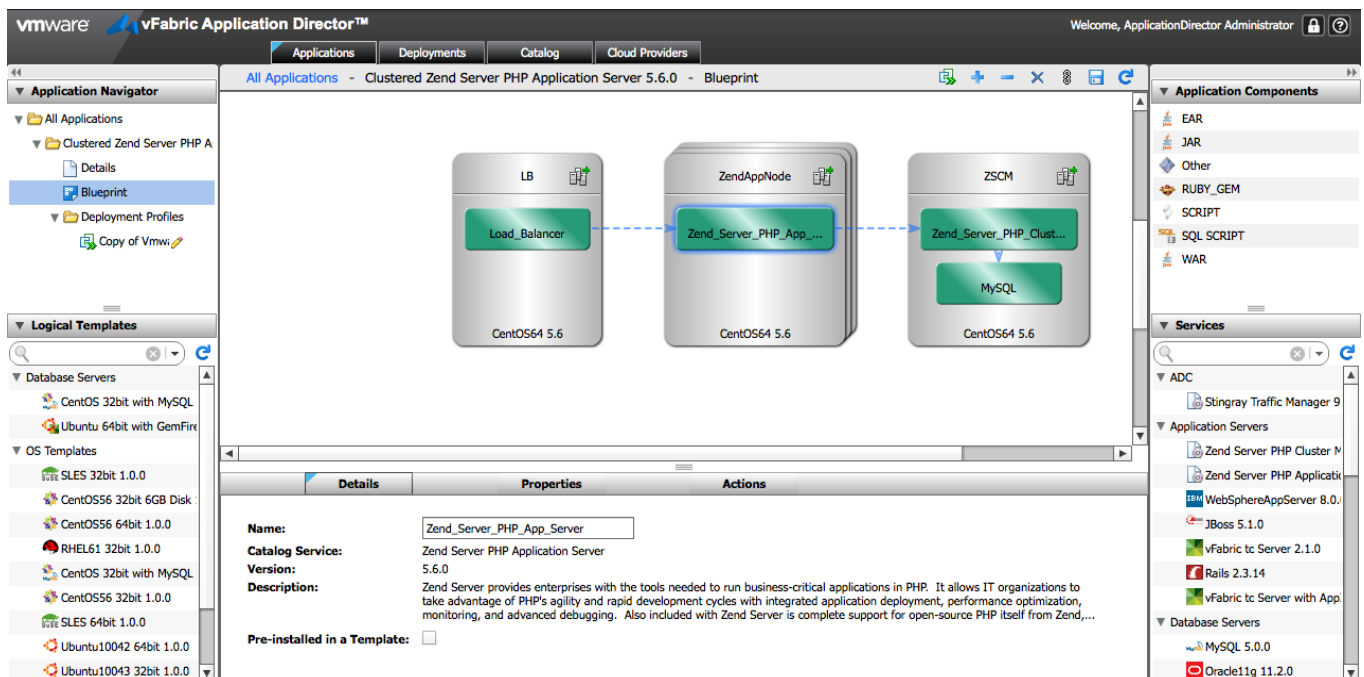# Clustered Zend Server PHP Application Server - Blueprint information

1. OVERVIEW

The purpose of this document is to describe Clustered Zend Server PHP Application Server blueprint in detail. The goal of the blueprint is to allow for provisioning and configuration of cluster of Zend Server (Application Server) instances in automated and repeatable fashion.

The following component and version are installed as part of Clustered Zend Server PHP Application server blueprint :

(1) Zend Server PHP App Server (Application Server)
(2) Zend Server Cluster Manager (Cluster Manager)
(3) Apache Server (Load Balancer)
(4) MySQL Server.

