



ORACLE[®]

Managing WebLogic Server Lifecycle

Starting WLS with Domain Supplied Scripts

- `$DOMAIN_HOME/startWebLogic.sh`
 - Starts the domain admin server
- Starting Managed Servers
 - `$DOMAIN_HOME/bin/startManagedWebLogic.sh`
managedServerName <http://adminserverdomainname:7001>

Stopping WLS Servers via Scripts

- `$DOMAIN_HOME/bin/stopWebLogic` optionalUser optionalPassword t3://host:port
 - If no arguments are supplied then `t3://localhost:7001` is used
 - Uses WSLT to shutdown WLS

Creating a Boot Identity File

- Create a file called `boot.properties` in the `DOMAIN_NAME/servers/<server_name>/security` directory that contains two lines:
 - `username=username`
 - `password=password`
- The first time you start the server, the server reads the Boot Identity file and overwrites it with an encrypted version of the username and password.
- Thereafter, the server remembers the credentials for subsequent startup cycles.

Starting WLS Servers as a Windows Service

- There are the scripts named *installSvc.cmd* and *uninstallSvc.cmd* located in `%MIDDLEWARE_HOME%/wlserver_10.3/server/bin`
- You should set a number of environment variables before calling these scripts
- `Boot.properties` file should exist for each server that is going to be started as a Windows service

Setting up a Windows Service to start WLS server - example

```
@echo off
SETLOCAL
set DOMAIN_NAME=FoundationLab
set USERDOMAIN_HOME=c:\wls103\user_projects\domains\FoundationLab
set SERVER_NAME=AdminServer
set PRODUCTION_MODE=true
set JAVA_OPTIONS=
    Dweblogic.Stdout="c:\wls103\user_projects\domains\FoundationLab\stdout.txt" -
    Dweblogic.Stderr="c:\wls103\user_projects\domains\FoundationLab\stderr.txt"
set MEM_ARGS=-Xms128m -Xmx256m
call "c:\wls103\wlserver_10.3\server\bin\installSvc.cmd"
ENDLOCAL
```

Node Manager

- Is a process that runs on a machine and it not associated with a domain
 - Required to start WLS Servers from Console
 - WLST can also call node manager to start/stop servers
- Two Flavors
 - Java Flavor
 - Shell Scripts

