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Configuring a Domain Using Templates

Objectives

After completing this lesson, you should be able to:

- Describe the internal process used to create or update a domain using a template
- Describe the process of extending a domain template
- Explain the domain templates provided for setting up JDeveloper, SOA, and WebCenter

Road Map

- Creating a custom domain template
- Supporting other environments

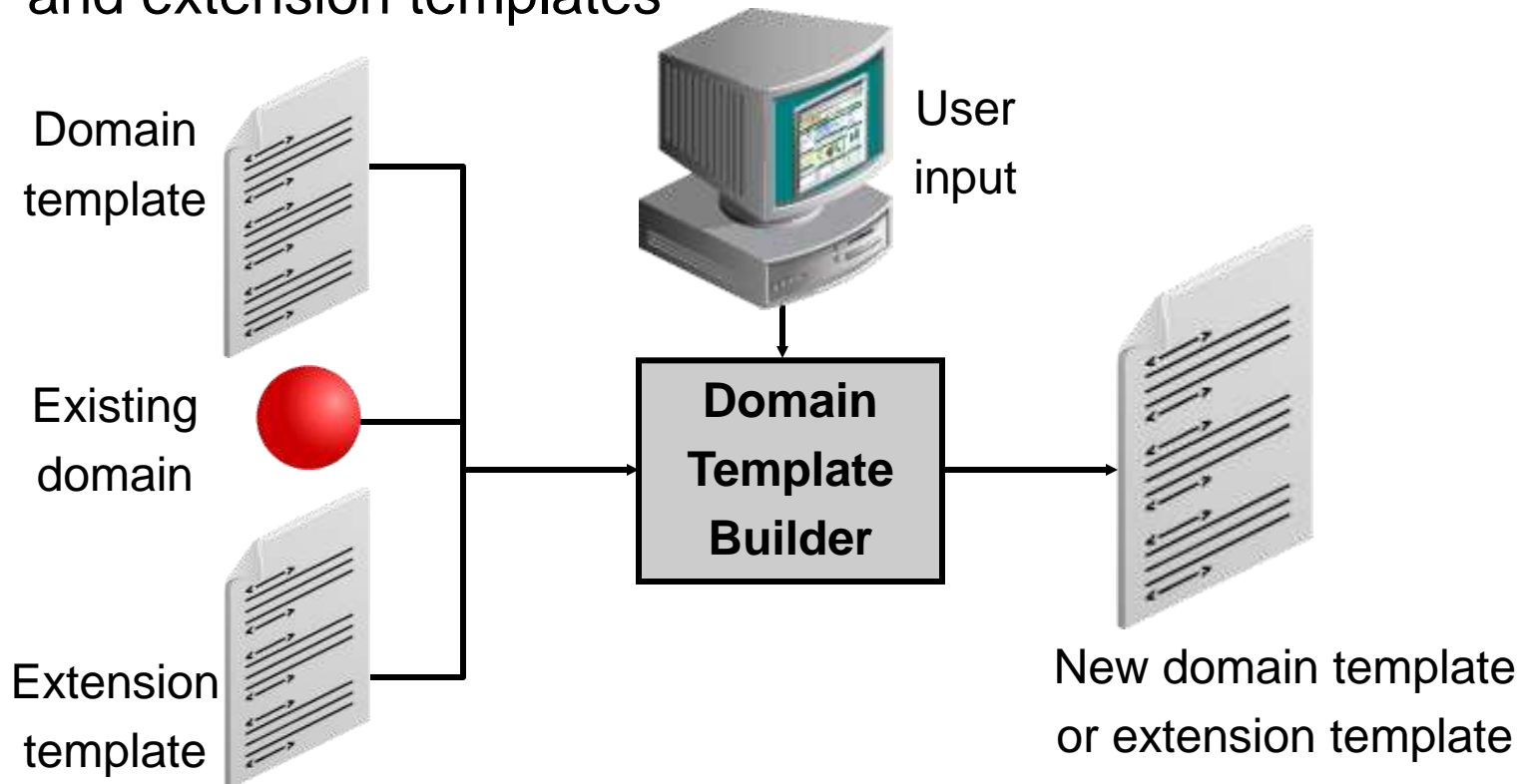


Custom Domain Templates

- A domain template defines the full set of resources within a domain.
- Oracle provides sample templates for creating any platform domain.
