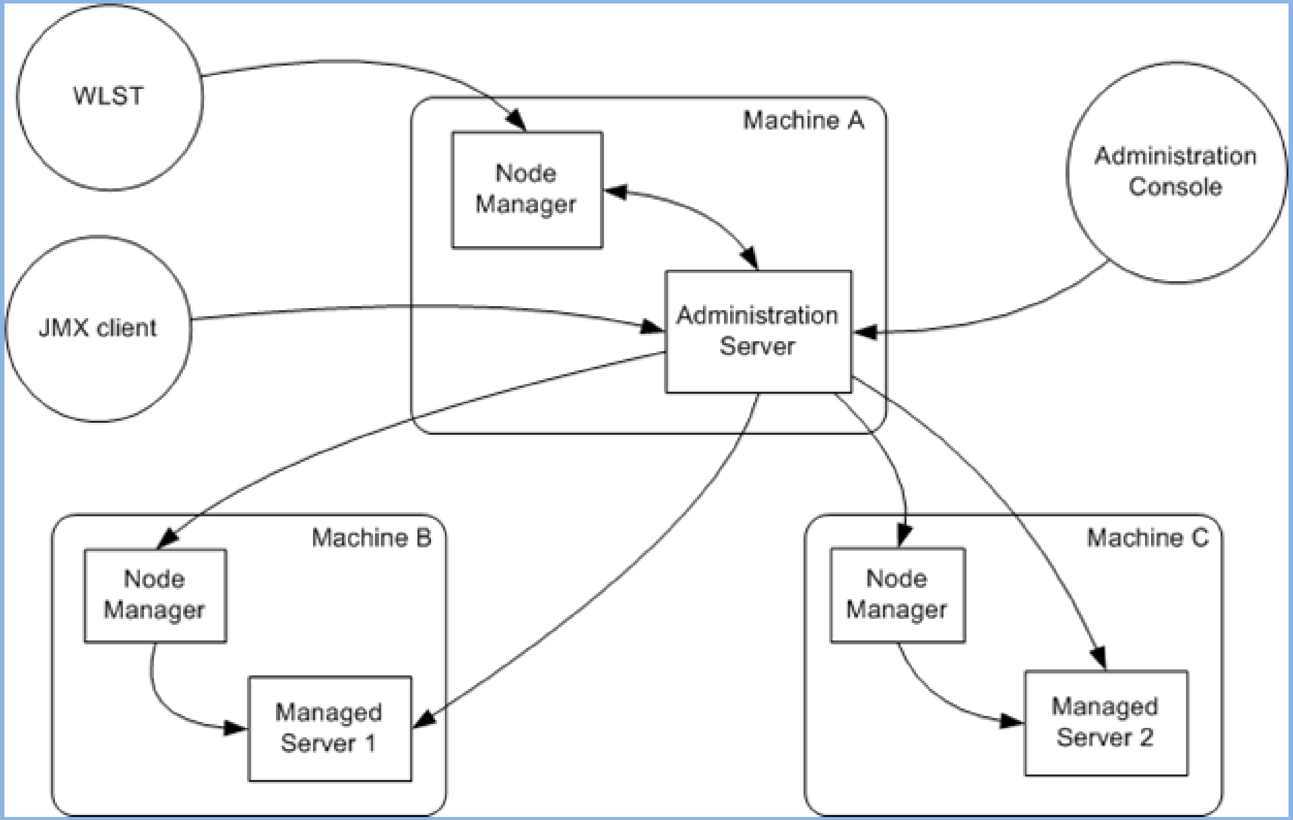
Node Manager and Application Deployment

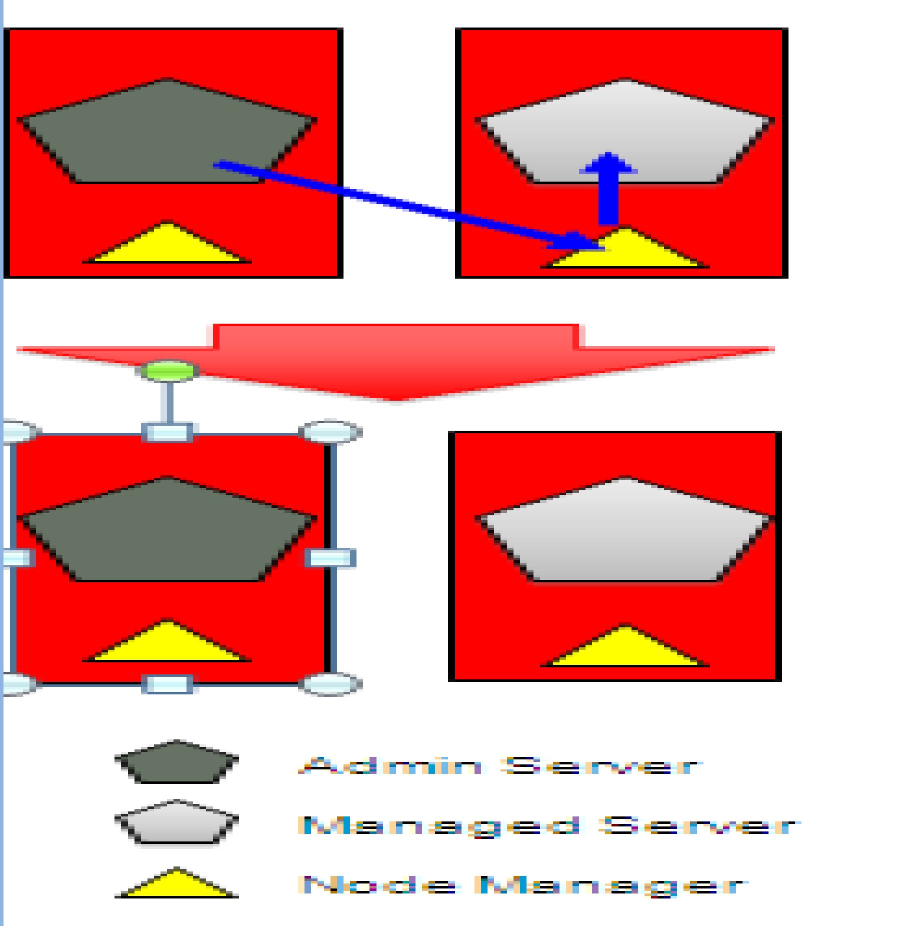
The node manager starts up and runs as a separate java process from any managed server.

Can be used to start / stop and monitor servers and clusters within a single domain

- Node Manager is an optional tool.
- You can start/stop a Server without the Node Manager


WLST
Machine A
Node Manager
Administration Console
JMX client
Administration Server
Machine B
Node Manager
Managed Server 1
Machine C
Node Manager
Managed Server 2

- Utility/process running on a physical server that enables you to start, stop, suspend, and restart WebLogic Server instances remotely
- Must run on each physical server that hosts WebLogic Server instances that you want to control with Node Manager
- Not associated with a domain. Can start any server instance that resides on the same physical server.
- Optional, but required to start/stop servers using the Administration Console