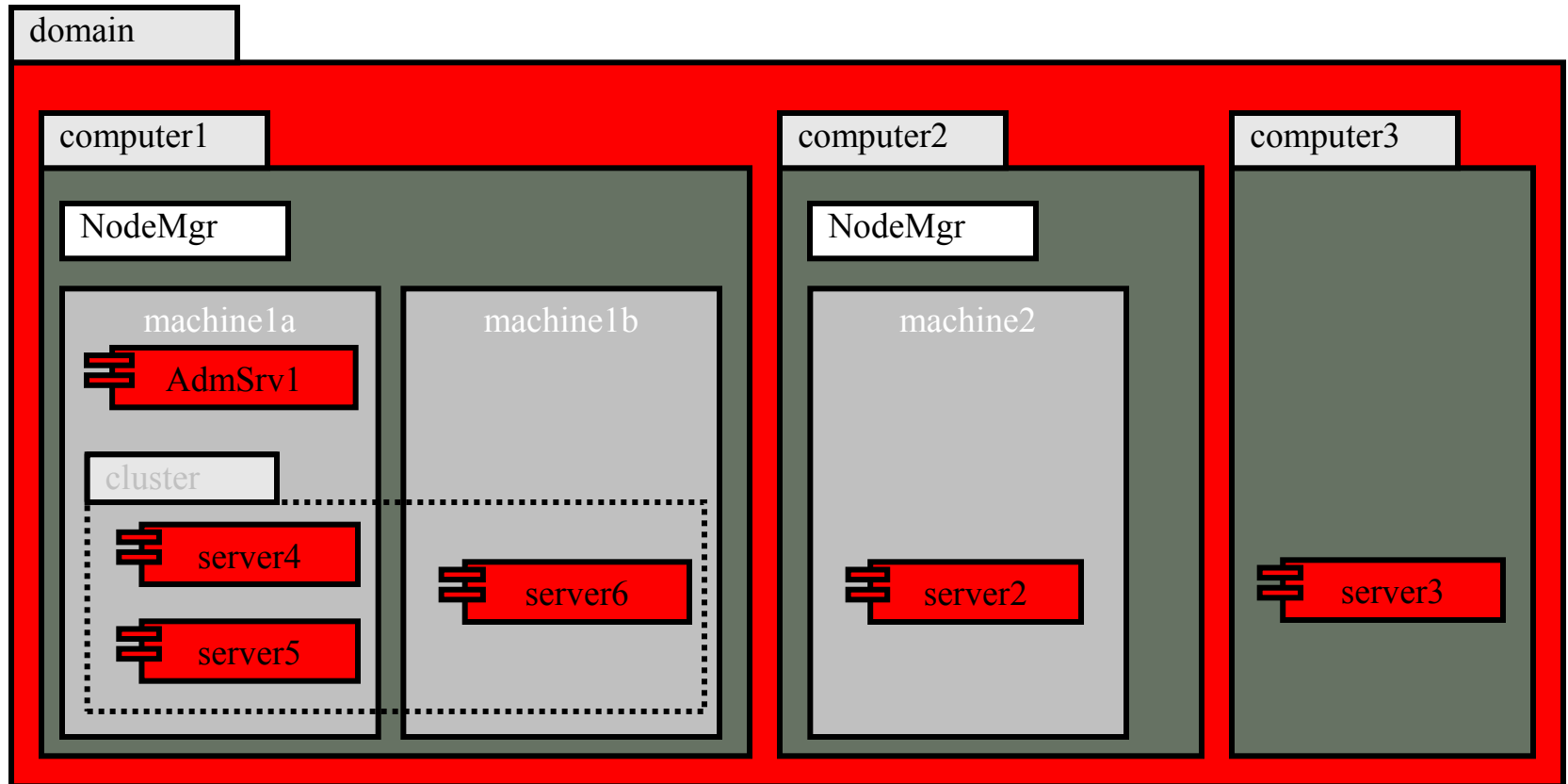
Starting/Stopping Node Manager

- Starting Node Manager
 - `$WL_HOME/server/bin/startNodeManager.sh(cmd)`
- Stopping Node Manager
 - Nothing supplied (kill -9 in UNIX for example)