- There are three ways to create domain templates:
 - WLST offline command-line tool
 - `pack` command
 - Domain Template Builder
- You can use the Domain Template Builder to create a domain template or an Extension template.
- Using the Domain Template Builder, you can:
 - Define a domain and replicate it across multiple projects
 - Distribute a domain packed with an application that has been developed to run in it

Domain Template Builder

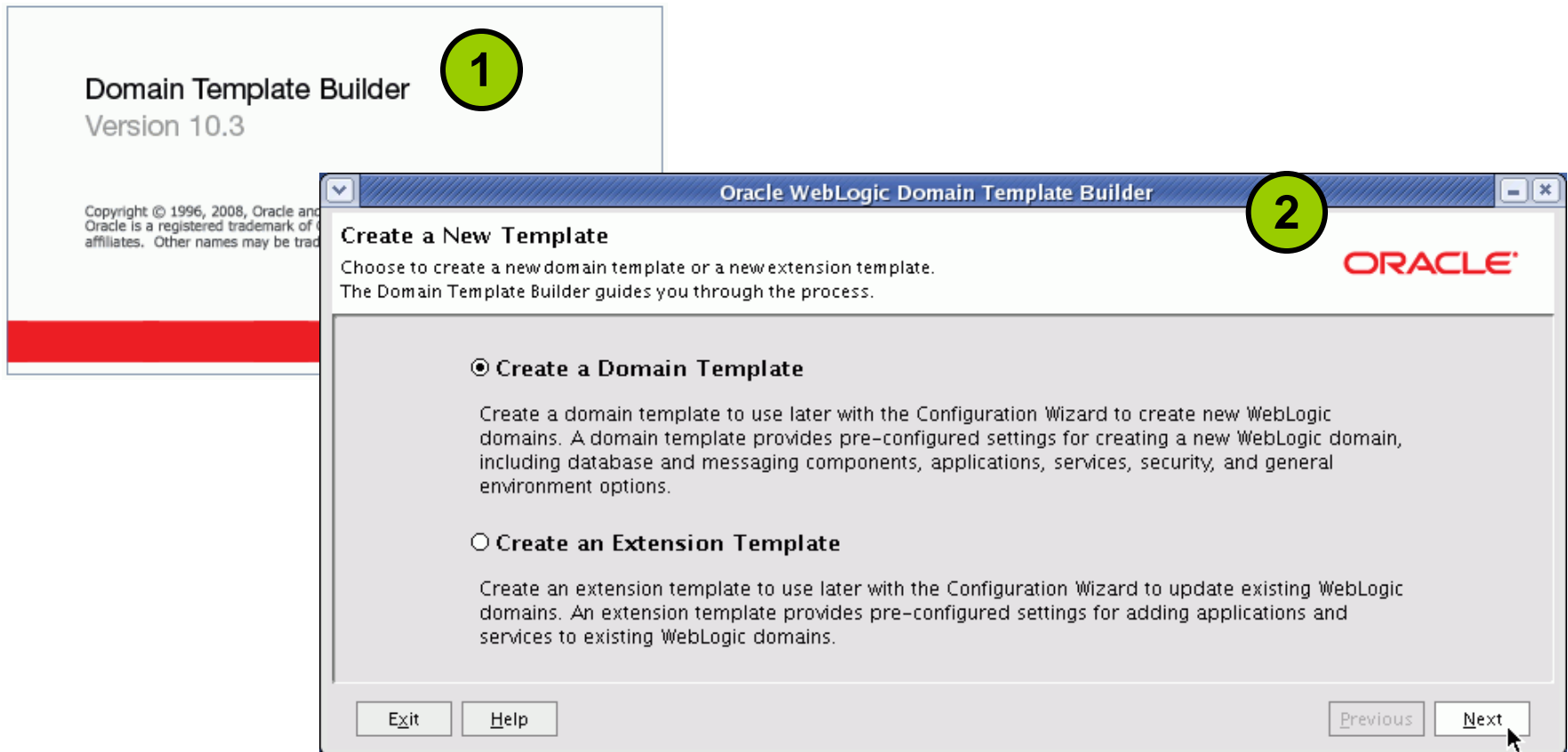
- Available in GUI mode only and not console mode
- A stand-alone Java application to create custom domain and extension templates



