This document supports the version of each product listed and supports all subsequent versions until the document is replaced by a new edition. To check for more recent editions of this document, see http://www.vmware.com/support/pubs.
You can find the most up-to-date technical documentation on the VMware Web site at:
http://www.vmware.com/support/
The VMware Web site also provides the latest product updates.
If you have comments about this documentation, submit your feedback to:
docfeedback@vmware.com
Contents

Using VMware vFabric Application Director Catalog Services 5

1 Sample vFabric Application Director Catalog Services 7

2 Using and Configuring Sample Application Server Services 9
   Sample Application Server Services 9

3 Sample Database Server Services 17

4 Sample Web Server Services 23

5 Sample Monitoring Server Services 27

6 Sample Performance Management Service 29

7 Sample Zimbra Services 31

8 Various Sample Services 33
   Index 35
Using VMware vFabric Application Director
Catalog Services

vFabric Application Director catalog provides a list of prepopulated standard logical templates, predefined (out-of-the-box) applications and services, and customizable scripts for users to create and deploy an application blueprint.

The vFabric Application Director catalog lets you specify definitions for installable custom services on logical templates using install, configure, start, and update scripts. A catalog administrator can add a service using logical templates or scripts to support custom application infrastructure and operating systems required by IT.

**Intended Audience**

This information is intended for anyone who wants to better understand the sample infrastructure and software services, supported operating systems, and supported application components available in vFabric Application Director. This audience includes application architects and catalog administrators who work in collaboration with application infrastructure administrators and cloud administrators.
vFabric Application Director includes predefined components, such as services, in its catalog that are reusable components in several applications. These services are available to all user groups in vFabric Application Director. Logical templates must be added for each group outside the Default group.

Catalog Services

On the vFabric Application Director title bar, click the drop-down menu and select Catalog > Services to view the available sample services. The Catalog menu also includes standard logical templates, task scripts, operating systems, and tags.

An application architect can create an application blueprint and add the sample services to the applicable nodes and configure them. The sample services can also be configured when deploying a predefined application.

In the application blueprint, these sample services are grouped into Application Servers, Database Servers, Web Servers, Windows Services, Zimbra Services, Monitoring, Performance Management, Other, and Windows.

The property values for all of the services are case-sensitive. A new property value does not take effect if the value is typed incorrectly.

**NOTE** Use the predefined sample catalog services only in a test environment.

The following concepts appear frequently in topics relating to catalog services.

- **Application**: Logical deployment unit, which defines the relationship between operating system templates, application components and their dependent services that can be distributed across multiple virtual machines.
- **Actions**: Life cycle stages for the install, configure, start, and update scripts for services and application components to be installed.
- **Application components**: Custom code used as a template for components such as EAR files, WAR files, and so on. They are custom script packages for the install, configure, start, and update actions on a node or service.
- **Node**: Virtual machine defined in the blueprint.
- **Clustered Node**: Cluster of virtual machines defined in the blueprint.
- **Application Blueprint**: Logical topology of an application for deployment. A blueprint captures the structure of an application with logical nodes, their corresponding services and operating systems, dependencies, default configurations, and network topology requirements.
Catalog

Library that contains logical templates, which are pointers to cloud templates. Reusable services that can be used in multiple applications and installed on a virtual machine. Tasks that can perform additional customized tasks in an application deployment.

Logical template

A predefined virtual machine definition in vFabric Application Director. A logical template can be mapped to an actual cloud template in the cloud catalog and supported services. Logical templates allow an application blueprint to remain cloud agnostic.

Service

Scripted software that can be installed on a virtual machine and reused in multiple applications.

Properties

Configuration name-value pairs for services and application components. These are variables used by the scripts to set parameters on a script and run various configurations. For example, you can set the installation_path property value and configure installation scripts to use this property to specify the path to use to install a service during the application deployment process.

Operating system

Specifies an operating system supported by the IT organization for templates and services. A list of operating systems appears in the Catalog > Operating Systems menu, and you can add to the list.

Tag

Organizes the lists of templates and services to enhance readability in the blueprint editor. A list of tags appears in the Catalog > Tags menu, and you can add new tags to the list.

Custom Tasks

From the execution plan, you can add custom tasks to perform additional customized tasks such as run security patches in an application deployment. You can create a custom task in the catalog and add it to an application deployment. vFabric Application Director also provides predefined tasks in the catalog that you can use to configure an APT repository, a YUM repository, register a machine with a Red Hat Network, or Join Domain.
Using and Configuring Sample Application Server Services

The predefined applications, such as Clustered Dukes Bank, Clustered Dot Shopping Cart, Ruby on Rails, and jPetStore, include many of the sample application server services. You can configure the application server services to customize them for your application.

Sample Application Server Services

vFabric Application Director provides samples of application server services that a catalog administrator can use to create or update an existing application.

