

Oracle WebLogic 14c 설치 및 구성

References

- JDK 11 다운로드
- WebLogic 다운로드
- Blog 참고

STEP 0. 서버 세팅 (Cent OS 7 기준)

```
# 호스트명 변경
$ hostnamectl set-hostname {호스트명}
$ reboot

# 방화벽 off
$ systemctl stop firewalld && systemctl disable firewalld
```






STEP 1. ORACLE JDK 11 다운로드

[링크] <https://www.oracle.com/kr/java/technologies/javase/jdk11-archive-downloads.html>

Java SE Development Kit 11.0.20

This software is licensed under the Oracle Technology Network License Agreement for Oracle Java SE

JDK 11.0.20 [checksum](#)

Product / File Description	File Size	Download
Linux ARM64 RPM Package	158.08 MB	 jdk-11.0.20_linux-aarch64_bin.rpm
Linux ARM64 Compressed Archive	158.16 MB	 jdk-11.0.20_linux-aarch64_bin.tar.gz
Linux x64 Debian Package	139.34 MB	 jdk-11.0.20_linux-x64_bin.deb
Linux x64 RPM Package	161.93 MB	 jdk-11.0.20_linux-x64_bin.rpm
Linux x64 Compressed Archive	162.06 MB	 jdk-11.0.20_linux-x64_bin.tar.gz

각 테스트 환경에 맞는 JDK Package 다운로드

→ Cent OS7 기준 Linux x64 RPM Package 다운로드

STEP 2. WebLogic 14c 다운로드

[링크] <https://www.oracle.com/kr/middleware/technologies/fusionmiddleware-downloads.html>

Oracle Fusion Middleware Software Downloads




Oracle WebLogic Server 14c (14.1.1.0)

The generic installer includes all Oracle WebLogic Server and Oracle Coherence software, including examples, and supports development and production usage on all supported OCI compute and AIX and zLinux on JDK 11. The generic installers for ARM OCI compute and AIX and zLinux on JDK 11 should be used for these respective platforms. The generic installers are for development purposes. It includes all Oracle WebLogic Server and Oracle Coherence runtime software but excludes examples and localized WebLogic console help files. The generic installers support development and production usage of Docker or CRI-O images and containers in Kubernetes, when WebLogic console monitoring and configuration is not required. It includes all Oracle Coherence server runtime software, but excludes examples, the WebLogic console, WebLogic clients, Maven plug-ins and Java DB. See our 14.1.1.0 documentation using the Generic installer, see this [document](#). For instructions on using the Generic installers for ARM OCI compute and AIX and zLinux on JDK 11, see this [document](#).

(Note: Licensed customers should obtain their Oracle WebLogic Server 14c software ([here](#)).