- You can install/uninstall NodeManager as a Windows Service using scripts named *installNodeMgrSvc.cmd* and *uninstallNodeMgrSvc.cmd* located in `%MIDDLEWARE_HOME%/wlserver_10.3/server/bin`

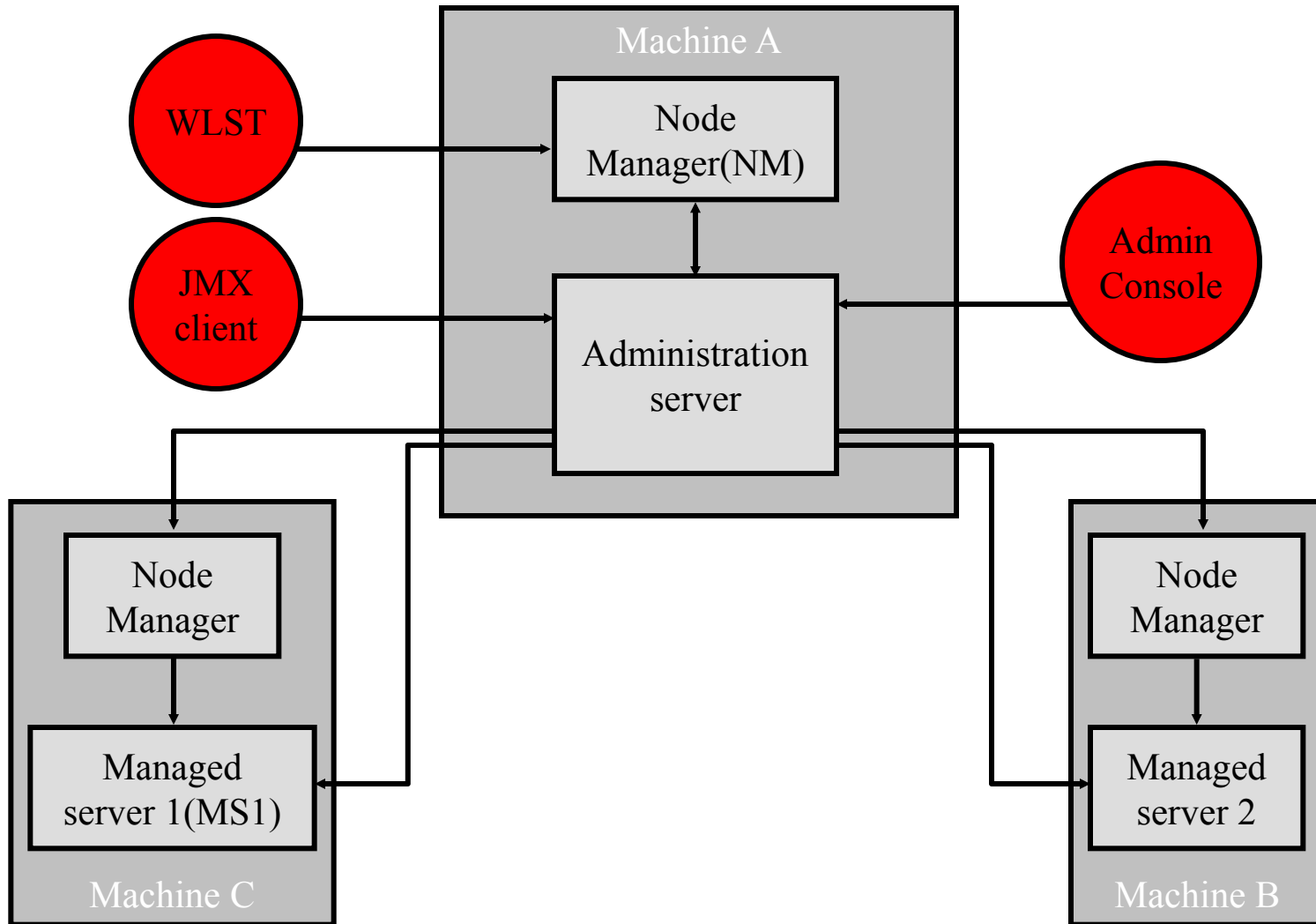
What is a Machine?

