudo tar -xvzf mediawiki-1.39.8.tar.gz

sudo mv mediawiki-1.39.8 wiki

sudo apt-get install php8.1-intl

sudo service apache2 restart

## 3.mysql 데이터베이스 생성

sudo mysql -u root

CREATE DATABASE wikidb;

SHOW DATABASES;

CREATE USER wiki@localhost IDENTIFIED BY 'ehowl0821';

GRANT ALL PRIVILEGES ON wikidb.\* TO wiki@localhost WITH GRANT OPTION;

quit

## 4.미디어위키 이미지 권한 부여

sudo chmod 777 /var/www/html/wiki/images

sudo mv /var/www/html/wiki/images/.htaccess /var/www/html/wiki/images/.htaccess\_disabled

## 

## 5.웹에서 미디어위키 설치/세팅

sudo chmod -R 777 "../../var/www/html/"

sudo chmod -R 755 "../../var/www/html/"

#웹에서 미디어위키 설치 과정 중 확장기능 설치하는 부분에서 왠만하면 기본적인것만 체크하기. “스팸막기”확장기능 - “Abuse Filter” 확장기능 추가시 충돌/에러-(ex.로그인/회원가입/페이지 생성 시 error 가 뜨며 불가능해지는 사태 발생)

## 

## 6.시맨틱미디어위키 4.2.0 설치

### *#composer 설치*

COMPOSER=composer.local.json php composer.phar require --no-update mediawiki/semantic-media-wiki

*#위 코드 안되면,*

cd /var/www/html/wiki

sudo vim composer.local.json

*#위 코드로 vim 으로 들어가서 composer.local.json 내부에 아래 내용 그대로 복사 “”사이에 있는 버전 숫자 확인 필수*

{

**"require"**: {

**"mediawiki/semantic-media-wiki"**: "~4.2"

}

}

*#Composer 설치*

sudo apt-get install composer

*#Composer version 2.7.1*

### *#composer업데이트*

sudo composer update --no-dev

위 코드 안되면 아래 코드

sudo composer update --no-dev --optimize-autoloader

*#아파치 재시작*

sudo systemctl restart apache2

*#에러코드*

Package phpunit/php-token-stream is abandoned, you should avoid using it. No replacement was suggested.

### #미디어위키 로컬세팅 변경 및 업데이트

vim LocalSettings.php 들어가서 아래 문자열 추가

wfLoadExtension( 'SemanticMediaWiki' );

enableSemantics( '13.209.254.53/wiki' );

**sudo php maintenance/update.php**

안될경우 아래 코드

sudo php maintenance/update.php --skip-external-dependencies

**php extensions/SemanticMediaWiki/maintenance/rebuildData.php -v**

### 

### #시맨틱위키 테스트

<https://www.semantic-mediawiki.org/wiki/Help:Verify_the_installation>

**Property test: [[Property name::Property value]]**

**<https://www.semantic-mediawiki.org/wiki/Help:Semantic_search>**

**[https://www.semantic-mediawiki.org/wiki/Help:Inline\_queries#Parser\_function\_.23ask](https://www.semantic-mediawiki.org/wiki/Help:Inline_queries" \l "Parser_function_.23ask)**

**[[like::ruru]]**

**[[like::마루]]**

**{{#ask: [[김바로]] |?like}}**

**{{#ask: [[김바로]]**

**[[like::+]]**

**|?like**

**}}**

### php unit

PHPUnit 9.6.17

sudo apt install phpunit