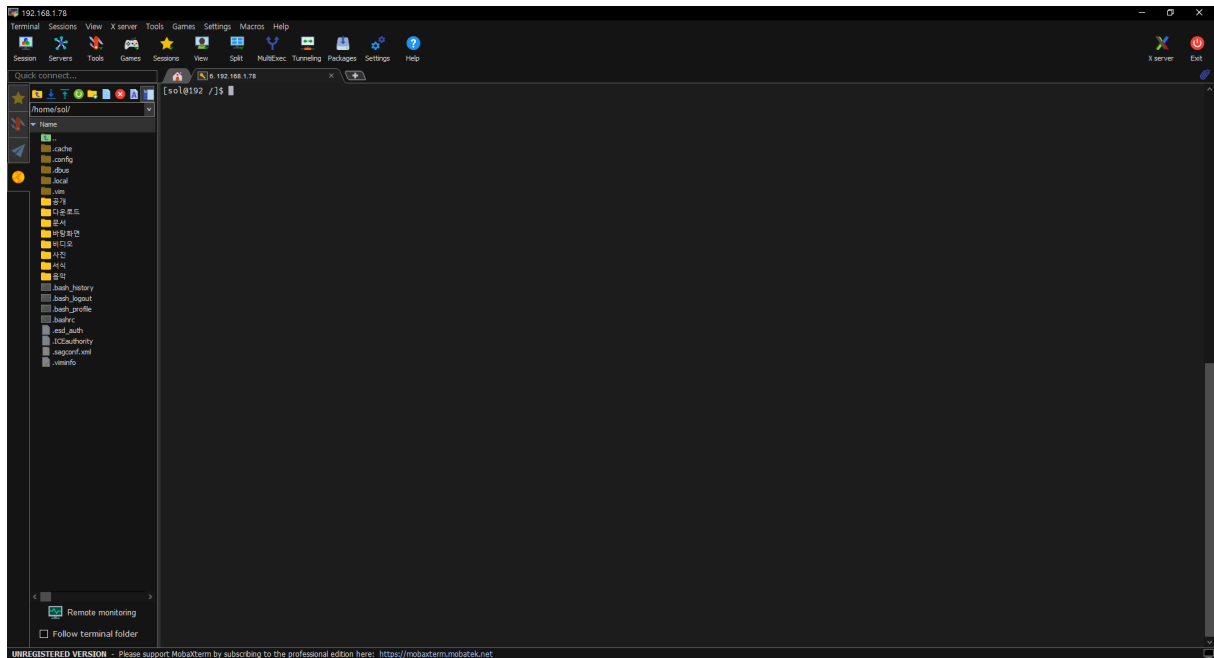
 [Generic Installer](#) (608 MB)

Generic Installer → 다운로드 매니저로 설치 zip 파일 다운로드

이름	수정한 날짜	유형	크기
 fmw_14.1.1.0.0_wls_lite_Disk1_1of1	2024-01-12 오전 10:19	압축(ZIP) 파일	622,809KB
 fmw_14.1.1.0.0_wls_lite_generic.jar	2020-07-22 오후 10:00	JAR 파일	623,073KB
 jdk-11.0.20_linux-x64_bin.rpm	2024-01-12 오전 10:39	RPM 파일	165,817KB

압축 해제 후 JDK RPM 파일과 WebLogic 설치 jar 파일 서버에 업로드

STEP 3. JDK & WebLogic 설치



X 윈도우를 위해 xterm 클라이언트 툴 사용 권장 (예시 MobaXterm)

[JDK 설치]

JDK RPM 설치

\$ sudo yum install -y jdk-11.0.20_linux-x64_bin.rpm

```
[sol@192 Oracle]$ sudo yum install -y jdk-11.0.20_linux-x64_bin.rpm
[sudo] sol의 암호 :
Loaded plugins: fastestmirror, langpacks
Examining jdk-11.0.20_linux-x64_bin.rpm: 2000:jdk-11-11.0.20-9.x86_64
Marking jdk-11.0.20_linux-x64_bin.rpm to be installed
Resolving Dependencies
--> Running transaction check
--> Package jdk-11.x86_64 2000:11.0.20-9 will be installed
--> Finished Dependency Resolution

base7/z86_64                                | 3.6 kB  00:00:00
extras7/z86_64                               | 2.9 kB  00:00:00
extras7/z86_64/primary_db                    | 250 kB  00:00:00
updates7/z86_64                              | 2.9 kB  00:00:00
updates7/z86_64/primary_db                   | 24 MB  00:00:05

Dependencies Resolved

=====
Package                Arch          Version           Repository        Size
=====
Installing:
jdk-11                  x86_64        2000:11.0.20-9    /jdk-11.0.20_linux-x64_bin 271 M
Transaction Summary
-----
Install 1 Package

Total size: 271 M
Installed size: 271 M
Downloading packages:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : 2000:jdk-11-11.0.20-9.x86_64 1/1
  Verifying  : 2000:jdk-11-11.0.20-9.x86_64 1/1

Installed:
jdk-11.x86_64 2000:11.0.20-9

Complete!
[sol@192 Oracle]$
```

```
# JAVA_HOME 설정

$ vi ~/.bash_profile

# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi

# User specific environment and startup programs

JAVA_HOME=/usr/java/jdk-11

PATH=$PATH:$JAVA_HOME/bin:$HOME/.local/bin:$HOME/bin

export PATH

# wq 저장

$ source ~/.bash_profile
```

```
# JAVA Version 확인

$ java -version
java version "11.0.20" 2023-07-18 LTS
Java(TM) SE Runtime Environment 18.9 (build 11.0.20+9-LTS-256)
Java HotSpot(TM) 64-Bit Server VM 18.9 (build 11.0.20+9-LTS-256, mixed mode)
```

