



vFabric Application Director® Marketplace Nanotrader Blueprint

1.0.0

August 2012

© 2011 VMware, Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. This product is covered by one or more patents listed at <http://www.vmware.com/download/patents.html>.

VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware, Inc
3401 Hillview Ave
Palo Alto, CA 94304
www.vmware.com

Author	Version	Review	Comments
Mahesh Rajani, GTS-COE	1.0.0		Initial Draft

Contents

Contents	4
List of Figures	4
List of Tables	5
1. Introduction	6
2. Pre-Requisites	7
3. Nanotrader Setup	8
3.1 Catalog Services	8
3.1.1 SQLFire Locator Service	9
3.1.2 SQLFire Server	11
3.1.3 RabbitMQ server	13
3.1.4 vFabric tcServer	14
3.1.5 vFabric web server	15
3.2 Application Blueprint.....	16
4. References	22

List of Figures

Figure 1 Nanotrader Architecture	6
Figure 2 Nanotrader Application.....	8
Figure 3 Create Catalog Service	9
Figure 4 SQLFire Locator Properties	10
Figure 5 Action Script	11
Figure 6 SQLFire Server service	11
Figure 7 SQLFire Server Properties	12
Figure 8 SQLFire Server Script	13
Figure 9 RabbitMQ Properties.....	14
Figure 10 vFabric tcServer	15
Figure 11 vFabric Webserver Properties.....	16
Figure 12 Create Application Blueprint.....	17
Figure 13 Create SQLFire locator node	17