Creating a Domain Template

Start the Domain Template Builder:

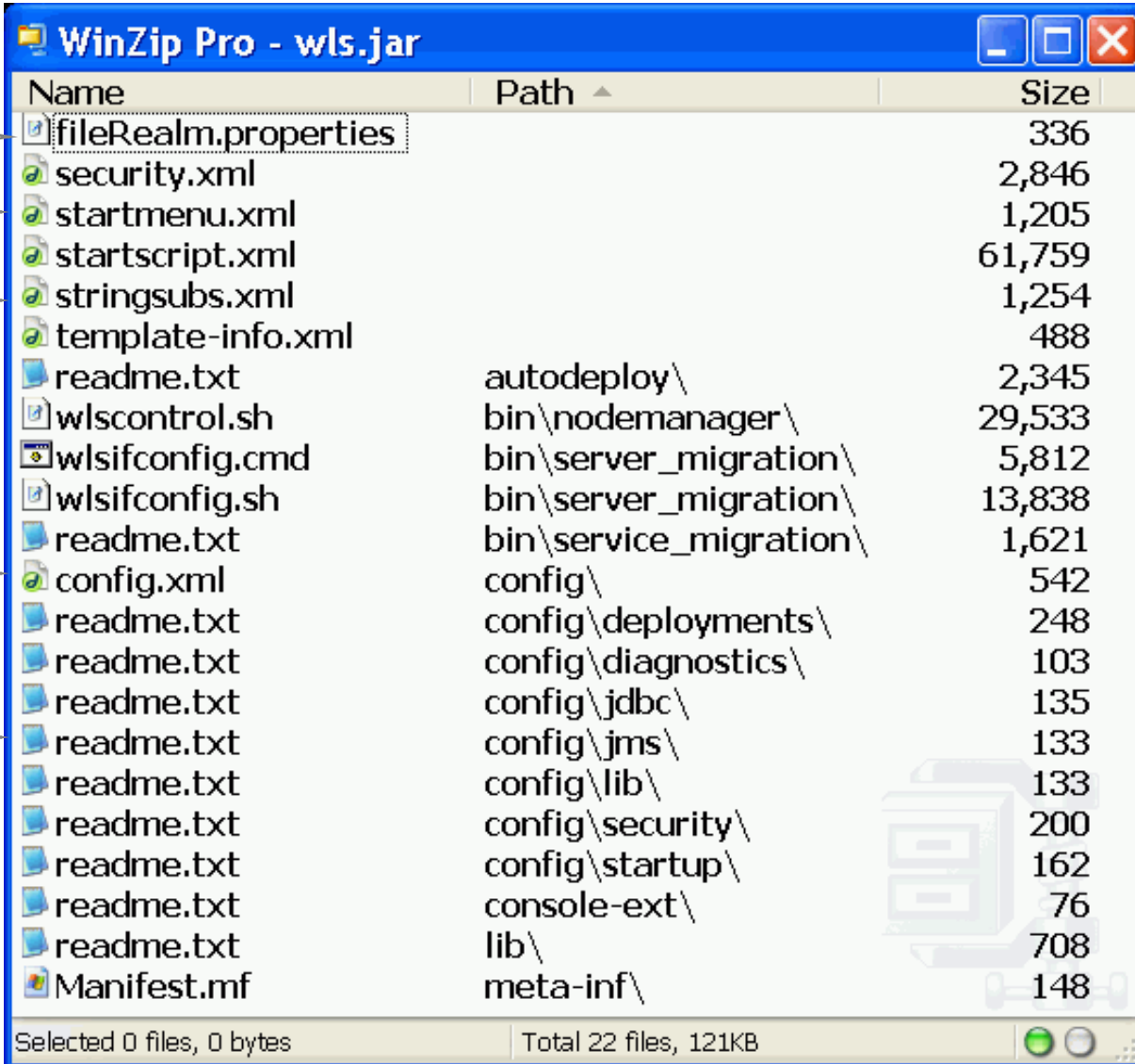
```
<WL_HOME>/common/bin/config_builder.sh
```



