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*Program Mgr.*

# PureSystems

Enable your applications for cloud computing with ICCT  
(Image Construction and Composition Tool)



Only 1 in 5 can allocate more than half their IT budget to innovation

## Least efficient data centers

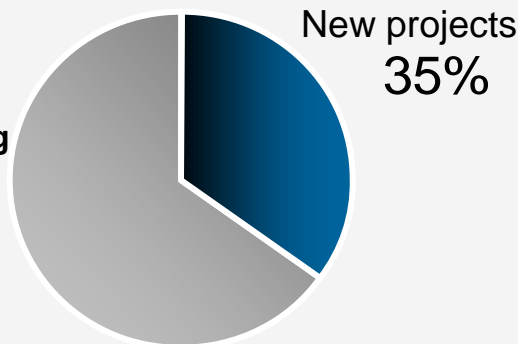
### Use of new technology:

- 43% first and fast technology adoption
- 1% move virtual machines to meet desired outcomes
- 21% use storage virtualization
- 3% use a storage service catalog (tiered storage)

### Results:

Maintaining existing infrastructure

65%



## Most efficient data centers

### Use of new technology:

- 86% first and fast technology adoption
- 58% move virtual machines to meet desired outcomes
- 93% use storage virtualization
- 87% use a storage service catalog (tiered storage)

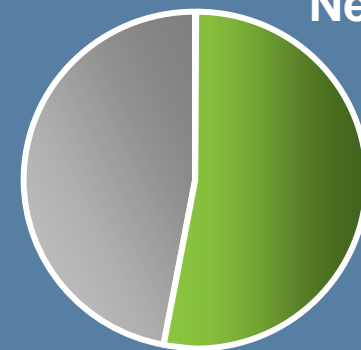
### Results:

Maintaining existing infrastructure

47%

New projects

53%



Source: 2012 IBM Data Center Study: [www.ibm.com/data-center/study](http://www.ibm.com/data-center/study) ( <http://www.ibm.com/data-center/study> )

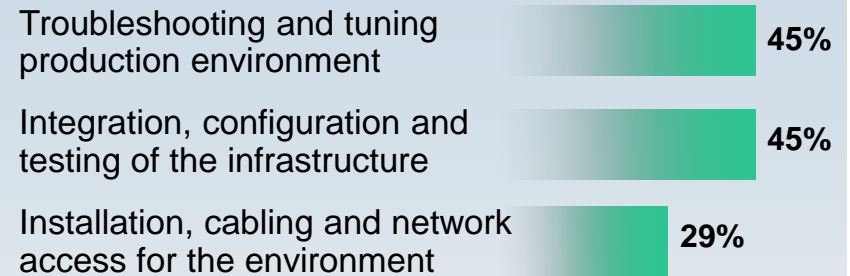
# Clients struggle to overcome barriers of time, cost and risk

## Typical IT Project Time and Budget

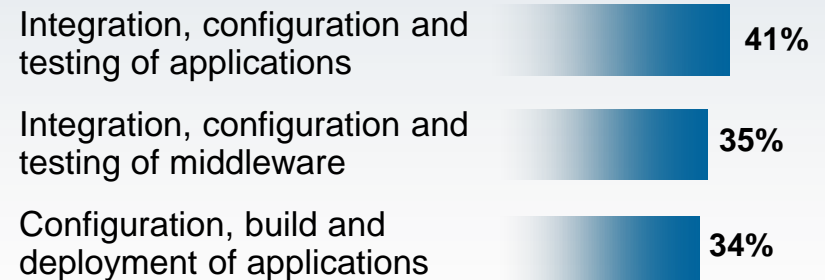
Phase	Time (days)	Budget
Specify/design	73 - 96	14% - 16%
Procure	57 - 112	19% - 21%
Implement	74 - 93	12%
Configure/test	74 - 80	10% - 11%
Cluster & HA	66 - 104	11% - 12%
Backup	44 - 108	10%
Tune	89 - 98	9% - 10%
Management	67 - 110	9 - 10%

## Top Causes of Project Delays

### Hardware



### Software

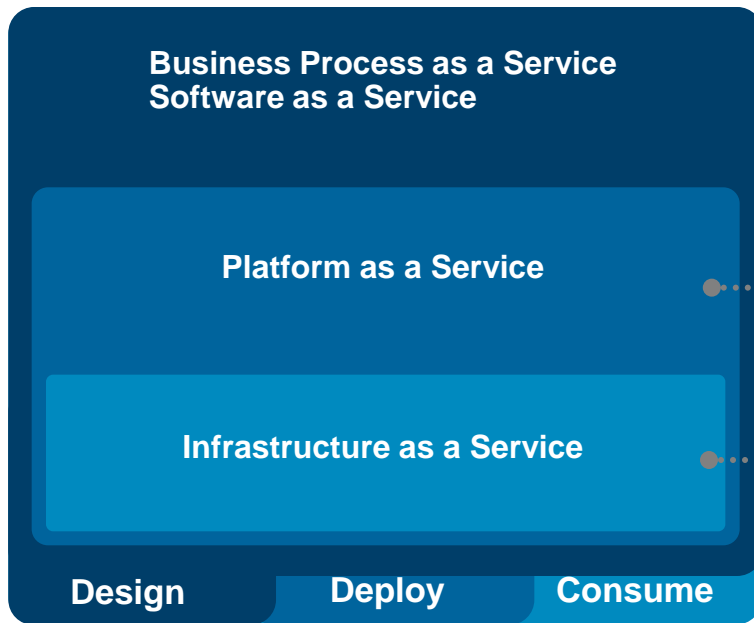


**34%** of new IT projects (US) *deploy late*

From a commissioned study conducted by Forrester Consulting on behalf of IBM

# IBM Systems built for cloud

## IBM SmartCloud



### IBM PureApplication & PureData Systems

20-30X faster deployment with application patterns expertise



### IBM PureFlex System

Accelerate adoption of private clouds with built-in virtualization and superior automation