- Logical representation of physical host
- Includes configuration of Node Manager
 - Listen Ports
- Ensures State is replicated to JVM's on separate machines

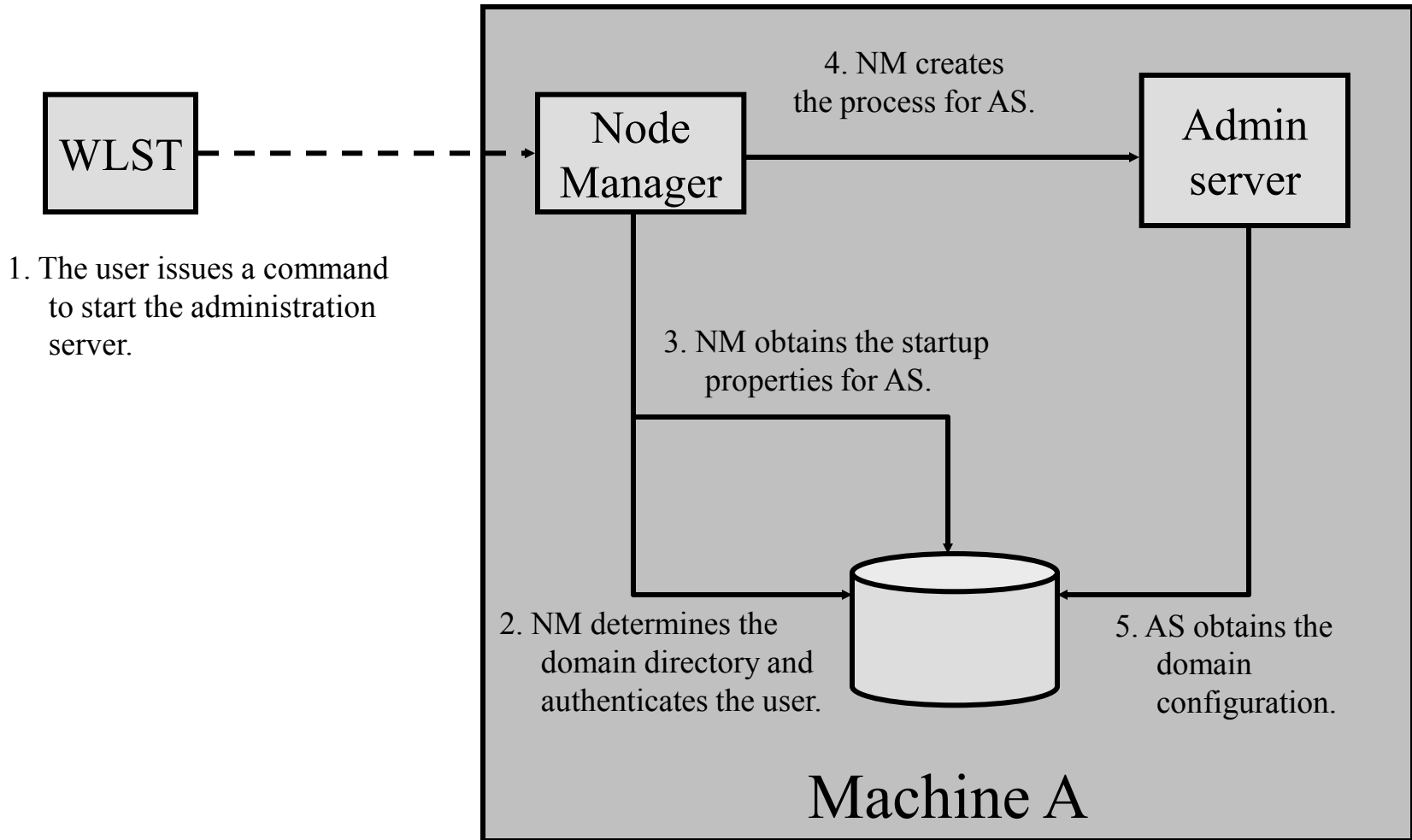
Relationship of Machines to Other Components