2. HIGH LEVEL BLUEPRINT DESIGN

Conceptually, the blueprint design consists of the tasks described below. These tasks are listed in chronological order:

(1) Install MySQL database service on (Cluster Manager)
(2) Install Zend Server Cluster Manager 5.6 (Cluster Manager)
(3) Setup Hostname (Application Server)
(4) Install Zend Server PHP Application Server 5.6 (Application Server)
(5) Install Apache Server (Load Balancer)

2.1 Files
You will need the following files to configure the scripts and services within this blueprint. Please refer to the following sections for details and their corresponding script/service.

```
darwin_global.conf
setHostName.sh
zendserver56-configure.sh
zendserver56-install.sh
zendserver56-properties.txt
zscm56-install.sh
zscm56-configure.sh
zscm56-properties.txt
```

2.2 Install MySQL on Zend Server Cluster Manager (Cluster Manager)
The "Setup MySQL" installs MySQL Database service on Zend Cluster Manager. It's defined as blueprint service.
Properties:

Name	Description	Type	Catalog Value	Blueprint Value	Required	Secured	Overrida Deploym
db_port	Database port	String	3306		☑	☐	☑
db_root_password	Database root p...	String	****		☑	☑	☑
db_root_username	Database root u...	String	root		☑	☐	☐
global_conf	URL to downloa...	Content	https://${darwin.server.ip}:8443/ darwin/conf/darwin_global.conf		☑	☐	☑

2.3 Install Zend Server Cluster Manager (Cluster Manager)
The "Install Zend Server Cluster Manager" task install ZSCM service on the machine that's provisioned.

Service Definition

Details   Properties   Actions

Name	Description	Type	Value
zendmanager_license_key		String	
zscm_db_password	Password to be used with zscm_db_user to access the central database for ZSCM	String	
zscm_db_user	Username to access monitoring and other ZSCM databases from the manager and the nodes.	String	
zendmanager_order_number		String	
global_conf	URL to download Darwin global configuration for each node	Content	https://${darwin.server.ip}:8443/darwin/conf/darwin_global.con
zend_node_ui_pass	Zend Node password for ZSCM access	Array	
zendmanager_db_port	Zend Cluster Manager MySQL DB Port	String	
zend_api_key_name	Zend Server API key name.	String	
zend_order_number		String	
db_root_password	DB admin password	String	
zend_api_key	Zend Server API key.	String	
zendmanager_db_host	Zend Cluster Manager DB MySQL host address.	String	
zendmanager_ui_pass	Zend Cluster Manager UI password. Can be difrent then node UI password.	String	
db_root_username	DB admin username	String	
zend_license_key		String	
DOWNLOADRPMURL	Zend Server yum configuration and installer scripts URL	String	http://downloads.zend.com/zendserver/5.6.0/ZendServer-5.6.0-

Blueprint Definition

Details			Properties		Actions			

Name	Description	Type	Catalog Value	Blueprint Value	Required	Secured	Overrida Deploym
zendmanager_order _number		String			☑	☐	
global_conf	URL to downloa...	Content	https://${darwin.server.ip}:8443/ darwin/conf/darwin_global.conf		☑	☐	
zend_node_ui_pass	Zend Node pass...	Array		all (ZendAppNode:Zend_Server_PHP_App_S erver:zendnode_ui_pass)	☑	☐	
zendmanager_db_po rt	Zend Cluster M...	String		self:MySQL:db_port	☑	☐	
zend_api_key_name	Zend Server AP...	String		vmwarezendcloud	☑	☐	
zend_order_number		String			☑	☐	
db_root_password	DB admin pass...	String		self:MySQL:db_root_password	☑	☐	
zend_api_key	Zend Server AP...	String		7c87a1e53eb4221b09a673225be3cd2ad2 9f43a61a4b60e0c1872ee114a6fc44	☑	☐	
zendmanager_db_ho st	Zend Cluster M...	String		self:ip	☑	☐	
zendmanager_ui_pa ss	Zend Cluster M...	String		self:MySQL:db_root_password	☑	☐	
db_root_username	DB admin usern...	String		self:MySQL:db_root_username	☑	☐	
zend_license_key		String			☑	☐	
DOWNLOADRPMURL	Zend Server yu...	String	http://downloads.zend.com/ zendserver/5.6.0/ZendServer-5.6.0- RepositoryInstaller-linux.tar.gz		☑	☐	

Actions:

Details		Properties		Actions	

Lifecycle Stage	Script Type	Script	
INSTALL	Bash Script	#!/bin/bash	✖
CONFIGURE	Bash Script	#!/bin/bash	✖
START	Bash Script		✖

Install Script:

Please refer to **zscm56-install.sh** for copy of the INSTALL Bash script.