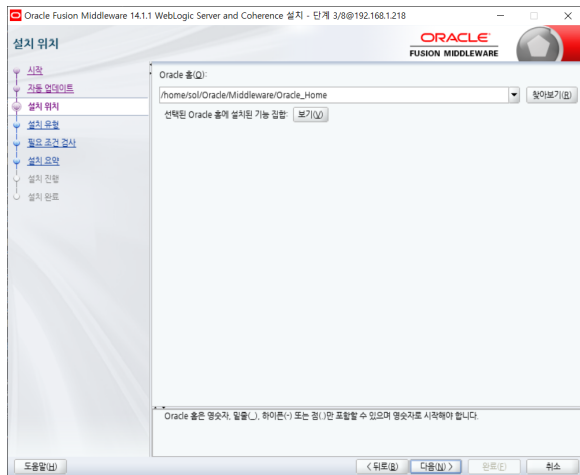
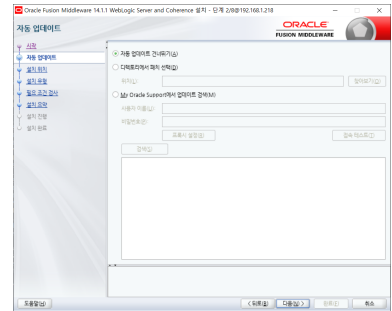
[WebLogic 14c 설치]

```
# WebLogic 14c 설치

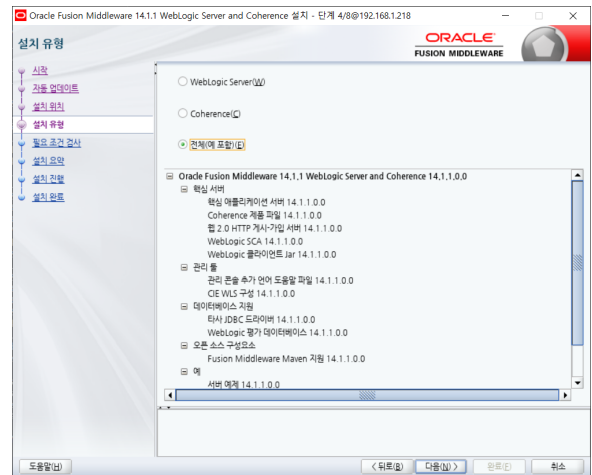
$ java -jar fmw_14.1.1.0.0_wls_lite_generic.jar
```