**Note** Use the predefined sample catalog service only in a test environment.
Table 2-1. Application Server Services

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| vFabric Web Server 5.1.1| Installs vFabric Web Server, the HTTP server component of vFabric Suite, and creates an instance that vFabric Application Director uses to deploy the static content and acts as a load balancer to one or more vFabric tc Server services. The vFabric Web Server Service includes the following properties to customize services in your application:  
  - instance_name. Specifies the internal name of the Web Server instance. The default value is instance1. You can also use this property to create a custom name. You cannot override this property when you initiate an update process.  
  - load_balancer_method. Specifies the load balancing method that the Web Server uses. The default value is byrequests. Other possible values are, bytraffic and bybusiness.  
  - deployment_archive. Specifies the URL of the *.tgz archive that contains the static content to deploy to the Web Server.  
  - http_port. Specifies the HTTP port that the Web Server listens to for incoming requests. The default port value is 80.  
  - cluster_name. Specifies the internal name of the cluster if you are using cluster load balancing. The default name is mycluster.  
  - webserver_conf_file. Specifies the internal name of the Web Server configuration file. The default file name is `httpd-vfabric-webserverootb.conf`. If you also include the vFabric tc Server 2.7.1 service in your application and create a dependency between it and the vFabric Web Server service, vFabric Application Director uses the Auto-Bind Consume and Expose properties of the two services to configure the Web Server service as a load balancer and proxy to the tc Server service. | CentOS 5.6.0 32-bit CentOS 6.0.0 64-bit CentOS 5.6.0 64-bit RHEL 6.1.0 32-bit RHEL 6.1.0 64-bit | SCRIPT OTHER | Web Servers |