Figure 14 Nanotrader Blueprint Detail..... 18

Figure 15 SQLFire Locator run-time binding 19

Figure 16 SQLFire Server run-time binding 19

Figure 17 RabbitMQ run-time binding 20

Figure 18 vFabric tcServer run-time binding 20

Figure 19 vFabric webserver run-time binding 21

Figure 20 Deploy Application 21

Figure 21 Nanotrader Front Page 22

List of Tables

Table 1 SQLFire Locator Property 10

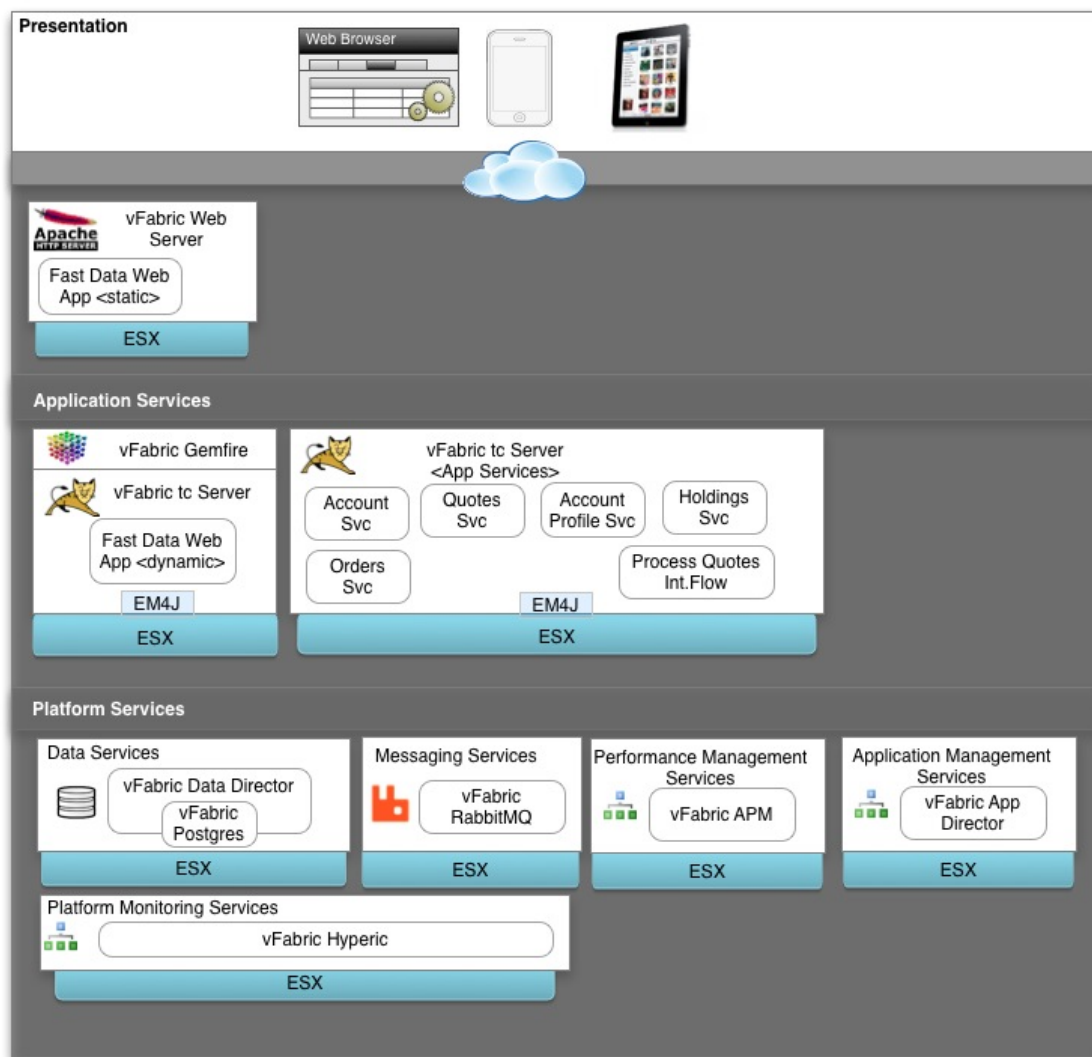
1. Introduction

Nanotrader application is written entirely using vFabric suite of products to show case the best of the breed solution for application development. It demonstrates:

- the best practices in coding in Spring and vFabric components,
- build high performing applications
- build highly scalable applications
- build applications for Platform-as-a-Service (PaaS)

Here is an overview of the Nanotrader architecture.

Figure 1 Nanotrader Architecture



Note: Performance management and monitoring is not part in this release of application blueprint, even though the Nanotrader application has support.

2. Pre-Requisites

To create Nanotrader blueprint into your Application Director setup, there are few pre-requisites that are needed:

- A working vCloud Director environment
- An Organization, an Organization Virtual Datacenter, and an Org Admin account
- Direct-connect or Routed Organization networks. Note that Isolated and vApp networks will not work, since the VMs cannot reach vFabric Application Director server.
- Application Director appliance installed and configured
- A web server to host the Nanotrader WARs, tcServer template for Nanotrader (tar) and sample data generator scripts (zip)
- A RedHat/CentOS x64bit VM with Application Director Agent and VMware JRE installed. This VM needs to be stored in the Catalog as a vApp template in the aforementioned Organization
- Install Groovy in the template. Groovy scripts are used to schema and generate sample data for backend SQLFire.
- Access to Internet, specifically access to <http://repo.vmware.com>. If the setup is behind the web proxy, then proxy server and proxy port are required. If the proxy requires a password, adjust the 'rpm' command to include the password
- Download the accompanying text file which has the Bash scripts for the Nanotrader catalog services
- Download the accompanying WAR files for the Nanotrader application
- Download the accompanying tcServer template for Nanotrader application
- Host the downloaded files in HTTP server that is accessible from the deployed VMs
- The Nanotrader blueprint is compatible with both vFabric Application Director v1.0 and v5.x versions

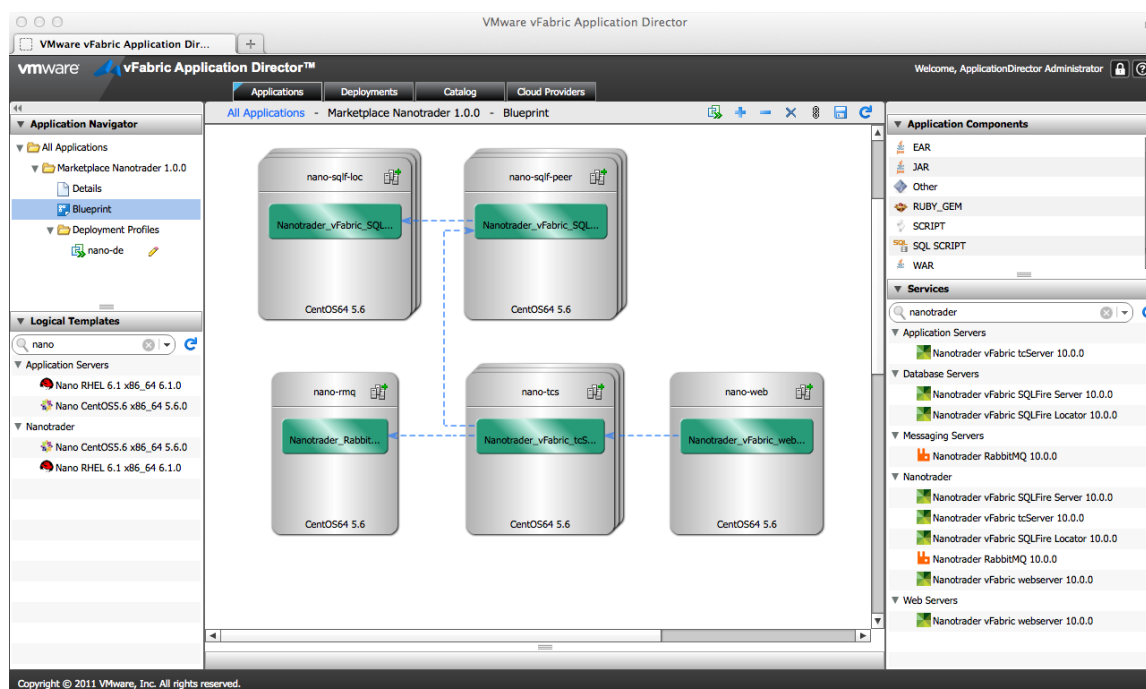
There is more information in Reference section.