Admin Server
Managed Server
Node Manager

Script Location

$WL_HOME/server/bin

startNodeManager.sh or startNodeManager.cmd

By default listens on port 5556

```
startNodeManager.cmd server_name port_no
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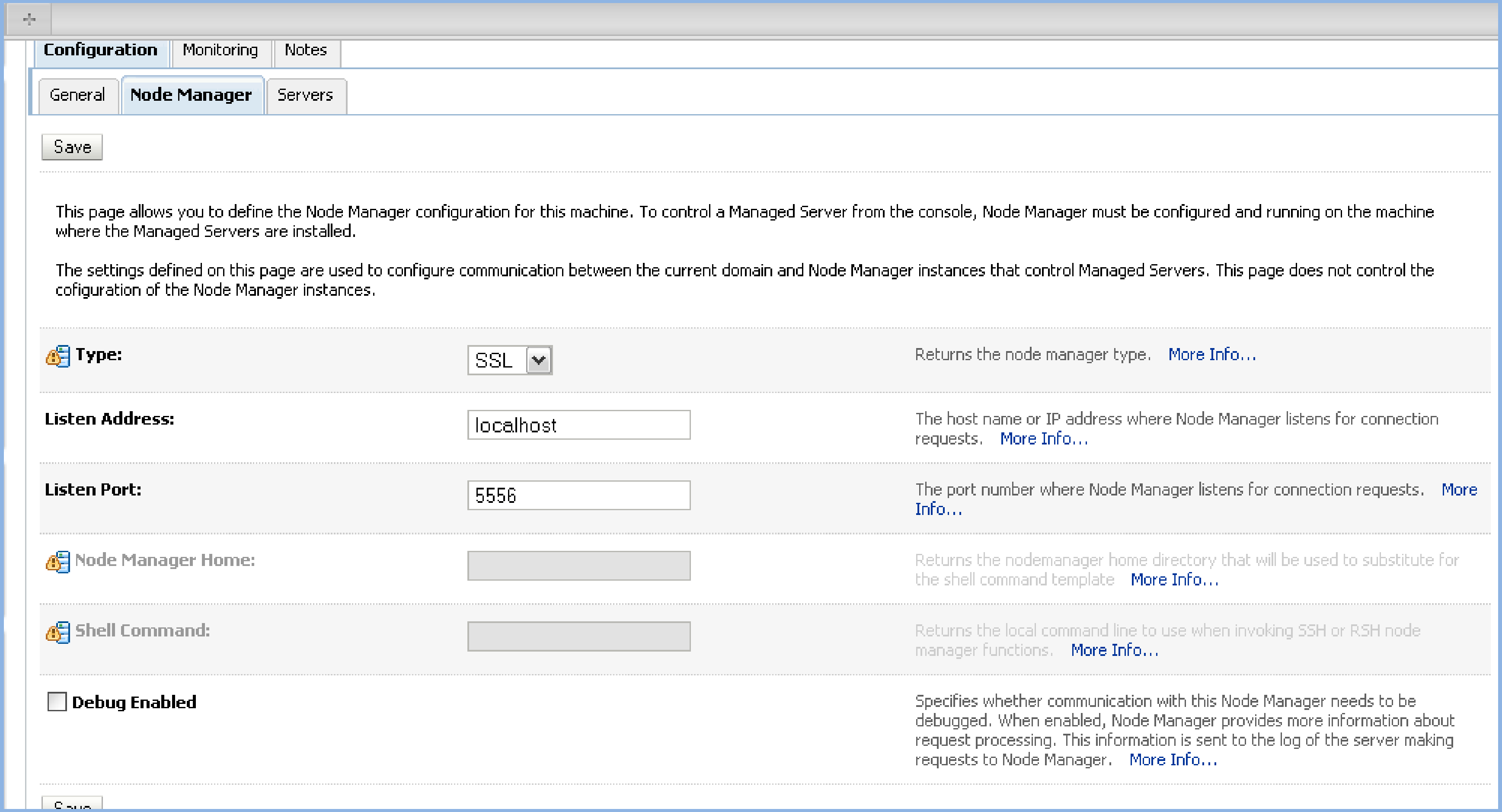
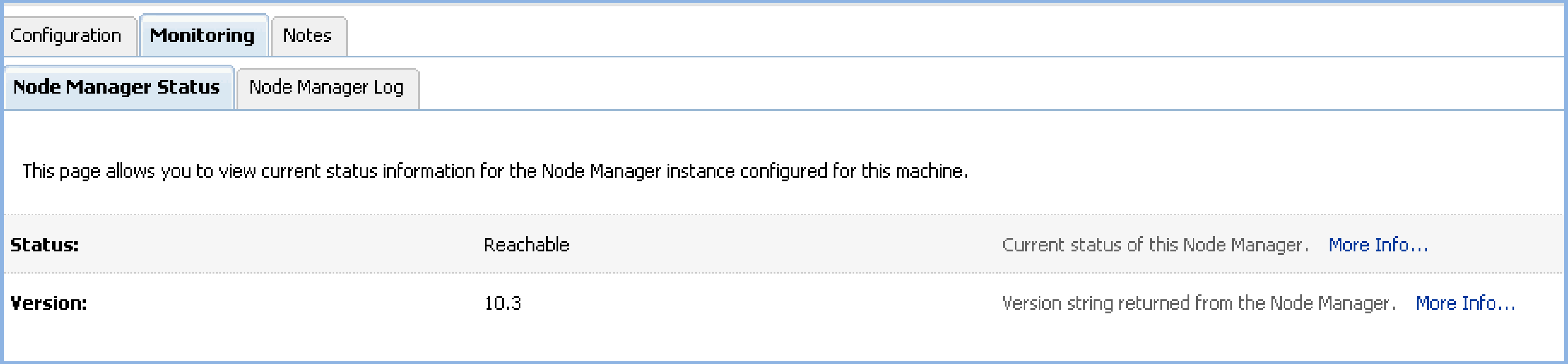


This page allows you to define the Node Manager configuration for this machine. To control a Managed Server from the console, Node Manager must be configured and running on the machine where the Managed Servers are installed.

The settings defined on this page are used to configure communication between the current domain and Node Manager instances that control Managed Servers. This page does not control the cofiguration of the Node Manager instances.

Type:	SSL	Returns the node manager type. More Info...
Listen Address:	localhost	The host name or IP address where Node Manager listens for connection requests. More Info...
Listen Port:	5556	The port number where Node Manager listens for connection requests. More Info...
Node Manager Home:		Returns the nodemanager home directory that will be used to substitute for the shell command template More Info...
Shell Command:		Returns the local command line to use when invoking SSH or RSH node manager functions. More Info...
□ **Debug Enabled**		Specifies whether communication with this Node Manager needs to be debugged. When enabled, Node Manager provides more information about request processing. This information is sent to the log of the server making requests to Node Manager. More Info...

Montor the status of Node Manager



This page allows you to view current status information for the Node Manager instance configured for this machine.

Status:	Reachable	Current status of this Node Manager. More Info...
Version:	10.3	Version string returned from the Node Manager. More Info...

Deployment