| vFabric tc Server 2.7.1 | Installs and configures tc Server, the application server component of vFabric Suite, and creates an | CentOS 5.6.0 32-bit CentOS 5.6.0 64-bit | JAR WAR | Application Servers |
Table 2-1. Application Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance that vfabric Application Director uses to deploy WAR files.</td>
<td></td>
<td>CentOS 5.7.0 32-bit</td>
<td>SCRIPT</td>
<td></td>
</tr>
<tr>
<td>To deploy Web applications, you must specify the Web application names in the app_name property.</td>
<td></td>
<td>CentOS 6.0.0 32-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The vfabric tc Server includes the following properties to customize services in your application:</td>
<td></td>
<td>CentOS 6.0.0 64-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ use_ajp. Set this property to Yes to configure the tc Server instance with the AJP Connector rather than the default HTTP Connector. If you use the vfabric Web Server as a load balancer, the two services communicate using the AJP protocol.</td>
<td></td>
<td>RHEL 6.1.0 32-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ java_home. Specifies the required directory where the JRE is installed. By default, vfabric Application Director installs the JRE in the /usr directory. You can also set this property to use a custom JRE installation.</td>
<td></td>
<td>RHEL 6.1.0 64-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ instance_name. Specifies the internal name of the tc Runtime instance. The default name value is instance1. You can also use this property to create a custom name.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ instance_root_dir. Specifies the directory where vfabric tc Server is installed. The default directory value is /opt/vmware/vfabric-tc-server-standard. This property allows you to specify a different directory.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ templates. Specifies an array of tc Server templates that are applied to the new instance, such as elastic-memory, bio-s, nio, or jmx-ssl. By default, only the bio template is applied. For</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2-1. Application Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>the list of the available</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>predefined templates, see</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the vFabric tc Server 2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>documentation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ app_name. Specifies the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>name of the Web application</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to deploy to the tc Server</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>instance. The application</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>name is the name of the WAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>file minus the .war suffix.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use commas to separate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>multiple applications. For</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>example, myapp1,mytestapp2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ external_template. Specifies the URL of a *.tgz file that contains a custom tc Server template to apply to the tc Runtime instance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ port. Specifies the HTTP port that the tc Server listens to for incoming requests. The default port value is 8080.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To monitor the vFabric tc Server service, drag a vFabric Hyperic Agent to the same node and use the vFabric Hyperic Server to discover the tc Server instance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you include the vFabric Web Server 5.1.1 service in your application and create a dependency between it and the vFabric tc Server service, vFabric Application Director uses the Auto-Bind Consume and Expose properties of the two services to configure the Web Server service as a load balancer and proxy to the tc Server service.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2-1. Application Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>vFabric tc Server 2.1.0</td>
<td>Installs and configures tc Server, and creates an instance. You must provide the instance name for the instance_name property. Set the automatically_start value to either YES or NO. When multiple instances of the services are placed on a node, a new instance is created for each service. Note: Adding multiple copies of the vFabric tc Server service on the same virtual machine creates multiple instances, but the installation process happens only once. The webapps_dir, instance_dir, service_start, service_stop, and service_restart properties are set during configuration. An application component such as WAR might use the parameter information to install the application and manage the server.</td>
<td>CentOS 5.6.0 32-bit</td>
<td>JAR</td>
<td>Application Servers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CentOS 5.6.0 64-bit</td>
<td>WAR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RHEL 6.1.0 32-bit</td>
<td>EAR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RHEL 6.1.0 64-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ubuntu 10.04.3 32-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ubuntu 10.04.2 64-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JBoss 5.1.0 on Windows</td>
<td>Installs and configures JBoss Enterprise components for Windows operating systems. The 5.1.0 version of JBoss requires JRE 1.6.0 u31 or later to work properly on Windows. You can apply the JBoss service to a clustered node. For persistent or sticky sessions, set the JVM_ROUTE property value to self:node_array_index in the expression drop-down menu and configure the load balancing server to use the JVM_ROUTE property. For the JAVA_INSTALL_DIR property, set a JRE installation path with respect to the Windows virtual machine template for the JBoss service.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td>JAR</td>