3. Nanotrader Setup

To setup Nanotrader in your vFabric Application Director appliance, first make sure that pre-requisites are met, and then we create catalog services, and finally build the application blueprint for deployment.

Figure 2 shows the lay out of the Nanotrader application blueprint in Application Director. The templates and services are filtered by 'nano' and 'nanotrader' respectively to show only the necessary components. The final application blueprint should be similar to the following screenshot.

Figure 2 Nanotrader Application



3.1 Catalog Services

Catalog services are building block of the application blueprint. They contain the necessary information in the form of properties and scripts to create a component of application. The properties allow for customization of the scripts at run-time. In the example, the scripts are in Bash.

There are several services which are available out-of-the-box in vFabric Application Director. But in our case, we are using customized scripts to create all the services.

3.1.1 SQLFire Locator Service


To start with, we will show how to create SQLfire locator service from scratch. In the Catalog tab → Services tab, click on the  image to begin. Enter the values as shown in the Figure 3

Figure 3 Create Catalog Service

Name:	<input type="text" value="Nanotrader vFabric SQLFire Locator"/>	*
Service Version:	<input type="text" value="10.0.0"/>	*
Description:	<input type="text" value="vFabric SQLFire Locator for Nanotrader"/>	
Tags:	<input type="text" value="Database Servers x Nanotrader x"/>	*
Supported OSes:	<input type="text" value="CentOS64 5.6.0"/>	
Supported Components:	<input type="text" value="JAR x WAR x SCRIPT x SQL SCRIPT x"/>	
Pre-installed in a Template:	<input type="checkbox"/>	

Then click on “Properties” tab. You can copy and paste the name/value pair from Table 1
Figure 4 shows the properties for the locator service. Note: These properties are passed to the Bash scripts, so they are case sensitive. Also, use variable names that are valid in Bash shell.

Figure 4 SQLFire Locator Properties

Edit Service Nanotrader vFabric SQLFire Locator 1.0.0						
<div> <div>Details</div> <div>Properties</div> <div>Actions</div> </div>						
Name	Description	Type	Value	Required	Secured	Overridable in Blueprint
vfabric_repo	Setup vFabric Repo ...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
vfabric_sqlfire	vFabric SQLFire to in...	String	vfabric-sqlfire.noarch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
httpproxy	Proxy Server IP or H...	String		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
httpport	Proxy Port if behind ...	String		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
eula_location	VMware EULA Locati...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
locators	IP addresses of clust...	Array		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
peer_disc_port	Peer Discovery Port f...	String	3241	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
client_port	Client Port access for...	String	1527	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Table 1 SQLFire Locator Property

Name	Value
httpproxy	
vfabric_sqlfire	vfabric-sqlfire.noarch
vfabric_repo	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm
httpport	
eula_location	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html
locators	
peer_disc_port	3241
client_port	1527

Click on the “Actions” tab, then “INSTALL” to create an action script. Copy and paste this script from the text file that you downloaded as shown in Figure 5

Figure 5 Action Script

Edit script for INSTALL stage of Nanotrader vFabric SQLFire Locator

Execution directory: /tmp

Properties: Select a property to insert

```

1 #!/bin/bash
2 env > /tmp/env.sh
3 set -e
4 export PATH=$PATH:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/opt/groovy-1.8.6/bin
5 export JAVA_HOME=/usr/java/jre-vmware
6
7 #
8 # Setup EULA Acceptance, Not this is good for vfabric5.1 only
9 # Generic accept-vfabric-eula.txt does not work
10 #
11 mkdir -p /etc/vmware/vfabric
12 echo "I_ACCEPT_EULA_LOCATED_AT=$eula_location" >> /etc/vmware/vfabric/accept-vfabric5.1-eula.txt
13 #
14 # Download SQLFire RPMs and Install
15 #
16 if [[ -n ${httpproxy} && -n ${httpport} ]];
17 then
18     rpm -U --httpproxy $httpproxy --httpport $httpport $vfabric_repo
19     http_proxy="http://${httpproxy}:${httpport}"
20     export http_proxy
21 else
22     rpm -U $vfabric_repo
23 fi
24
25 #
26 # Search for the vfabric_tcserver and install without checking the key - Warning not for production
27 #
28 yum search vfabric
29 yum install -y --nogpgcheck $vfabric_sqlfire
30 mv /opt/vmware/vfabric-sqlfire/vFabric_SQLFire_102/lib/sqlfire.jar /tmp
31 wget -q http://engweb.vmware.com/~szhu/sqlfire.jar -P /opt/vmware/vfabric-sqlfire/vFabric_SQLFire_102/lib
32 #

```

OK Cancel

3.1.2 SQLFire Server

In this section, we will create SQLFire Server service for Nanotrader. Enter the values as shown in Figure 6. SQLFire server requires the properties as shown in Figure 7.