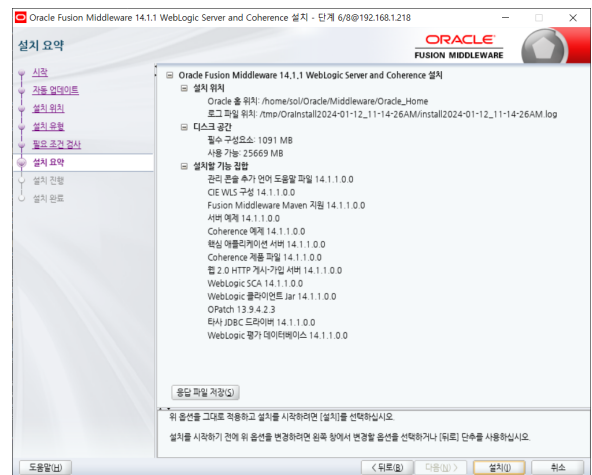
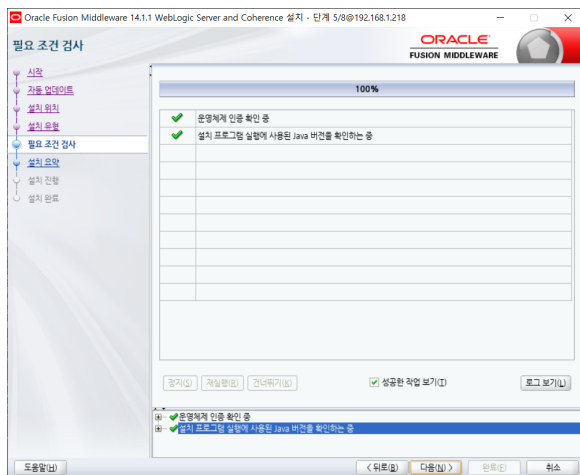
설치 인벤토리 설정

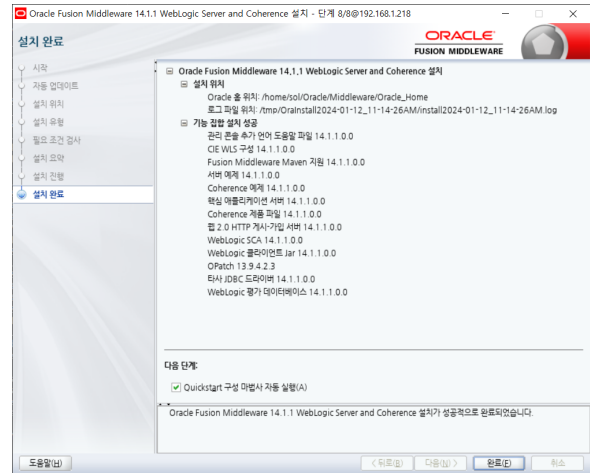
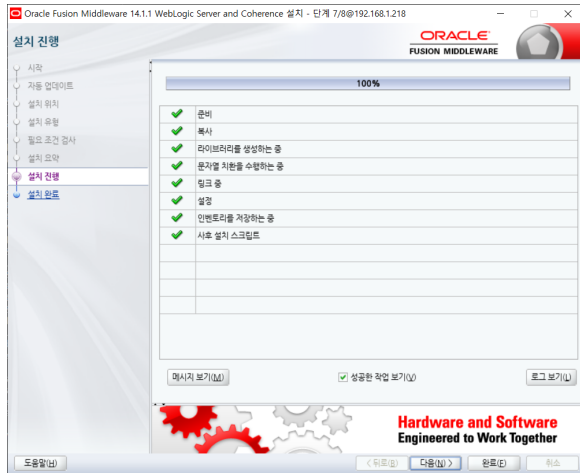