<td>Windows Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WAR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EAR</td>
<td></td>
</tr>
<tr>
<td>JBoss 5.1.0 on Linux</td>
<td>Installs and configures JBoss Enterprise components for Linux operating systems. You can apply the JBoss service to a clustered node. For persistent or sticky sessions, set the JVMROUTE property value to self:node_array_index in the expression drop-down menu and configure the load balancing server to use the JVM_ROUTE property. The JBoss service installation scripts use the YUM package management tool to install dependencies.</td>
<td>CentOS 5.6.0 32-bit</td>
<td>JAR</td>
<td>Application Servers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CentOS 5.6.0 64-bit</td>
<td>WAR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RHEL 6.1.0 32-bit</td>
<td>EAR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RHEL 6.1.0 64-bit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Service</td>
<td>Service Description</td>
<td>Supported Operating Systems</td>
<td>Supported Application Components</td>
<td>Associated Service Tag</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Microsoft IIS with .NET Framework on Windows Server 2008 R2 1.0.0</td>
<td>Installs and enables the Microsoft IIS Server 7 and .NET Framework 3.5 on Windows Server 2008 R2.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td><img src="image" alt="Windows Services" /> <img src="image" alt="Web Servers" /> <img src="image" alt="Application Servers" /></td>
<td></td>
</tr>
<tr>
<td>Microsoft .NET Framework 4.0 1.0.0</td>
<td>The Microsoft .NET Framework 4.0 service downloads and installs the .NET Framework components.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td><img src="image" alt="Windows Services" /> <img src="image" alt="Application Servers" /></td>
<td></td>
</tr>
<tr>
<td>Microsoft SharePoint 2010 1.0.0</td>
<td>Downloads and installs SharePoint 2010 components. Set the download_url property to an HTTP address to download the SharePoint 2010 .exe file. Define the volume license key value for the pid_key property.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td><img src="image" alt="SCRIPT" /> <img src="image" alt="Windows Servers" /> <img src="image" alt="Web Servers" /></td>
<td></td>
</tr>
<tr>
<td>Oracle WebLogic Server 13.0.0</td>
<td>Installs and configures the Oracle WebLogic Server 12c (12.1.1) application server. The service sets up Clustered Oracle WebLogic Server. For more information about configuring the service, see &quot;Configure the Oracle WebLogic Server 13.0.0 Service,&quot; on page 15.</td>
<td><img src="image" alt="CentOS 5.6.0 32-bit" /> <img src="image" alt="CentOS 5.6.0 64-bit" /> <img src="image" alt="JAR" /> <img src="image" alt="WAR" /> <img src="image" alt="SCRIPT" /></td>
<td><img src="image" alt="Application Servers" /></td>
<td></td>
</tr>
<tr>
<td>Oracle WebLogic Server 12.1.1</td>
<td>Installs and configures the Oracle WebLogic Server 12c (12.1.1) application server. For more information about configuring the service, see &quot;Configure the Oracle WebLogic Server 12.1.1 Service,&quot; on page 16.</td>
<td><img src="image" alt="CentOS 5.6.0 32-bit" /> <img src="image" alt="JAR" /> <img src="image" alt="WAR" /> <img src="image" alt="SCRIPT" /></td>
<td><img src="image" alt="Application Servers" /></td>
<td></td>
</tr>
<tr>
<td>WebSphereApp Server 8.0.0</td>
<td>Uses the IBM Installation Manager to install, configure, and start the WebSphere Application Server. <strong>Note:</strong> The account you designate to the ibm_username and ibm_password parameters must have access to the WebSphere Application Server software. The default server is called demoserver with the administrator username <strong>demoadmin</strong> and password <strong>demoadmin</strong>. Set the required properties such as im_download_url and set optional properties such as repository_url to override the default behavior. The WebSphereAppServer service INSTALL scripts use the YUM package management tool to install dependencies. The Hyperic Agent service does not monitor this version of the WebSphereAppServer service.</td>
<td><img src="image" alt="CentOS 5.6.0 32-bit" /> <img src="image" alt="CentOS 5.6.0 64-bit" /> <img src="image" alt="JAR" /> <img src="image" alt="WAR" /> <img src="image" alt="EAR" /> <img src="image" alt="SCRIPT" /></td>
<td><img src="image" alt="Application Servers" /></td>
<td></td>
</tr>
</tbody>
</table>
### Table 2-1. Application Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| WebSphere C Server 8.0.0| Installs, configures, and starts the WebSphere Application Server. The sample WebSphere clustered application includes the following services:  
  - WebSphere C Server - AppServer  
  - WebSphere C Server - Development Manager 8.0.0-onecluster  
  - WebSphere C Server - Federation | CentOS 6.0.0 32-bit  
  CentOS 6.0.0 64-bit  
  CentOS 5.7.0 32-bit  
  CentOS 5.6.0 32-bit  
  CentOS 5.6.0 64-bit  
  SLES 11.1.0 32-bit  
  SLES 11.1.0 64-bit  
  RHEL 6.1.0 32-bit  
  RHEL 6.1.0 64-bit  
  Ubuntu 10.04.3 32-bit  
  Ubuntu 10.04.2 64-bit | WebSphereC Server - Development Manager supports the SCRIPT component. | Application Servers |
| Rails 3.2.6              | Downloads and installs Ruby On Rails. The Rails service INSTALL scripts use the YUM package management tool to install dependencies.  
The Hyperic Agent service does not monitor the Rails service. | CentOS 5.6.0 32-bit  
CentOS 5.6.0 64-bit | SCRIPT  
RUBY_GEM | Application Servers |