Comparing Domain Templates

- The template that comes with WebLogic Server:
 - Located in `<MW_HOME>/wlserver_10.3/common/templates/domains` by default, or wherever you want to store it
- The template that was just created by Domain Template Builder
 - Located in `<MW_HOME>/user_templates` by default, or wherever you want to store it

wls.jar Template



The image shows a screenshot of the WinZip Pro application window displaying the contents of a file named 'wls.jar'. The window title is 'WinZip Pro - wls.jar'. The file list is organized into columns: Name, Path, and Size. The files are listed as follows:

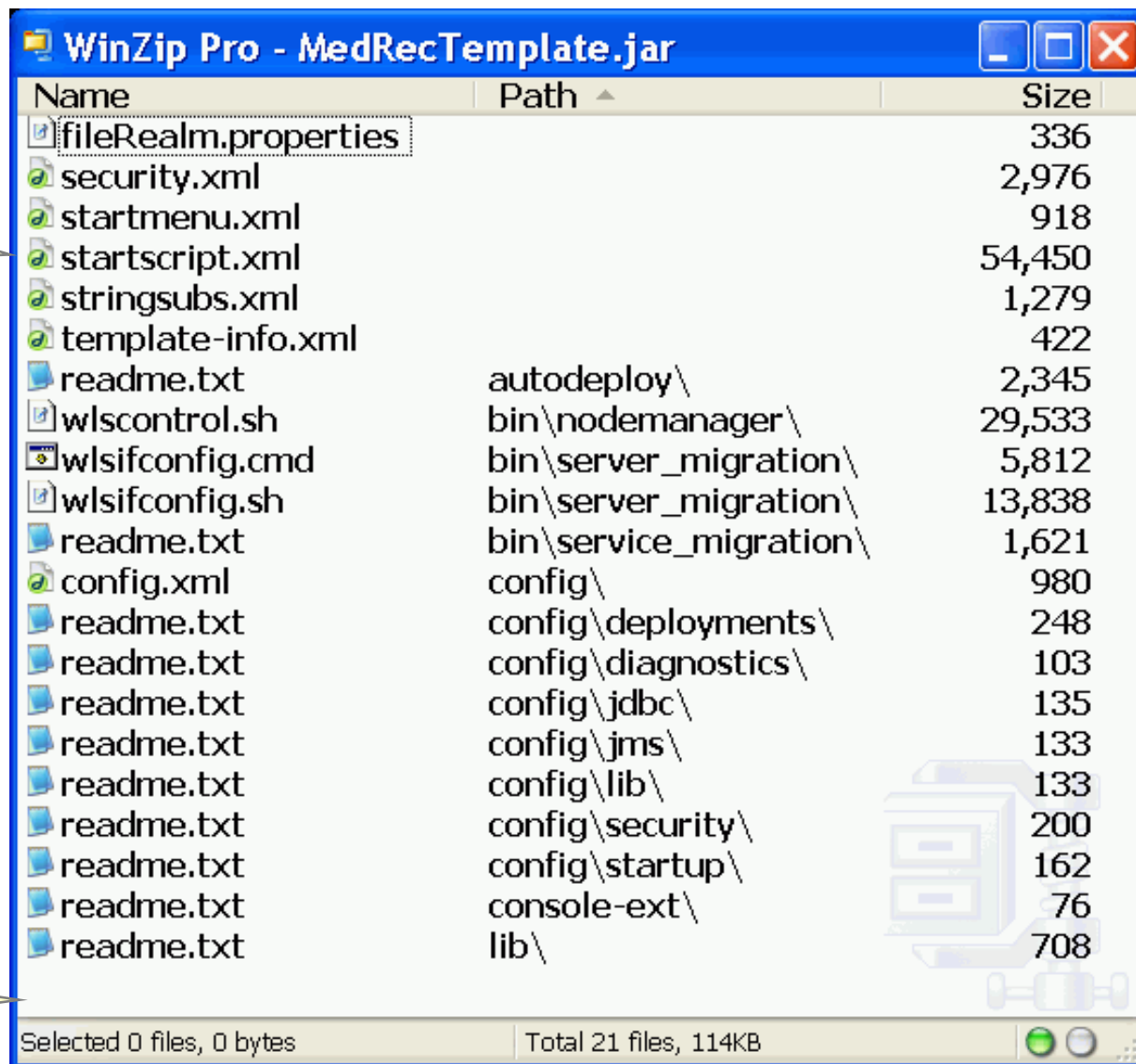
Name	Path	Size
fileRealm.properties		336
security.xml		2,846
startmenu.xml		1,205
startscript.xml		61,759
stringsubs.xml		1,254
template-info.xml		488
readme.txt	autodeploy\	2,345
wlscontrol.sh	bin\nodemanager\	29,533
wlsifconfig.cmd	bin\server_migration\	5,812
wlsifconfig.sh	bin\server_migration\	13,838
readme.txt	bin\service_migration\	1,621
config.xml	config\	542
readme.txt	config\deployments\	248
readme.txt	config\diagnostics\	103
readme.txt	config\jdbc\	135
readme.txt	config\jms\	133
readme.txt	config\lib\	133
readme.txt	config\security\	200
readme.txt	config\startup\	162
readme.txt	console-ext\	76
readme.txt	lib\	708
Manifest.mf	meta-inf\	148

Annotations on the left side of the image point to specific files in the list:

- Users, groups, ACLs** points to `fileRealm.properties`.
- For Windows** points to `startmenu.xml`.
- Substitutions** points to `stringsubs.xml`.
- Shown below** points to `config.xml`.
- Placeholders** points to the first `readme.txt` file in the `bin\autodeploy\` directory.

The status bar at the bottom of the window indicates: 'Selected 0 files, 0 bytes' and 'Total 22 files, 121KB'.

MedRecTemplate.jar Template



A screenshot of a WinZip Pro window titled "WinZip Pro - MedRecTemplate.jar". The window displays a list of files and folders with columns for Name, Path, and Size. The file "fileRealm.properties" is selected. A yellow callout box points to it with the text "Calls setDomainEnv". Another yellow callout box at the bottom left points to the status bar with the text "Missing Manifest.mf".