Oracle 홈 설정



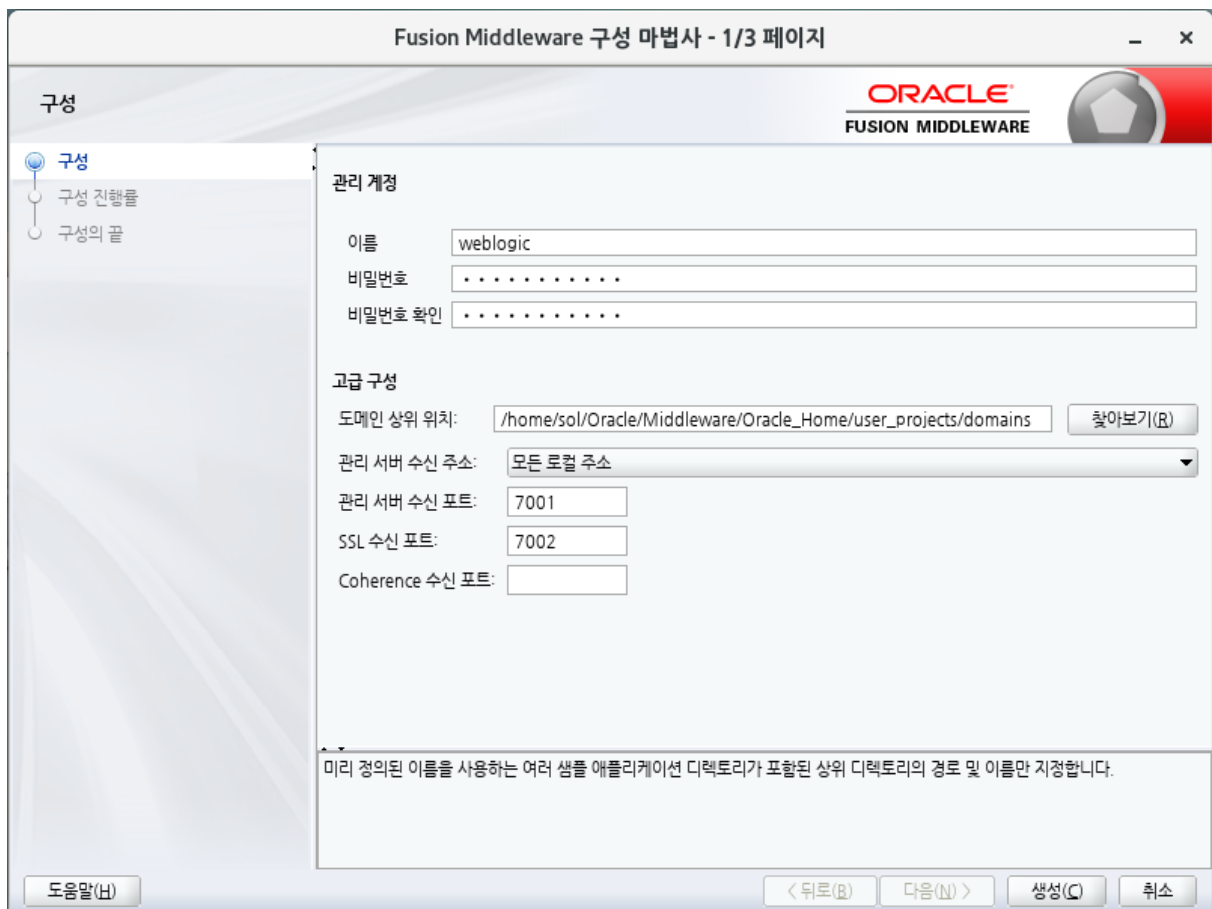
설치 컴포넌트 선택 (전체 설치)