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the *Using VMware vFabric Application Director Guide*.

### Configure the Oracle WebLogic Server 13.0.0 Service

You can configure the Oracle WebLogic Server 13.0.0 service property and the SCRIPT component in the WebLogic Clustered Deployment, and deploy the sample application.

**Prerequisites**

- Verify that your user account has the *ROLE_APP_ARCHITECT* application architect role and *ROLE_DEPLOYER* deployer role assigned to it.
- Familiarize yourself with how to configure the SCRIPT component. See the *Using VMware vFabric Application Director Guide*.
- Understand the basic concepts of creating a deployment profile and deploying an application. See the *Using VMware vFabric Application Director Guide*.
- Verify that the *wls1211_generic.jar* installer file is downloaded to an HTTPD server.

**Procedure**

1. On the vFabric Application Director title bar, click the drop-down menu and select **Applications**.
2. Open an application and select an application version.
3. Click the blueprint image.  
The application blueprint canvas opens.
4. Drag the Oracle WebLogic Server 13.0.0 service to a node.
5 Set the weblogic_installer property to the location of the WebLogic installer package wls1211_generic.jar.
   You can use this service on the clustered AdminServer node or the ManagedServer node.
6 Configure the SCRIPT components to complete the installation.
7 Deploy the application to complete the installation.

Configure the Oracle WebLogic Server 12.1.1 Service

You can configure the Oracle WebLogic Server 12.1.1 service property in a custom application and access the deployed application from the Oracle WebLogic Server.

Prerequisites
- Verify that your user account has the ROLE_APP_ARCHITECT application architect role and ROLE_DEPLOYER deployer role assigned to it.
- Understand the basic concepts of creating a deployment profile and deploying an application. See the Using VMware vFabric Application Director Guide.
- Verify that the Oracle WebLogic Server 12c installer file is downloaded and hosted to an NFS server.

Procedure
1 On the vFabric Application Director title bar, click the drop-down menu and select Applications.
2 Open an application and select an application version.
3 Click the blueprint image.
   The application blueprint canvas opens.
4 Drag the Oracle WebLogic Server 12.1.1 service to a node.
5 Bind the weblogic_server_ip property value to self:ip.
6 Set the nfs_path property to the NFS server that contains the webLogicInstaller.bin installer file.
7 Deploy the application to complete the installation.
8 Open a supported Web browser and log in to the Oracle WebLogic Server at http://$ServerIP:7001/console/login/LoginForm.jsp.
9 Type the username admin_user and password VirtualMachine to log in.
vFabric Application Director provides samples of database server services that a catalog administrator can use to create or update an existing application.

Many of the sample services are available in the predefined applications such as Clustered Dukes Bank, Clustered Dot Shopping Cart, Radiant CMS, and jPetStore.