Figure 6 SQLFire Server service

Name:	Nanotrader vFabric SQLFire Server	*
Service Version:	10.0.0	*
Description:	vFabric SQLFire Server for Nanotrader	
Tags:	Database Servers X Nanotrader X	*
Supported OSes:	CentOS64 5.6.0 X	
Supported Components:	JAR X WAR X SCRIPT X SQL SCRIPT X	
Pre-installed in a Template:	<input type="checkbox"/>	

Figure 7 SQLFire Server Properties

Edit Service Nanotrader vFabric SQLFire Server 1.0.0

Details Properties Actions

Name	Description	Type	Value	Required	Secured
peer_disc_port	Peer Discovery Port	String	3241	<input checked="" type="checkbox"/>	<input type="checkbox"/>
sqlf_peers	SQLFire Server Peers	Array		<input checked="" type="checkbox"/>	<input type="checkbox"/>
eula_location	VMware EULA Location	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html	<input checked="" type="checkbox"/>	<input type="checkbox"/>
locators	SQLFire locators IP ad...	Array		<input checked="" type="checkbox"/>	<input type="checkbox"/>
vfabric_sqlfire	vFabric SQLFire	String	vfabric-sqlfire.noarch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
client_port	Client Port Number	String	1528	<input checked="" type="checkbox"/>	<input type="checkbox"/>
datagen_zip	Datagenerator Zip File....	String		<input checked="" type="checkbox"/>	<input type="checkbox"/>
vfabric_repo	Setup vFabric Repo Ser...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
httpproxy	Proxy server IP and Ho...	String		<input type="checkbox"/>	<input type="checkbox"/>
httpport	Proxy port if behind a ...	String		<input type="checkbox"/>	<input type="checkbox"/>

Figure 8 SQLFire Server Script

Edit script for INSTALL stage of Nanotrader vFabric SQLFire Server

Execution directory: /tmp

```

73 -license-serial-number=Y550V-40GEL-M8H8P-0PP9T-Z4FFZ
74
75
76 ##
77 ## NOTE: Among the SQLFire Peers find the VM with lowest
78 ## IP address by string comparison. This VM will generate the data
79 ##
80 lowestIP=${sqlf_peers[0]}
81 for ((i=1; i<${#sqlf_peers[@]}; i++))
82 do
83     if [[ "${sqlf_peers[i]}" < "$lowestIP" ]]
84     then
85         lowestIP=${sqlf_peers[i]}
86     fi
87 done
88
89 ## Download the DataGenerator, create SQLF Schema
90 ## on Webserver, we will create the tables via REST API
91 ##
92 if [[ "$lowestIP" == "$myip" ]]
93 then
94     echo Downloading Datagenerator zip to initialize Nanotrader
95     datagen_zip=`eval echo $datagen_zip`
96     wget -q $datagen_zip
97     zipname=${datagen_zip##*/}
98     stemname=${zipname%.zip}
99     unzip -qq $zipname -d $stemname
100    cd $stemname
101    sed -i "s/nanodobserver/${locators[0]}/" nanotrader.sqlf.properties
102    ./createSqlfSchema
103 fi
104

```

Copy and paste the action script for the SQLFire server from the text file.

If there is more than one SQLFire server, we pick the one with lowest IP address in string comparison, and run **createSqlfSchema** script. This script creates Nanotrader schema. Since this script is shared across all SQLFire servers, we want to run this script once, we pick the one with the lowest IP address. This is shown in Figure 8

3.1.3 RabbitMQ server

Use similar procedure to create services for RabbitMQ.

Figure 9 RabbitMQ Properties

Edit Service Nanotrader RabbitMQ 1.0.0

Details Properties Actions

Name	Description	Type	Value	Required	Secured
rabbit_rpm	RabbitMQ RPM	String	http://www.rabbitmq.com/releases/rabbitmq-server/v2.8.4/rabbitmq-server-2.8.4-1.noarch.rpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
httpport	Proxy Port if behind...	String		<input type="checkbox"/>	<input type="checkbox"/>
httpproxy	Proxy Server IP or ...	String		<input type="checkbox"/>	<input type="checkbox"/>

Copy the action script for RabbitMQ from the text file downloaded from the Marketplace.

3.1.4 vFabric tcServer

Properties for vFabric tcServer shown in Figure 10. Copy and paste property value from Table 1 as needed.