Please refer to **zscm56-configure.sh** for copy of the CONFIGURE Bash script

2.4 Setup Host Name (Application Server)
The "Setup Host Name" task sets the hostname for the machine that's provisioned. It's defined as a blueprint script.

Properties:

Name	Description	Type	Blueprint Value	Required	Secured	Overridable at Deployment
IP_ADDRESS		String		☑	☐	☑
HOST_NAME		String		☑	☐	☑
DOMAIN_NAME		String		☑	☐	☑

Actions:

Install Script:

Please refer to file **setHostName.sh** to copy the script as the INSTALL Bash Script.

2. Install Zend Server PHP Application Server (Application Server)
2.5 Install Zend Server PHP Application Server (Application Server)
The "Install Zend Server PHP Application Server 5.6.0" task installs a server instance of Zend Server PHP Application Server 5.6.0. It's defined as a blueprint service

Edit Service Zend Server PHP Application Server 5.6.0 ✕

| Details | Properties | Actions |

Name: Zend Server PHP Application Server *

Service Version: 5.6.0 *

Description: Zend Server provides enterprises with the tools needed to run business-critical applications in PHP. It allows IT organizations to take advantage of PHP's agility and rapid development cycles with integrated application deployment, performance optimization, monitoring, and advanced debugging. Also included with Zend Server is complete support for open-source PHP itself from ▼

Tags: Application Servers ✕ Web Servers ✕ Monitoring ✕ ▼ *

Supported OSes: CentOS64 5.6.0 ✕ ▼

Supported Components: SCRIPT ✕ Other ✕ ▼

Pre-installed in a Template: ☐

OK   Cancel

Properties:

Details			Properties	Actions			

Name	Description	Type	Catalog Value	Blueprint Value	Required	Secured	Overrida Deploym
DOWNLOADRPMURL	Zend Server yu...	String	http://downloads.zend.com/ zendserver/5.6.0/ZendServer-5.6.0-RepositoryInstaller-linux.tar.gz		☑	☐	☑
global_conf	URL to downloa...	Content	https://${darwin.server.ip}:8443/ darwin/conf/darwin_global.conf		☑	☐	☑
zendnode_ui_pass	Zend Server No...	String		114a6fc44	☑	☐	☑
zend_zscm_host	Address of the ...	String		ZSCM:ip	☐	☐	☑
zendnode_is_node	Set to 0 if used ...	String		1	☑	☐	☑
zend_api_key_name		String		ZSCM:Zend_Server_PHP_Cluster_Manage r:zend_api_key_name	☐	☐	☑
zend_api_key		String		ZSCM:Zend_Server_PHP_Cluster_Manage r:zend_api_key	☐	☑	☑
zend_self_addr		String		self:ip	☑	☐	☑
zend_self_name		String		self:ip	☑	☐	☑
zend_license_key	Zend Server No...	String			☑	☐	☑
zend_order_number	Zend Server Lic...	String			☑	☐	☑

Please refer to file **zendserver56-properties.txt** for additional explanation and property details.

Actions:

Details	Properties	Actions	
Lifecycle Stage	**Script Type**	**Script**	
INSTALL	Bash Script	#!/bin/bash	✖
CONFIGURE	Bash Script	#!/bin/bash	✖
START	Bash Script		✖

Install Script:

Please refer to file **zendserver56-install.sh** to copy the script as the INSTALL Bash Script.

Please refer to file **zendserver56-configure.sh** to copy the script as the CONFIGURE Bash Script.

2.5 Install Apache Load Balancer.(Load Balancer)
The "Install Apache Load Balancer" task installs Apache Service which provides the load balancing functionality to the clustered Zend Server solution. It's defined as a blueprint script.

2.6