**NOTE** Use the predefined sample catalog service only in a test environment.

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>vFabric GemFire 6.6.0-vFabric51</td>
<td>Installs the service and makes the vFabric GemFire libraries available for use. Application components can use the value in the install_path property to find the GemFire JAR files. The Hyperic Agent service does not monitor this version of the vFabric GemFire service.</td>
<td>RHEL 6.1.0 32-bit, RHEL 6.1.0 64-bit</td>
<td>SCRIPT</td>
<td>Database Servers</td>
</tr>
<tr>
<td>vFabric SQLFire 1.0.0</td>
<td>Installs the server and starts an instance of the service using the values that you defined in the client_port and multicast_port properties. The Hyperic Agent service does not monitor the vFabric SQLFire service.</td>
<td>CentOS 5.6.0 32-bit, CentOS 5.6.0 64-bit, RHEL 6.1.0 32-bit, RHEL 6.1.0 64-bit, Ubuntu 10.04.3 32-bit, Ubuntu 10.04.2 64-bit</td>
<td>SCRIPT</td>
<td>Database Servers</td>
</tr>
</tbody>
</table>
Table 3-1. Database Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| vFabric SQLFire Server 1.0.3 | Installs the server and starts an instance of the service using the values that you defined in the client_port and multicast_port properties. The vFabric SQLFire Server and Locator services Auto-Bind to each other when added to an application blueprint. The vFabric SQLFire Server service should be on a clustered node, and the vFabric SQLFire Locator service should be on a single node. The vFabric SQLFire Server service includes the following properties to customize a service in your application:  
  - username. Specifies the SQLFire user name. This property is exposed for other services such as tc Server, to use when they connect to SQLFire server.  
  - password. Specifies the user password that is set in the username property.  
  - multicast_port. Specifies the port used for multicast communication with other members of the distributed system. The default port value is 12333.  
  - number_of_servers. Specifies the number of SQLFire servers to start. The default server value is 1.  
  - client_port. Specifies the port that the network controller listens on for client connections. The default port value is 1528.  
  - initial_heap. Specifies the initial heap size of the JVM in which the SQLFire Server runs. The default size value is 512MB.  
  - java_home. Specifies the required directory where the JRE is installed. By default, vFabric Application Director installs the JRE in the /usr directory. You can also set this property to use a custom JRE installation.  
  - max_heap. Specifies the maximum heap size of the JVM in which the SQLFire Server runs. The default size value is 1024MB.  
  - dataload_file. Specifies the URL to a SQL file that contains the SQL commands for loading initial data to the schema that you set in the schema_file property. This SQL file runs only once when the vFabric SQLFire service is created.  
  - schema_file. Specifies the URL to a SQL file that contains the SQL commands for creating a schema such as tables and indices. This SQL file runs only once when the vFabric SQLFire service is created. | CentOS 5.7.0 32-bit  
  CentOS 5.6.0 64-bit | SCRIPT | Database Servers |
<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| vFabric SQLFire Locator 1.0.3 | Installs the server and starts an instance of the service using the values that you defined in the client_port and multicast_port properties. The vFabric SQLFire server and Locator services Auto-Bind to each other when added to an application blueprint. The vFabric SQLFire server service should be on a clustered node, and the vFabric SQLFire Locator service should be on a single node. The vFabric SQLFire Locator service includes the following properties to customize a service in your application:  
  - peer_discovery_port. Specifies the port on which the locator listens for peer discovery, which includes servers and other locators. Default port value is 10101.  
  - install_path. Specifies the directory where the vFabric SQLFire locator is installed. The default directory is `/opt/vmware/darwin/sqlfire`. You can also use this property to designate a different directory.  
  - java_home. Specifies the required directory where the JRE is installed. By default, vFabric Application Director installs the JRE in the `/usr` directory, you can also set this property to use a custom JRE installation.  
  - locator_client_port. Specifies the port that the locator listens on. The default port value is 1527.  
  - multicast_port. Specifies the port used for multicast communication with other members of the distributed system. The default port value is 12333. | CentOS 6.0.0 32-bit  
CentOS 6.0.0 64-bit  
CentOS 5.7.0 32-bit  
CentOS 5.6.0 32-bit  
CentOS 5.6.0 64-bit  
RHEL 6.1.0 32-bit  
RHEL 6.1.0 64-bit | SCRIPT | Database Servers |
| vFabric Postgres 9.0.4 | Installs and configures the service for use. Set the property allow_connection_ips value to `All` to allow any host to connect to the database. Set the property allow_connection_ips value to `None` to allow only local connections. You can also set an array of IP addresses to selectively allow remote access. | RHEL 6.1.0 64-bit | SQL SCRIPT | Database Servers |
### Table 3-1. Database Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| MySQL 5.0.0    | Installs the MySQL server software. Set the property `db_port` value to the appropriate port. Application components use the database port value for configuration. Set the property `db_root_password` value to the password assigned to the database administrator. The default database administrator password is *root*. On Ubuntu, the default server configuration does not allow remote connections for security reasons. To remotely connect to the Ubuntu server, append `sed -ie "s/^bind-address/#bind-address/g" $mysq1_config_file` to the configuration action script. This change to the action script causes the server to bind to all interfaces allowing remote hosts to connect. **Note**: On Ubuntu, the `db_port` property is not supported. The MySQL service INSTALL scripts use the YUM package management tool and APT-GET packaging tool to install dependencies. | CentOS 5.6.0 32-bit  
CentOS 5.6.0 64-bit  
Ubuntu 10.04.3 32-bit | SQL SCRIPT | Database Servers |
| Microsoft SQL Server 2008 Express 1.0.0 | The Microsoft SQL Server 2008 Express service installs the Microsoft SQL Server 2008 Express and creates a database instance. The default `SA_PWD` property value is `SQLserverdb1`. If you change the property value, follow the Microsoft SQL Server strong password requirements. The default password is `VirtualMachine`. | Windows Server 2008 R2 Enterprise SP1 64-bit | SQL SCRIPT | Windows Services  
Database Servers |
### Table 3-1. Database Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>MongoDB 2.0.1</td>
<td>Installs the MongoDB server and configures the server according to all of the parameters. The service sets the BINDIP property value to self.ip. Use the wget tool to download MongoDB installation files. You might have to configure the http_proxy property. The Hyperic Agent service does not monitor the MongoDB service.</td>
<td>CentOS 5.6.0 32-bit, CentOS 5.6.0 64-bit, Ubuntu 10.04.3 32-bit, RHEL 6.1.0 32-bit</td>
<td>SCRIPT</td>
<td>Database Servers</td>
</tr>
<tr>
<td>Oracle11g 11.2.0</td>
<td>Installs and configures Oracle to start and use the server. The default system administrator password is VirtualMachine. The installer requires the installation files to be available on a NFS server. Set the server NFS path in the NFSPATH parameter and make sure the files are available. For 32-bit installations, download the linux_11gR2_database_1of2.zip and linux_11gR2_database_2of2.zip files from the Oracle Web site. For 64-bit installations, download the linux.x64_11gR2_database_1of2.zip and linux.x64_11gR2_database_2of2.zip files from the Oracle Web site. The Oracle11g service INSTALL scripts use the YUM package management tool to install dependencies. <strong>Note</strong> The logical template with the Oracle11g service must have at least 10GB of hard disk space to successfully deploy the application. By default, the oracle_base and inventory_location properties values are set to the /disk2 directory.</td>
<td>CentOS 5.6.0 32-bit, CentOS 5.6.0 64-bit, RHEL 6.1.0 32-bit, RHEL 6.1.0 64-bit, Ubuntu 10.04.3 32-bit, Ubuntu 10.04.2 64-bit, SLES 11.1.0 32-bit, SLES 11.1.0 64-bit</td>
<td>SQL SCRIPT</td>
<td>Database Servers</td>
</tr>
</tbody>
</table>