Name	Path	Size
fileRealm.properties		336
security.xml		2,976
startmenu.xml		918
startscript.xml		54,450
stringsubs.xml		1,279
template-info.xml		422
readme.txt	autodeploy\	2,345
wlscontrol.sh	bin\nodemanager\	29,533
wlsifconfig.cmd	bin\server_migration\	5,812
wlsifconfig.sh	bin\server_migration\	13,838
readme.txt	bin\service_migration\	1,621
config.xml	config\	980
readme.txt	config\deployments\	248
readme.txt	config\diagnostics\	103
readme.txt	config\jdbc\	135
readme.txt	config\jms\	133
readme.txt	config\lib\	133
readme.txt	config\security\	200
readme.txt	config\startup\	162
readme.txt	console-ext\	76
readme.txt	lib\	708

Selected 0 files, 0 bytes Total 21 files, 114KB

Road Map

- Creating a custom domain template
- Supporting other environments
 - JDeveloper
 - SOA
 - WebCenter



Templates for SOA, JDeveloper, and Others

- Templates are created by installing the other products.
- The SOA template is located by default in:
`<SOA_HOME>common/templates/applications/oracle.soa_template_11.1.1.jar`
- Templates for Oracle Middleware products are automatically detected by the domain wizards.

The screenshot shows a configuration window for creating a domain. It has two radio buttons at the top: "Generate a domain configured automatically to support the following products:" (which is selected) and "Base this domain on an existing template". Below the first option is a list of products with checkboxes: "Basic WebLogic Server Domain - 10.3.1.0 [wlserver_10.3] *" (checked), "Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]" (checked), "Oracle Enterprise Manager - 11.1.1.0 [Oracle_SOA1]" (checked), "Oracle Business Activity Monitoring - 11.1.1.0 [Oracle_SOA1]" (unchecked), "Oracle WSM-PM Extension - 11.1.1.0 [Oracle_SOA1]" (checked), and "Oracle JRF - 11.1.1.0 [Oracle_SOA1]" (checked). A red rectangle highlights the first five items. Below the second radio button is a text field for "Template location:" containing "C:\AS11SOAPresentation\mwhome" and a "Browse" button.

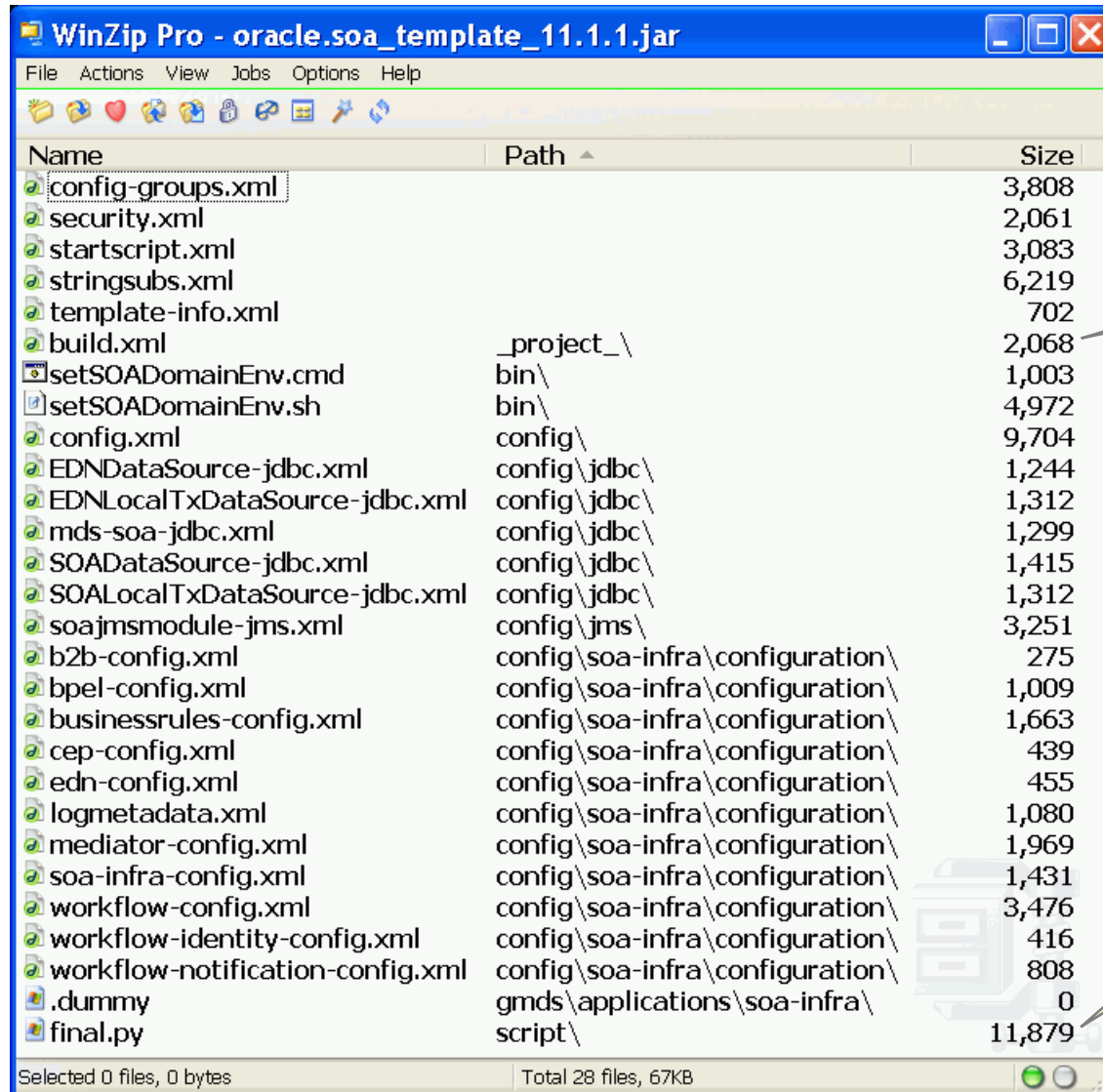
☒ Generate a domain configured automatically to support the following products:

- ☒ Basic WebLogic Server Domain - 10.3.1.0 [wlserver_10.3] *
- ☒ Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]
- ☒ Oracle Enterprise Manager - 11.1.1.0 [Oracle_SOA1]
- ☐ Oracle Business Activity Monitoring - 11.1.1.0 [Oracle_SOA1]
- ☒ Oracle WSM-PM Extension - 11.1.1.0 [Oracle_SOA1]
- ☒ Oracle JRF - 11.1.1.0 [Oracle_SOA1]

☐ Base this domain on an existing template

Template location:

oracle.soa_template_11.1.1.jar Template



Name	Path	Size
config-groups.xml		3,808
security.xml		2,061
startscript.xml		3,083
stringsubs.xml		6,219
template-info.xml		702
build.xml	_project_\	2,068
setSOADomainEnv.cmd	bin\	1,003
setSOADomainEnv.sh	bin\	4,972
config.xml	config\	9,704
EDNDataSource-jdbc.xml	config\jdbc\	1,244
EDNLocalTxDataSource-jdbc.xml	config\jdbc\	1,312
mds-soa-jdbc.xml	config\jdbc\	1,299
SOADDataSource-jdbc.xml	config\jdbc\	1,415
SOALocalTxDataSource-jdbc.xml	config\jdbc\	1,312
soajmsmodule-jms.xml	config\jms\	3,251
b2b-config.xml	config\soa-infra\configuration\	275
bpel-config.xml	config\soa-infra\configuration\	1,009
businessrules-config.xml	config\soa-infra\configuration\	1,663
cep-config.xml	config\soa-infra\configuration\	439
edn-config.xml	config\soa-infra\configuration\	455
logmetadata.xml	config\soa-infra\configuration\	1,080
mediator-config.xml	config\soa-infra\configuration\	1,969
soa-infra-config.xml	config\soa-infra\configuration\	1,431
workflow-config.xml	config\soa-infra\configuration\	3,476
workflow-identity-config.xml	config\soa-infra\configuration\	416
workflow-notification-config.xml	config\soa-infra\configuration\	808
.dummy	gmds\applications\soa-infra\	0
final.py	script\	11,879