Node Manager Architecture

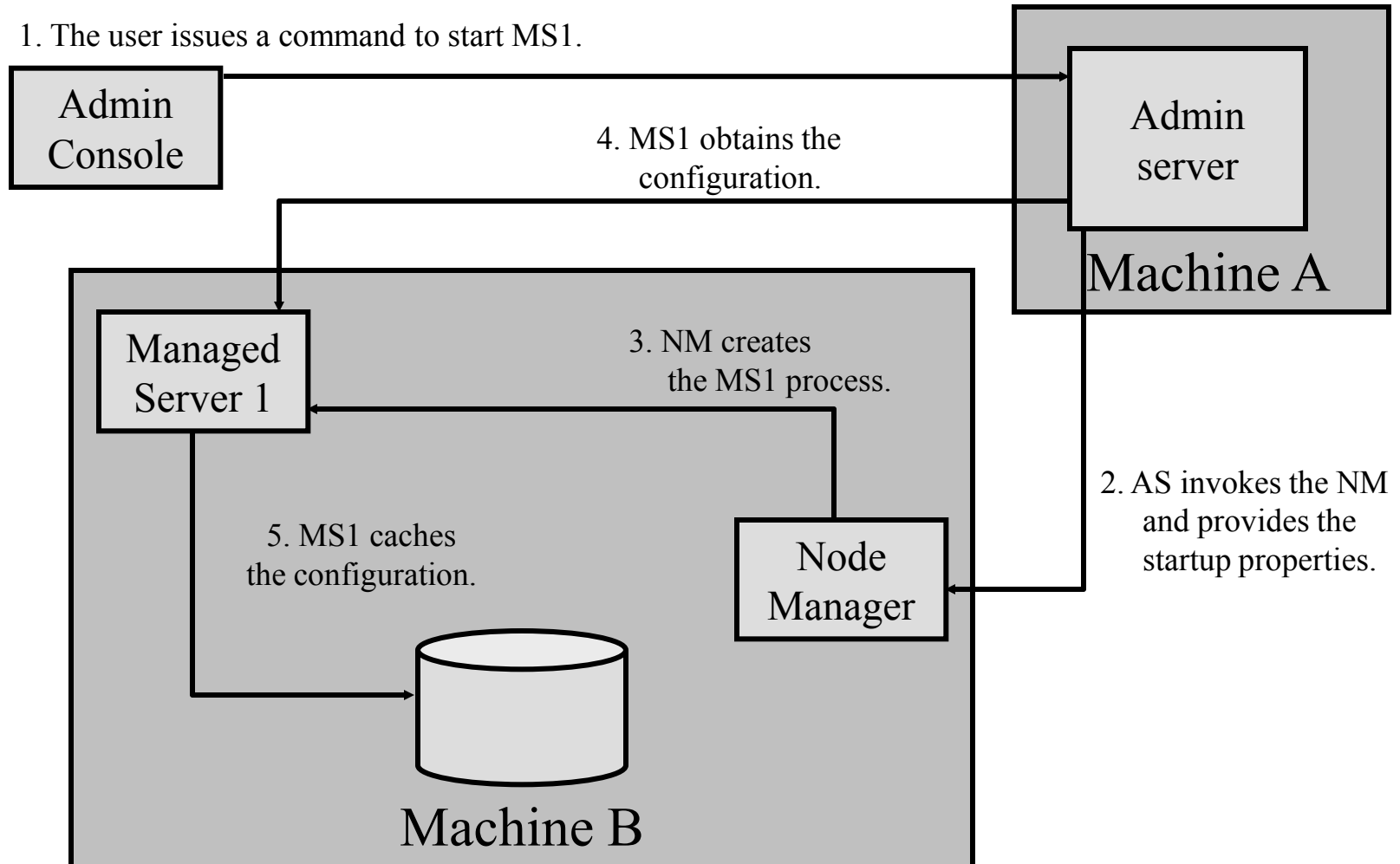


How a Node Manager Starts an Administration Server

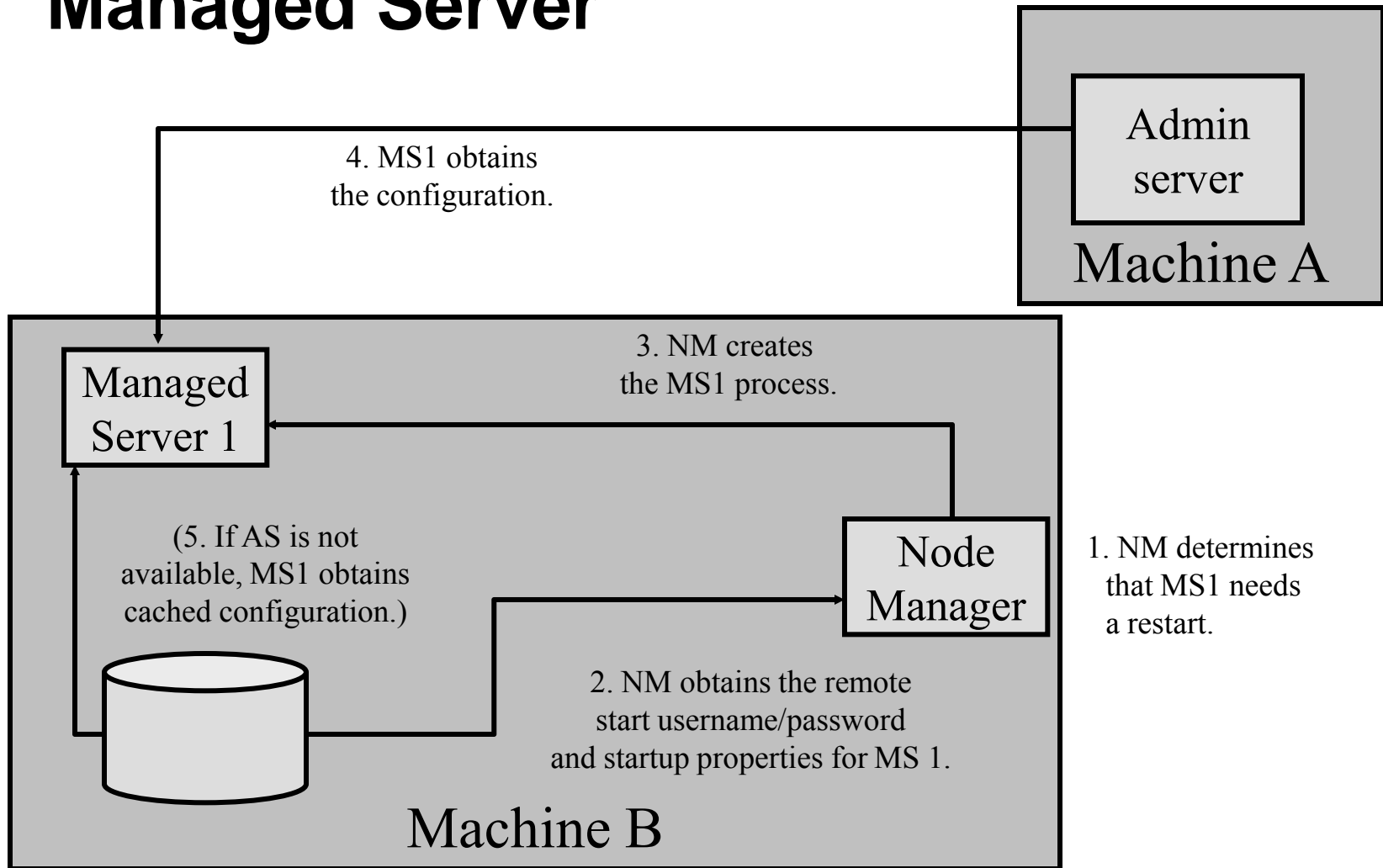