Figure 10 vFabric tcServer

Edit Service Nanotrader vFabric tcServer 1.0.0

Details
Properties
Actions

Name	Description	Type	Value	Required	Secured
vfabric_tcserver	vFabric tcServer ins...	String	vfabric-tc-server-standard.noarch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
vfabric_repo	Setup vFabric Repo...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
app_name	tcServer instance n...	String	nanotrader	<input checked="" type="checkbox"/>	<input type="checkbox"/>
rmq_port	RabbitMQ Service p...	String	5672	<input checked="" type="checkbox"/>	<input type="checkbox"/>
rmq_host	RabbitMQ IP addre...	Array		<input checked="" type="checkbox"/>	<input type="checkbox"/>
eula_location	VMware EULA locat...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html	<input checked="" type="checkbox"/>	<input type="checkbox"/>
db_ip	SQLFire Locator IP ...	Array		<input checked="" type="checkbox"/>	<input type="checkbox"/>
nano_war_files	Nanotrader Applica...	String		<input checked="" type="checkbox"/>	<input type="checkbox"/>
nano_tcserver_template	tcServer Template f...	String		<input checked="" type="checkbox"/>	<input type="checkbox"/>
httpport	Proxy Port if behind...	String		<input type="checkbox"/>	<input type="checkbox"/>
httpproxy	Proxy Server IP or ...	String		<input type="checkbox"/>	<input type="checkbox"/>

3.1.5 vFabric web server

Create the vFabric web server with properties as shown in Figure 11.

Figure 11 vFabric Webserver Properties

Edit Service Nanotrader vFabric webserver 1.0.0

Details
Properties
Actions

Name	Description	Type	Value	Required	Secured
tcs_nodes_ip	tcServer nodes IP a...	Array		<input checked="" type="checkbox"/>	<input type="checkbox"/>
tcs_nodes_port	tcServer Ports	String	8080	<input checked="" type="checkbox"/>	<input type="checkbox"/>
vfabric_webserver	vFabric Webserver i...	String	vfabric-web-server	<input checked="" type="checkbox"/>	<input type="checkbox"/>
web_war_file	War files for Nanotr...	String		<input checked="" type="checkbox"/>	<input type="checkbox"/>
datagen_zip	Datagenerator Zip F...	String		<input checked="" type="checkbox"/>	<input type="checkbox"/>
httpproxy	Proxy Server IP or ...	String		<input type="checkbox"/>	<input type="checkbox"/>
httpport	Proxy port	String		<input type="checkbox"/>	<input type="checkbox"/>
ws_instance	Name of the Webse...	String	nanotrader	<input checked="" type="checkbox"/>	<input type="checkbox"/>
vfabric_repo	Setup vFabric Repo ...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
eula_location	VMware EULA locati...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ws_ip	Web Server IP addr...	String		<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.2 Application Blueprint

Now we are ready to create Nanotrader Application blueprint. It is important that the nodes are named and used consistently, since we use those nodes names in the Bash scripts.


To create an application, click on “Applications” tab and  icon, enter the fields in the text area and click OK.

Figure 12 Create Application Blueprint

Create an Application

Name: Nanotrader *

Description: Nanotrader Application

Version: 1.0.0 *

Description: v1.0.0

OK Cancel

Now drag and drop guest VM template from the “Logical Templates”. This must be the logical template that is mapped to the vApp template in vCloud Director catalog.

Next drag and drop SQLFire Locator service on to the node as shown in Figure 13

Figure 13 Create SQLFire locator node

All Applications - Nanotrader 1.0.1 - Blueprint

Application Navigator

- All Applications
 - Nanotrader 1.0.1
 - Details
 - Blueprint
 - Deployment Profiles

Logical Templates

nano

- Application Servers
 - Nano RHEL 6.1 x86_64 6.1.0
 - Nano CentOS 5.6 x86_64 5.6.1
- Nanotrader
 - Nano CentOS 5.6 x86_64 5.6.1
 - Nano RHEL 6.1 x86_64 6.1.0

Details

Details

Name: nano-sqlf-loc

vCPU: 1

Memory: 2048 MB

Description:

Modify the node name in “Details”, Click on “Convert to Node Array” and enter 2 for the size of the cluster. Now when the blueprint is instantiated, two SQLFire locator nodes will be deployed. Default is one.