- To deploy an Applcation from Admin Console, you must first create a deployable archive in Oracle JDeveloper or through the ant or WebLogic Scripting Tool (WLST) command line tools. The archive can consist of a single SOA composite application revision in a JAR file or multiple composite application revisions (known as a SOA bundle) in a ZIP file

Types of Applications for deployment

- A complete Java EE application packaged as an Enterprise Archive (EAR) file

- Standalone modules packaged as Java Archive files (JARs) containing Web
- Services, Enterprise JavaBeans (EJBs), application clients (CARs), or resource
- adapters (RARs).

- An ADF application, developed using oracle ADF

- An Oracle SOA Suite composite application. A SOA composite application is a
- single unit of deployment that greatly simplifies the management and lifecycle of
- SOA applications

- An Oracle WebCenter application

Deploy a simple J2EE Application

- Login to admin console and deploy a simple j2EE Application.
- Demo on deployment

DataSources

- A **data source is a Java object that application components use to obtain connections to a relational database. Specific connection information, such as URL or user name and password, are set on a data source object as properties and do not need to be explicitly defined in an application's code. This abstraction allows applications to be built in a portable manner, because the application is not tied to a specific back-end database.**

- Applications use the Java Naming and Directory Interface (JNDI) API to access a datasource object
- The application uses a JNDI name that is bound to the data source object
- When you configure certain Oracle Fusion Middleware components, such as Oracle SOA Suite or Oracle WebCenter, using the Oracle WebLogic Server Configuration Wizard, you specify the data source connection information

Configure a data source

- 1.Login to admin console
- 2.Navigate to domain_name⍰services⍰JDBC⍰Data Souces
- 3.Click new to create a new datasource.
- 4.Give the ds name and jndi name
- Provide driver type as oracle and select Database driver
- 5.provide database details
- 6.Test configuration and click finish

- Demo on DataSource configuration