How a Node Manager Starts a Managed Server

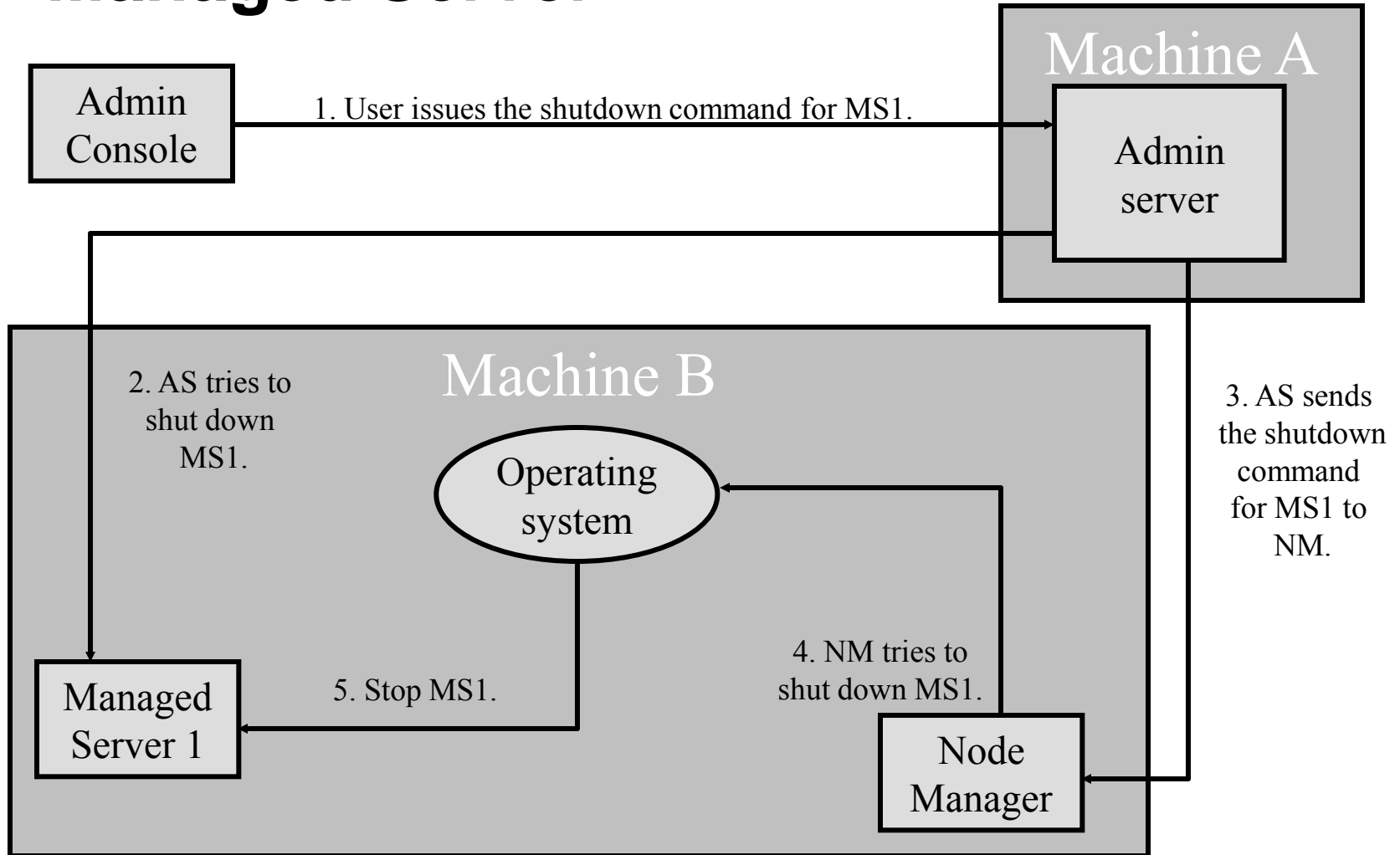
1. The user issues a command to start MS1.