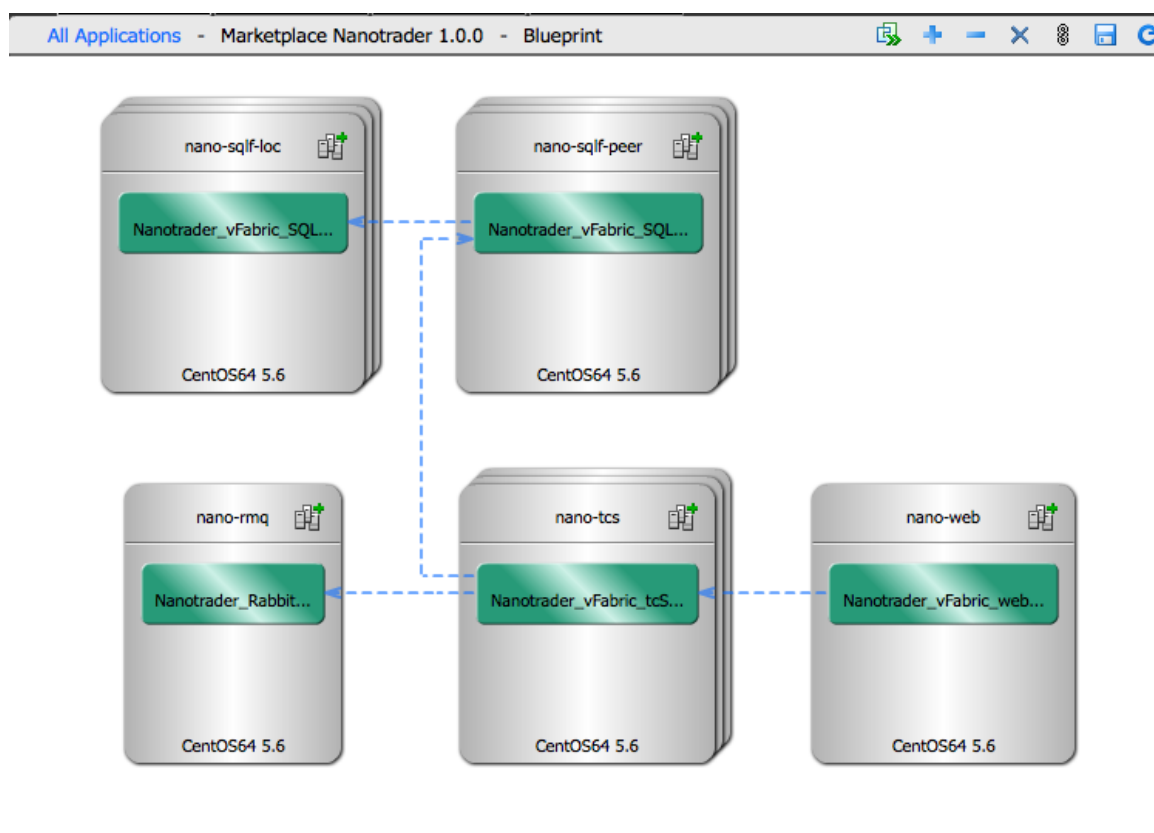
Complete rest of the application as shown in Figure 14. Make sure that node names match the screen shot, SQLFire nodes and tcServer cluster sizes are set to two or more.

In the Figure 14, we also show the dependencies of the server nodes. In this example, RabbitMQ and SQLFire Locator servers are installed and configured first, since they are no dependencies for them. The vFabric webserver is installed last as it depends on vFabric tcServer, which in turn depends on SQLFire server and RabbitMQ.

Setting up the dependencies are important because of configurations need to be done in the right order. For example, we can create schemas and populate the tables with sample data only after the database is installed and configured.

To create this application we need to create catalog services first. In section 3.1 Catalog Services on page 8, we show how to create the services.

Figure 14 Nanotrader Blueprint Detail



There are 5 services that are requirement to set up this blueprint. These are:

- SQLFire Locator Service
- SQLFire Server
- RabbitMQ server
- vFabric tcServer
- vFabric web server

Let us look at the run-time properties set for each of the services. Click on each service and enter the properties as shown in the following screenshots.

Binding of the properties is required at run-time. This is because when we created the blueprint, we did not have all the information necessary to instantiate it. For example, the IP addresses of the nodes are not known until the blueprint is instantiated and nodes are deployed as VMs. Similarly, proxy settings may differ for different environments.

Modify the path of the WAR, TAR and ZIP file to match your Depot/Repository server as mentioned in section 2 Pre-Requisites on page 7.

Figure 15 SQLFire Locator run-time binding

Details		Properties		Actions
Name	Description	Type	Catalog Value	Blueprint Value
vfabric_repo	Setup vFabric R...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm	
vfabric_sqlfire	vFabric SQLFire...	String	vfabric-sqlfire.noarch	
httpproxy	Proxy Server IP...	String		10.16.67.187
httpport	Proxy Port if be...	String		3128
eula_location	VMware EULA L...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html	
locators	IP addresses of...	Array		all(nano-sqlf-loc:ip)
peer_disc_port	Peer Discovery ...	String	3241	
client_port	Client Port acce...	String	1527	

Figure 16 SQLFire Server run-time binding

Details		Properties		Actions
Name	Description	Type	Catalog Value	Blueprint Value
peer_disc_port	Peer Discovery ...	String	3241	
sqlf_peers	SQLFire Server ...	Array		all(nano-sqlf-peer:ip)
eula_location	VMware EULA L...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html	
locators	SQLFire locator...	Array		all(nano-sqlf-loc:ip)
vfabric_sqlfire	vFabric SQLFire	String	vfabric-sqlfire.noarch	
client_port	Client Port Num...	String	1528	
datagen_zip	Datagenerator ...	String		http://10.32.12.133/nanotrader/appfiles/DataGenerator.zip
vfabric_repo	Setup vFabric R...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm	
httpproxy	Proxy server IP ...	String		10.16.67.187
httpport	Proxy port if be...	String		3128