For Ant

WLST and Jython

WLS Configuration in the Context of Other Products in the Fusion Middleware Suite

- Repository Creation Utility (RCU)
 - Requires the Database to be installed first
 - Is used for SOA
- WebTier
 - Can be installed independent of WLS in “opmn-managed mode”
 - Can be installed after WLS with Java Required Files (JRF) enabled
 - Includes Oracle HTTP Server and Oracle Web Cache

Repository Creation Utility (RCU)

Repository Creation Utility - Step 3 of 7 : Select Components

Select Components

ORACLE FUSION MIDDLEWARE

A Prefix groups the components associated with one deployment.

☐ Select an Existing Prefix

☒ Create a New Prefix

Component	Schema Owner
<input checked="" type="checkbox"/> Oracle AS Repository Components	
<input checked="" type="checkbox"/> AS Common Schemas	
<input checked="" type="checkbox"/> Metadata Services	DEV1_MDS
<input checked="" type="checkbox"/> Audit Services	DEV1_IAU
<input checked="" type="checkbox"/> Enterprise Scheduler Service	DEV1_ORAESS
<input checked="" type="checkbox"/> Identity Management	
<input checked="" type="checkbox"/> Oracle Internet Directory	ODS
<input checked="" type="checkbox"/> Oracle Identity Federation	DEV1_OIF
<input checked="" type="checkbox"/> ECM_SUITE	
<input checked="" type="checkbox"/> ODI_REPOSITORIES	
<input checked="" type="checkbox"/> SOA Infrastructure	
<input checked="" type="checkbox"/> SOA Infrastructure	DEV1_SOAINFRA
<input checked="" type="checkbox"/> Business Activity Monitoring	DEV1_ORABAM
<input checked="" type="checkbox"/> User Messaging	DEV1_ORASDPM
<input checked="" type="checkbox"/> Webcenter Suite	
<input checked="" type="checkbox"/> WebCenter Spaces	DEV1_WEBCENTER
<input checked="" type="checkbox"/> Portlet Producers	DEV1_PORTLET
<input checked="" type="checkbox"/> Oracle Content Server 10g	DEV1_OCSERVER
<input checked="" type="checkbox"/> Discussions	DEV1_DISCUSSIONS
<input checked="" type="checkbox"/> Wiki and Blogs	DEV1_WIKI
<input checked="" type="checkbox"/> Portal and BI	
<input checked="" type="checkbox"/> Portal	DEV1_PORTAL
<input checked="" type="checkbox"/> Discoverer	DEV1_DISCOVERER

Messages:

[Help](#) [< Back](#) [Next >](#) [Finish](#) [Cancel](#)

SOA Installation

- Before proceeding with the SOA installation:
 - Install the Database
 - Create DB schemas for the suites to install using RCU
 - Install and configure a WebLogic Server
- Perform the SOA installation.
- After the SOA installation, perform one or both of the following tasks:
 - Extend the existing WebLogic domain to support SOA functions.
 - Create a new WebLogic domain to support SOA functions.

Quiz

Invoke the Template Configuration Wizard using _____.

1. `config.sh` **under** `<WL_HOME>/common/bin`
2. `config_builder.sh` **under** `<WL_HOME>/common/bin`

Quiz

When you create a new domain to automatically support Oracle WebLogic Server, which template is it based on by default?

1. `wlst.jar`
2. `ws.jar`
3. `web_server.jar`
4. `server.jar`
5. `wls.jar`

Quiz

Which of the following can you use to create a domain template:

1. The `pack` command
2. `config_temp.sh`
3. The Administration Console
4. `config_builder.sh`
5. The WLST offline command-line tool

Summary

In this lesson, you should have learned how to:

- Create custom domain templates
- Create a new domain using the custom domain template for JDeveloper, SOA, and WebCenter

Practice 5 Overview: Using a Domain Template

This practice covers the following topics:

- Examining an existing template
- Extending an existing domain using an application template