How a Node Manager Restarts a Managed Server



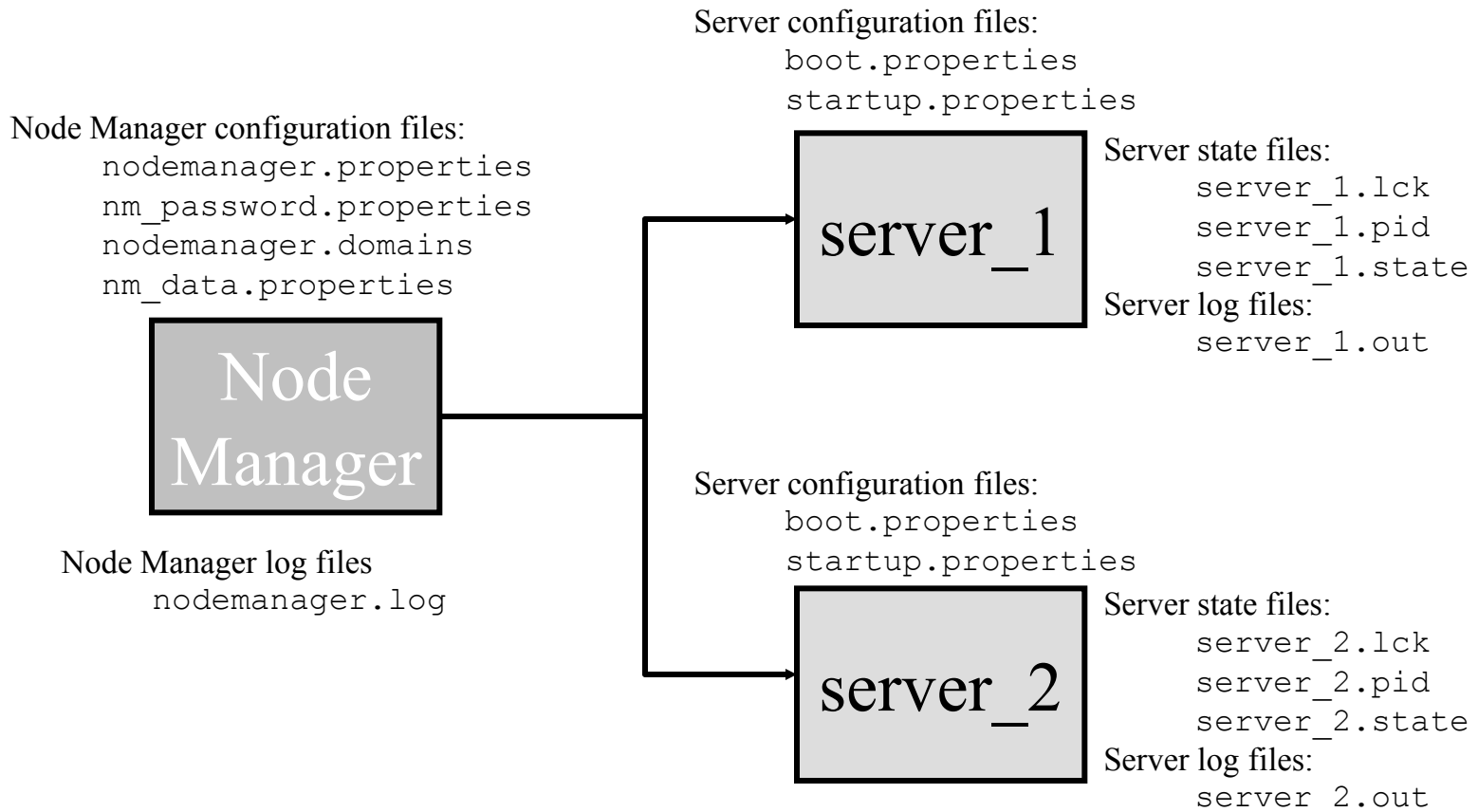
How a Node Manager Shuts Down a Managed Server



Node Manager Configuration and Log Files

- Two sets of files:
 - The Node Manager `config` files, located in `DOMAIN_HOME/servers/server_name/data/nodemanager`
 - The Node Manager `log` files, located in `DOMAIN_HOME/servers/server_name/logs` **and** `<WL_HOME>/common/nodemanager`

Node Manager Configuration and Log Files



Starting/Stopping Servers with WLS Admin Console

Home > dev_domain > Summary of Environment > Summary of Servers

Summary of Servers

Configuration Control

Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in Standby mode requires the domain-wide administration port.



Customize this table

Servers(Filtered - More Columns Exist)

Start Resume Suspend Shutdown Restart SSL

Showing 1 to 1 of 1 Previous | Next

<input checked="" type="checkbox"/>	Server ^	Machine	State	Status of Last Action
<input checked="" type="checkbox"/>	DevServer(admin)	devmachine	RUNNING	None

Start Resume Suspend Shutdown Restart SSL

Showing 1 to 1 of 1 Previous | Next

Starting/Stopping Servers with WLS Admin Console Requirements

- Admin Server has to be running
 - Hosts the Console
- Node Manager must be running to start servers from the console

Starting/Stopping With WLST Without Node Manager

- Starting

```
wls:offline/>startServer('AdminServer','mydomain','t3://localhost:7001','weblogic','weblogic','c:/bea/user_projects/domains/mydomain','true','60000','false')
```