Figure 17 RabbitMQ run-time binding

Details		Properties		Actions	
Name	Description	Type	Catalog Value	Blueprint Value	Required
rabbit_rpm	RabbitMQ RPM	String	http://www.rabbitmq.com/releases/rabbitmq-server/v2.8.4/rabbitmq-server-2.8.4-1.noarch.rpm		<input checked="" type="checkbox"/>
httpport	Proxy Port if be...	String		3128	<input type="checkbox"/>
httpproxy	Proxy Server IP...	String		10.16.67.187	<input type="checkbox"/>

Figure 18 vFabric tcServer run-time binding

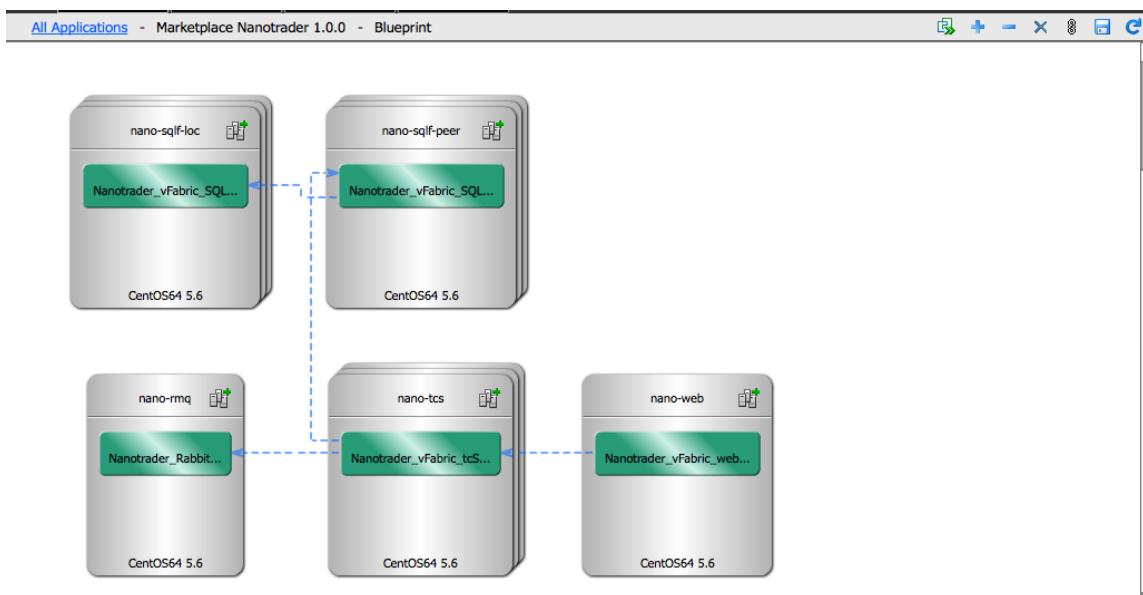
Details		Properties		Actions	
Name	Description	Type	Catalog Value	Blueprint Value	Required
vfabric_tcserver	vFabric tcServer...	String	vfabric-tc-server-standard.noarch		<input checked="" type="checkbox"/>
vfabric_repo	Setup vFabric R...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm		<input checked="" type="checkbox"/>
app_name	tcServer instanc...	String	nanotrader		<input checked="" type="checkbox"/>
rmq_port	RabbitMQ Servi...	String	5672		<input checked="" type="checkbox"/>
rmq_host	RabbitMQ IP ad...	Array		nano-rmq:ip	<input checked="" type="checkbox"/>
eula_location	VMware EULA l...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html		<input checked="" type="checkbox"/>
db_ip	SQLFire Locator...	Array		all(nano-sqlf-loc:ip)	<input checked="" type="checkbox"/>
nano_war_files	Nanotrader App...	String		http://10.32.12.133/nanotrader/appfiles	<input checked="" type="checkbox"/>
nano_tcserver_template	tcServer Templa...	String		http://10.32.12.133/nanotrader/appfiles/nanotrader-template.tar	<input checked="" type="checkbox"/>
httpport	Proxy Port if be...	String		3128	<input type="checkbox"/>
httpproxy	Proxy Server IP...	String		10.16.67.187	<input type="checkbox"/>