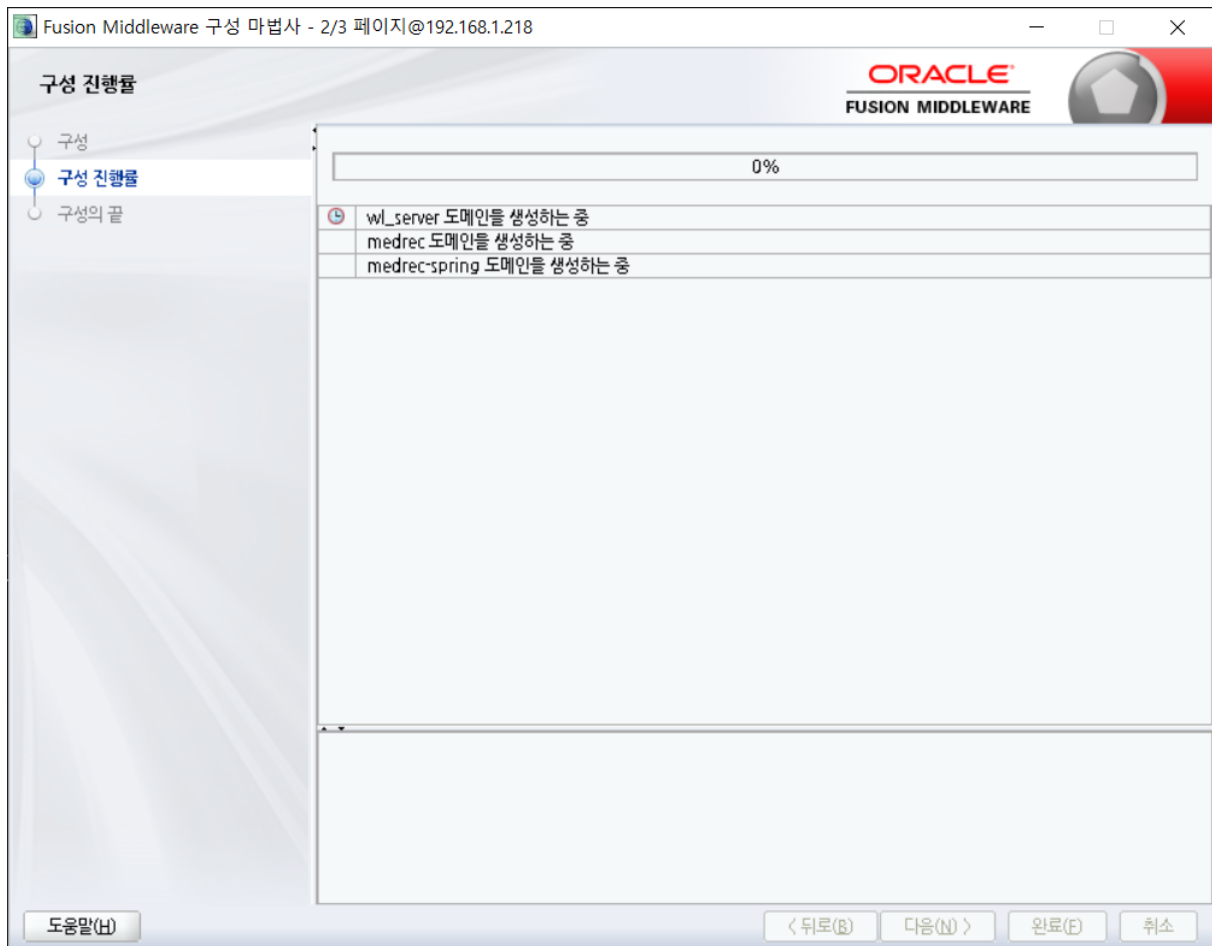
설치 완료

이후 WebLogic 빠른 구성 마법사 자동 실행



→ webLogic 관리자 계정 및 HTTP, HTTPS 포트 설정

→ 도메인 경로 설정





```
# WebLogic 기동
$ cd /home/sol/Oracle/Middleware/Oracle_Home/user_projects/domains/wl_server/
$ ./startWebLogic.sh

# 백그라운드 실행
$ nohup ./startwebLogic.sh &

# 서버 기동 완료 후 브라우저에서 http://{IP}:7001 로 접속
```




Trouble Shooting - “Can't connect to X11...” 에러 관련

References

- [참고](#) (X11 접속 관련)
- [참고2](#) - 테스트 환경에선 다음 해결 방안 사용

자바에서 그래픽 관련 모듈을 사용하려 하나 에러가 발생하는 경우로 MobaXterm 사용 시 그래픽 관련 모듈이 지원되지 않아 생기는 문제일 때, DISPLAY 를 사용하지 않는 것으로 설정하여 문제 해결.. (권장하지 않음)

→ 추후 GUI 기반의 설치가 불가능, xauth 관련 설정을 하는 것을 권장

XCP-ng 서버 테스트 환경에서 VM 생성 후 실행 시, 템플릿 VM 의 호스트 명 관련 문제일 가능성이 있으므로 서버 설치 전 호스트 명부터 확인 후 Reboot 후 서버 설치 진행 권장