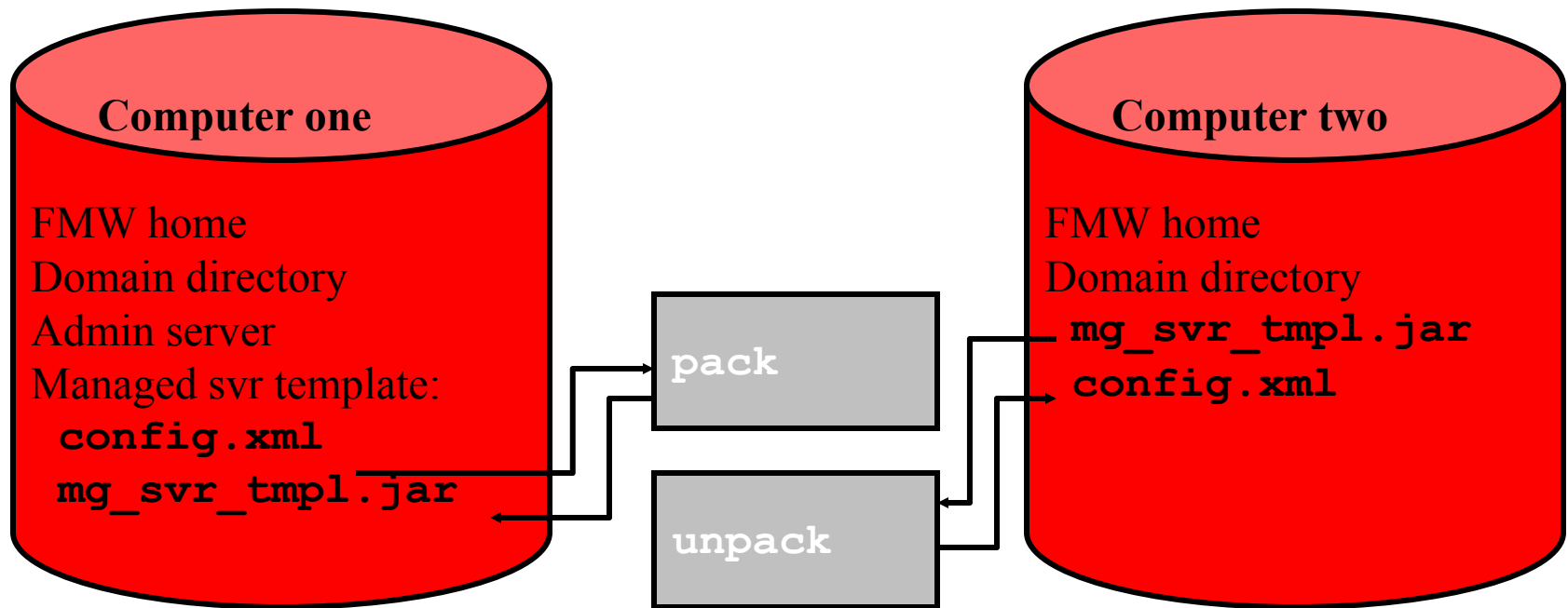
- Stopping

```
wls:/offline> connect('weblogic','weblogic','t3://localhost:7001')
....connected
wls:/mydomain/serverConfig> shutdown('AdminServer','Server','false',1000, block='false')
```

Creating a Managed Server on a Remote Computer

1. Install WLS on both computers.
2. Create a managed server using the Administration Console.
3. Create a managed server template using `pack`.
4. Create a managed server on a remote computer using `unpack`.
5. Start the remote managed server.

Creating a Managed Server on a Remote Computer



pack and unpack: Examples

- On computer one (administration server):

```
[oracle@wls-sysadm]$ cd $WL_HOME/common/bin
[oracle@wls-sysadm]$ pack -managed=true
    -domain=/u01/app/oracle/user_projects/domains/mydomain
    -template=/home/oracle/work/mydomain_managed.jar
    -template_name="My Managed Server Domain"
```

- On computer two (remote managed server):

```
[oracle@wls-mgdsvr2]$ cd $WL_HOME/common/bin
[oracle@wls-mgdsvr2]$ unpack
    -domain=/u01/app/oracle/user_projects/domains/mydomain
    -template=/home/oracle/work/mydomain_managed.jar
```

Domain scale-up using GridControl

ORACLE Enterprise Manager 11g Grid Control Help

Fusion Middleware Domain Scale Up

Select Source Configure Domain Schedule Review

Select Source Cancel Step 1 of 4 Next

This procedure allows scaling up of existing domains in online or offline mode. It allows cloning of existing managed servers or addition of new managed servers to add capacity.

* Fusion Middleware Domain Name

* Working Directory

Provisioning Mode

Administration Server Console Credentials

* Administrator Username

* Administrator Password

Administration Server Host Credentials

Preferred Credentials

Override Preferred Credentials

* Host Username

* Host Password

Source Information

Components	Host
medrec_oradb	oel46-vmware
Fusion Middleware Home	/opt/oracle/Middleware
Weblogic Server 10.3	/opt/oracle/Middleware/wlserver_10.3
Oracle Home(s)	/opt/oracle/Middleware/user_projects
Oracle_WT	/domains/medrec_oradb

<http://bit.ly/WLS11gDomainScaleup>