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the *Using VMware vFabric Application Director Guide*. 
vFabric Application Director provides sample Web Server services that a catalog administrator can use to create or update an existing application.

The Apache sample Web Server service is included in the Clustered Dukes Bank predefined application.

**NOTE** Use the predefined sample catalog service only in a test environment.

### Table 4-1. Web Server Services

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>vFabric Web Server 5.1.1</td>
<td>Installs the vFabric Web Server, which is the HTTP Server and load-balancing component of the vFabric Suite. In the blueprint, drag the service to a node. Set the property value <code>http_node_ips</code> to an array of IP addresses to load balance and bind the <code>webserver_ip</code> property value to <code>self:ip</code>.</td>
<td>■ CentOS 5.6.0 32-bit&lt;br&gt;■ CentOS 5.6.0 64-bit&lt;br&gt;■ CentOS 6.0.0 64-bit&lt;br&gt;■ RHEL 6.1.0 32-bit&lt;br&gt;■ RHEL 6.1.0 64-bit</td>
<td>■ SCRIPT&lt;br&gt;■ OTHER</td>
<td>Web Servers</td>
</tr>
<tr>
<td>vFabric ERS 4.0.3</td>
<td>Installs vFabric Enterprise Ready Server, creates an instance, and configures the instance for use. You must add a port value for the <code>http_port</code> property to enable the static server configuration. The vFabric ERS service INSTALL scripts use the YUM package management tool and APT-GET packaging tool to install dependencies.</td>
<td>■ CentOS 5.6.0 32-bit&lt;br&gt;■ CentOS 5.6.0 64-bit&lt;br&gt;■ RHEL 6.1.0 32-bit&lt;br&gt;■ RHEL 6.1.0 64-bit&lt;br&gt;■ Ubuntu 10.04.3 32-bit&lt;br&gt;■ Ubuntu 10.04.2 64-bit</td>
<td>SCRIPT</td>
<td>Web Servers</td>
</tr>
<tr>
<td>Microsoft IIS with .NET Framework on Windows Server 2008 R2 1.0.0</td>
<td>Installs and enables the Microsoft IIS Server 7 and .NET Framework 3.5 on Windows Server 2008 R2.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td>■ Windows Services&lt;br&gt;■ Web Servers&lt;br&gt;■ Application Servers</td>
<td></td>
</tr>
</tbody>
</table>
Table 4-1. Web Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apache HTTP Server 2.2.22 for Windows</td>
<td>Provides an installation of Apache 2.2 to serve static content. The service also provides proxy configuration for mod_proxy and mod_proxy_ajp for application servers.  - Add a port value for the http_port property to enable the static server configuration.  - Add an IP or array of IP reference for the http_node_ips property to enable proxy configuration.  - Set the use_ajp property value to NO to configure mod_proxy.  - Set the use_ajp property value to YES to configure mod_proxy_ajp.  - Set the http_proxy_port property value to 8099 when using Apache JServ Protocol (AJP). Otherwise, set the value to the port on which the application server is running.  - Set the autogen_sticky_cookie property value to YES when using the Apache server for load balancing non-Java application servers such as the Microsoft IIS Server. Otherwise, set the property value to NO.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td>SCRIPT</td>
<td>Windows Services, Web Servers</td>
</tr>
<tr>
<td>Apache 2.2.0</td>
<td>Provides a standard installation of Apache to serve static content. The service also provides optional proxy configuration for mod_proxy and mod_proxy_ajp for standard application servers.  - Add a port value for the http_port property to enable the static server configuration.  - Add a node IP address value for the http_node_ips property to enable proxy configuration.  - Set the use_ajp property value to NO to configure mod_proxy.  - Set the use_ajp property value to YES to configure mod_proxy_ajp.  - When you use mod_proxy_ajp, it is optional to add the tomcat_context and ajp_proxy_context values for the proxy.  - Set the http_proxy_port property value to 8099 when you use Apache JServ Protocol (AJP). Otherwise, set the value to the port that the application server is running on.</td>
<td>CentOS 5.6.0 32-bit, CentOS 5.6.0 64-bit, RHEL 6.1.0 32-bit, RHEL 6.1.0 64-bit</td>
<td>SCRIPT</td>
<td>Web Servers</td>
</tr>
</tbody>
</table>
Table 4-1. Web Server Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>For Hyperic to properly monitor the Apache service, add the following code to the /etc/httpd/conf/httpd.conf configuration file and restart, for the changes in the file to take effect.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **ExtendedStatus On**
- `<Location /server-status>`
- `SetHandler server-status`
- `Order deny,allow`
- `Deny from all`
- `Allow from localhost`
- `</Location>`

- Additional parameters such as `service_start` are read-only. Application components can use the read-only parameter information to start and stop the Apache server.

- The JVM_ROUTES property can be bound to the JVM_ROUTE on clustered application servers.

- The Apache service INSTALL scripts use YUM package management tool to install dependancies.

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the Using VMware vFabric Application Director Guide.
vFabric Application Director provides samples of monitoring server services that a catalog administrator can use to create or update an existing monitoring application.

**NOTE** Use the predefined sample catalog service only in a test environment.

### Table 5-1. Monitoring Server Services

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| Hyperic HQ Agent 5.0.0 | Installs either a 32-bit or a 64-bit Hyperic Agent and configures the agent to connect to the server specified in the HQ_SERVER_IP property. Set the required ip_address property value to self:ip. The install script configures the server to use hqadmin as the username and VirtualMachine password to connect to the Hyperic Server. To modify the login credentials, change the username and password in the service INSTALL script. | - CentOS 5.6.0 32-bit  
- CentOS 5.6.0 64-bit  
- RHEL 6.1.0 32-bit  
- RHEL 6.1.0 64-bit  
- Ubuntu 10.04.3 32-bit  
- Ubuntu 10.04.2 64-bit | -  | Monitoring |
| Hyperic HQ Server 5.0.0 | Installs, configures, and starts either a 32-bit or a 64-bit Hyperic server. Set the required ip_address property value to self:ip. The INSTALL script configures the server to use hqadmin as the username and VirtualMachine password to connect to the Hyperic Server. To modify the login credentials, change the username and password in the service INSTALL script. The Hyperic Server service INSTALL scripts use the YUM package management tool and APT-GET packaging tool to install dependancies. | - CentOS 5.6.0 64-bit  
- RHEL 6.1.0 64-bit | -  | Monitoring |

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the *Using VMware vFabric Application Director Guide*. 
vFabric Application Director provides a sample vFabric AppInsight Code Agent service that a catalog administrator can use to manage the performance.

**NOTE** Use the predefined sample catalog service only in a test environment.

### Table 6-1. Performance Management Service

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
</table>
| vFabric AppInsight Code Agent 1.0.0 | Provides the agent client to connect to the vFabric AppInsight server. **NOTE** You must install cURL on a logical template with a vFabric AppInsight Code Agent service to successfully deploy the application blueprint. In the blueprint, drag the service to a virtual machine with a vFabric tc Server instance and complete the required property values for APM server IP, Username, and Password. Set the install_paths property value to an array of instance directories to which to add the service. | - CentOS 5.6.0 32-bit  
- CentOS 5.6.0 64-bit  
- RHEL 6.1.0 32-bit  
- RHEL 6.1.0 64-bit  
- Ubuntu 10.04.3 32-bit  
- Ubuntu 10.04.2 64-bit | SCRIPT | Performance Management |

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the Using VMware vFabric Application Director Guide.
vFabric Application Director provides sample Zimbra server services for an email server software that a catalog administrator can use to create or update an existing application.