Figure 19 vFabric webserver run-time binding

Details		Properties		Actions	
Name	Description	Type	Catalog Value	Blueprint Value	Required
tcs_nodes_ip	tcServer nodes ...	Array		all(nano-tcs:ip)	<input checked="" type="checkbox"/>
tcs_nodes_port	tcServer Ports	String	8080		<input checked="" type="checkbox"/>
vfabric_webserver	vFabric Webser...	String	vfabric-web-server		<input checked="" type="checkbox"/>
web_war_file	War files for Na...	String		http://10.32.12.133/nanotrader/appfiles/spring-nanotrader-web-0.0.1.BUILD-SNAPSHOT.war	<input checked="" type="checkbox"/>
datagen_zip	Datagenerator ...	String		http://10.32.12.133/nanotrader/appfiles/DataGenerator.zip	<input checked="" type="checkbox"/>
httpproxy	Proxy Server IP...	String		10.16.67.187	<input type="checkbox"/>
httpport	Proxy port	String		3128	<input type="checkbox"/>
ws_instance	Name of the W...	String	nanotrader		<input checked="" type="checkbox"/>
vfabric_repo	Setup vFabric R...	String	http://repo.vmware.com/pub/rhel5/vfabric/5.1/vfabric-5.1-repo-5.1-1.noarch.rpm		<input checked="" type="checkbox"/>
eula_location	VMware EULA l...	String	http://www.vmware.com/download/eula/vfabric_app-platform_eula.html		<input checked="" type="checkbox"/>
ws_ip	Web Server IP ...	String		self:ip	<input checked="" type="checkbox"/>

To deploy this application to the cloud, click on “Deploy” icon in Figure 20 Deploy Application. You will be prompted to create a new deployment profile, enter “Nanotrader Dev Profile” and Click OK. Click “Next” and modify the fields if needed, finally click “Deploy” button.

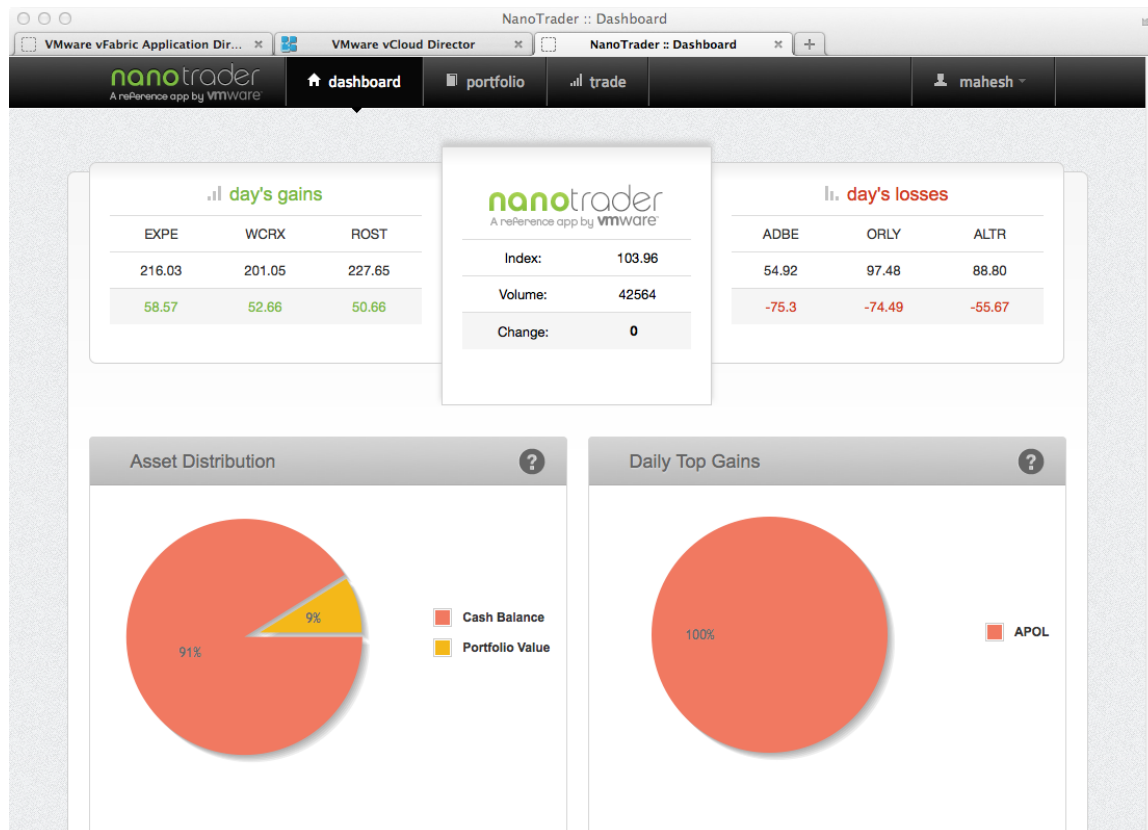
Figure 20 Deploy Application



Review the status of the deployment by refreshing the page, by clicking on the refresh icon. After you see the message “Deployed Successfully”, click on the VM Console to find the web server’s IP address.

Open a browser and enter the web server IP address. You should see the application deployed in Figure 21

Figure 21 Nanotrader Front Page



4. References

- vFabric Application Director Documentation
<https://www.vmware.com/support/pubs/appdirector-pubs.html>
- VMware Repository for vFabric suite
<http://repo.vmware.com/pub/>
- RabbitMQ Install and Documentation
<http://www.rabbitmq.com/install-rpm.html>