→ \$ xauth list 로 확인 가능

[WebLogic 서버 접속 화면]

Getting Started | Samples | Fast Track | Documentation | Oracle Technology Network

Controls: [Start the Administration Console](#) [Shut Down Server](#)

What's New in Oracle WebLogic Server

New Features and Enhancements

- ▶ **Java EE 8 Support**
WebLogic Server is a fully compatible implementation of the Java Platform, Enterprise Edition (Java EE) Version 8.0.
- ▶ **Runtime Improvements**
WebLogic Server builds on support from prior WebLogic Server versions to improve the reliability, availability, scalability and performance of WebLogic Server applications in clustered environments, when using new Oracle database features, in multi data center architectures, and on Exalogic Systems.
- ▶ **Manageability Improvements**
WebLogic Server continues to provide new management features which simplify the configuration, monitoring and ongoing management of WebLogic Server domains and applications.
- ▶ **Standards Support, Supported Configurations, and WebLogic Server Compatibility**
WebLogic Server supports standards and version, configurations, licensing information, weblogic server compatibility and database interoperability.
- ▶ **Removed and Deprecated Functionality**
The following functionality has been deprecated: Log4j, the Maven 1.x Plug-In, JSP Tags for XML Processing, Server Argument to WLST Diagnostics Commands, URL Format for REST Management, and more. The following functionality has been removed: Multitenancy Support, WebLogic full client, IIOP thin client jar files, and JMS adapter.

For more detailed information on new features and enhancements, see the [What's New in Oracle WebLogic Server](#).

Support for Multiple Programming Models

- ▶ **Java EE 8**, including these APIs and features:
 - ▶ JSON Binding 1.0
 - ▶ Java EE Security API 1.0
 - ▶ JSON Processing 1.1
 - ▶ Servlet 4.0
 - ▶ JavaServer Faces 2.3
 - ▶ Bean Validation 2.0

Learn About WebLogic Server

Resources Available with your WebLogic Server Installation

- ▶ **Administration Console**
A Web browser-based, graphical user interface that you use to manage WebLogic Server. Use the username and password you entered when creating WebLogic samples domains
- ▶ **Code Examples and Sample Applications**
WebLogic Server provides a variety of code examples that show configuration and API use, including a set of Coherence examples. Code examples and sample applications are not installed by default. You must perform a custom installation and select to install the Complete Installation.
- ▶ **Fast Track Deployment and Administrator Guide**
Learn how to quickly deploy Java Platform, Enterprise Edition (Java EE) applications and access system administration tools.
- ▶ **Avitek Medical Records Sample Application**
The Avitek Medical Records application is an educational tool for all levels of Java EE developers. It showcases the use of each Java EE component, and illustrates best practice design patterns for component interaction and client development. MedRec also illustrates best practices for developing and deploying applications with WebLogic Server. Complete source code and documentation is available for this application.

To launch the Medical Records Application, first shut down the current WebLogic Server instance using the **Shut Down Server** button in the top right corner of this page. Then run the `asactWebLogic` script from the MedRec Spring domain root directory. By default, this is the `ORACLE_HOME/user_projects/domains/medrec` directory, where `ORACLE_HOME` represents the directory you specified as the Oracle Home when you installed WebLogic Server; for example, `C:\Oracle\Middleware\Oracle_Home`.
- ▶ **Avitek Medical Records Sample Application (Spring Version)**
A Spring version of the Avitek Medical Records application is now available!

To launch the Spring version of the Medical Records Application, first shut down the current WebLogic Server instance using the **Shut Down Server** button in the top right corner of this page. Then run the `asactWebLogic` script from the MedRec Spring domain root directory. By default, this is the `ORACLE_HOME/user_projects/domains/medrec-spring` directory.

Resources Available on the Internet

- ▶ [What's New in Oracle WebLogic Server](#)
- ▶ [Release Notes for Oracle WebLogic Server](#)

서버 기동 후 브라우저를 사용하여 `http://{IP}:7001` 접속