**NOTE** Use the predefined sample catalog service only in a test environment.

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZimbraLDA P 7.1.0</td>
<td>Deploys the Zimbra email and collaboration suite. Use the predefined sample Zimbra App or sample Zimbra Clustered App for these services. You cannot install more than one Zimbra service in a virtual machine. The Hyperic Agent service does not monitor these versions of the Zimbra services.</td>
<td>CentOS 5.6.0 32-bit</td>
<td></td>
<td>Zimbra Services</td>
</tr>
</tbody>
</table>

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the *Using VMware vFabric Application Director Guide*. 
vFabric Application Director provides sample services such as Microsoft SQL Server Management Tools 2008 Express, Hadoop, NTPClient, and vFabric RabbitMQ that a catalog administrator can use to create or update an existing application.

**NOTE** Use the predefined sample catalog service only in a test environment.

### Table 8-1. Other Catalog Services

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>vFabric RabbitMQ 2.4.1</td>
<td>Installs and configures the service for use. The vFabric RabbitMQ service INSTALL scripts use the YUM package management tool and APT-GET packaging tool to install dependencies. When an application blueprint with vFabric RabbitMQ service and Ubuntu 10.04 32-bit or 64-bit is deployed, the vFabric RabbitMQ 2.7.1 service is installed. The Hyperic Agent service can monitor vFabric RabbitMQ only with the management console plug-ins activated. See vFabric RabbitMQ documentation.</td>
<td>♦ CentOS 5.6.0 32-bit</td>
<td>SCRIPT</td>
<td>OTHER</td>
</tr>
<tr>
<td>Hadoop_Datanode 0.20.203-0</td>
<td>Hadoop services are used in the sample Hadoop Cluster application.</td>
<td>♦ CentOS 5.6.0 32-bit</td>
<td></td>
<td>OTHER</td>
</tr>
<tr>
<td>Hadoop_JobTracker 0.20.203-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hadoop_NameNode 0.20.203-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hadoop_TaskTracker 0.20.203-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 8-1. Other Catalog Services (Continued)

<table>
<thead>
<tr>
<th>Sample Service</th>
<th>Service Description</th>
<th>Supported Operating Systems</th>
<th>Supported Application Components</th>
<th>Associated Service Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft SQL Server Management Tools 2008 Express 1.0.0</td>
<td>Installs the Management Studio for the SQL Server 2008 Express.</td>
<td>Windows Server 2008 R2 Enterprise SP1 64-bit</td>
<td></td>
<td>Windows Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OTHER</td>
</tr>
<tr>
<td>NTPClient 1.0.0</td>
<td>Installs the NTP client and configures the client to use the time server specified in the ntp_server parameter. The NTPClient service INSTALL scripts use the YUM package management tool to install dependancies. The Hyperic Agent service does not monitor the NTPClient service.</td>
<td>CentOS 5.6.0 32-bit</td>
<td></td>
<td>OTHER</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CentOS 5.6.0 64-bit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To deploy predefined sample applications or add predefined tasks to an execution deployment plan, see the *Using VMware vFabric Application Director Guide*. 
Index

C
catalog services 5
configure, Oracle WebLogic Server 15, 16

S
sample, catalog services 7
sample service
  Microsoft SQL Server Management Tools
    2008 Express 33
  Apache 23
  Apache HTTP Server for Windows 23
  Hadoop 33
  Hyperic HQ Agent 27
  Hyperic HQ Server 27
  IIS with Microsoft .NET Framework on
    Windows Server 2008 R2 23
  JBoss on Linux 9
  JBoss on Windows 9
  Microsoft .NET Framework 4.0 9
  Microsoft IIS with .NET Framework on
    Windows Server 2008 R2 9
  Microsoft SharePoint 2010 9
  Microsoft SQL Server 2008 Express 17
  MongoDB 17
  MySQL 17
  NTPClient 33
  Oracle WebLogic Server 9, 15, 16
  Oracle11g 17
  Rails 9
  vFabric ApplInsight Code Agent 29
  vFabric ERS 23
  vFabric GemFire 17
  vFabric Postgres 17
  vFabric RabbitMQ 33
  vFabric SQLFire 17
  vFabric SQLFire Locator 17
  vFabric SQLFire Server 17
  vFabric tc Server 9
  vFabric Web Server 9, 23
  Web servers 9, 23
  WebSphere C Server 9
  WebSphereAppServer 9
  Windows 33
  Windows services 23
  Zimbra services 31

sample services
  application servers 9, 23
database servers 17
  monitoring 27
  other 33
  performance management 29
  Windows 23
  Windows services 9, 17, 33
  Zimbra 31
  services 7