# Types of Patterns Available

## Virtual Application Patterns

- Built for the cloud environment
- Highly automated, policy based deployment
- Leverages elastic workload management services

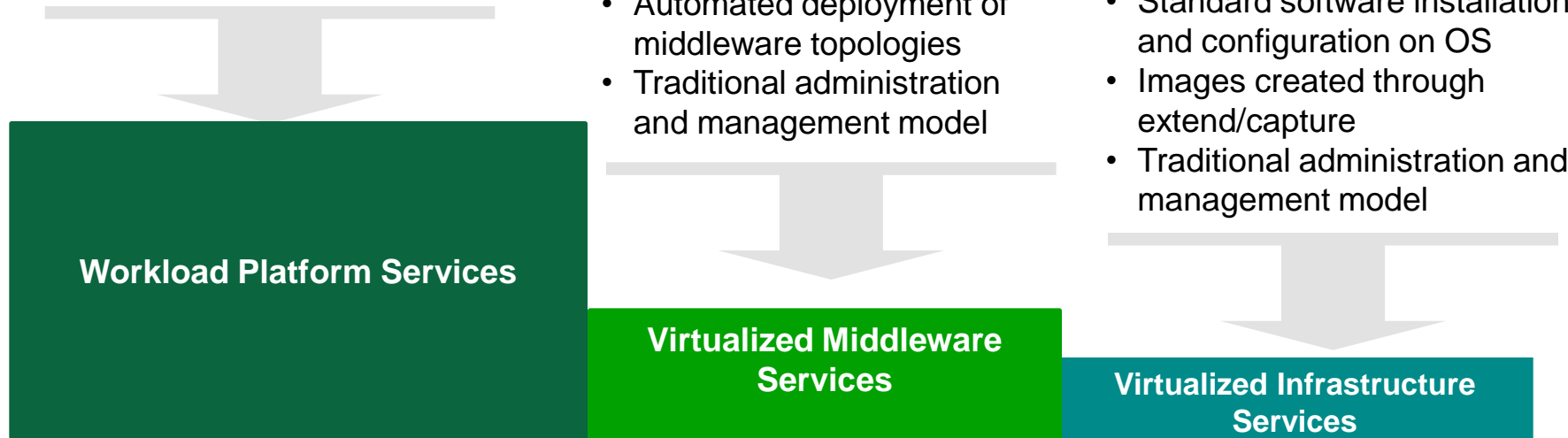
## Virtual Appliance

- Packaged for virtual environments
- Automated deployment of middleware topologies
- Traditional administration and management model

## Existing Software

- Standard software installation and configuration on OS
- Images created through extend/capture
- Traditional administration and management model

Value



Workload Platform Services

Virtualized Middleware Services

Virtualized Infrastructure Services

Best TCO  
*cloud applications*

Improved TCO  
*virtualized applications*

Standard TCO  
*existing applications*

Best

Better

Good

# IBM PureSystems Centre

<http://www-01.ibm.com/software/brandcatalog/puresystems/center>  
<http://www.ibm.com/developerworks/expert/try.html>

The screenshot shows the IBM PureSystems Centre search results page. It features a search bar with 135 results, a 'Refine search' section, and a list of results. The results include:

- oxaion open** (Version: 2.0) - System: IBM PureFlex System, Provided by: oxaion ag
- S2K Enterprise Management Solutions** (System: IBM PureFlex System, Provided by: Vormittag Associates Inc.)
- eyeOS Professional Edition** (Version: 1.1) - System: IBM PureFlex System, Provided by: eyeOS S.L.
- The Red Bend Software Management Center** (Version: 4.5) - System: IBM PureApplication System, Provided by: Red Bend Software
- Alteon Virtual Appliance (VA) for IBM PureSystems** (Version: Alteon-25.1.2.3\_kv1m.tgz) - System: IBM PureFlex System, Provided by: Radware Ltd.

- Optimized solutions from 100+ leading ISV partners
- Search by solution area, industry or system.
- Gain access to ISV application patterns for trial and production.

• Certified through



- All of your existing AIX, IBM i, Linux and Windows applications will run on PureSystems

A collage of logos for various ISV partners, including:

- Dassault Systèmes
- HarrisData
- SAP
- Esri
- Arkeia
- iWay
- Siemens PLM Software
- Hardis
- PriceLenz
- CrossView
- Radware
- Riverbed
- Innovation Group
- Vision Solutions
- Infor
- Redhat
- Suse
- Aviarc
- Juniper
- F5
- GMC
- Sab
- Temenos
- SugarCRM

# IBM PureSystems Centre

IBM PureSystems  
**PureSystems Centre**  
Extending the Value of IBM PureSystems

Welcome | Browse Solutions

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Refine search Reset **Results**

135 results   [Show Details](#) | [Hide Details](#) Sort by: Latest

<p><b>IBM PureSystems</b></p> <ul style="list-style-type: none"> <li>PureApplication System (85)</li> <li>PureFlex System (67)</li> </ul> <p><b>Provider:</b></p> <ul style="list-style-type: none"> <li>IBM (5)</li> <li>IBM Partners (135)</li> </ul> <p><b>Industries</b></p> <ul style="list-style-type: none"> <li>Aerospace and defense (45)</li> <li>Automotive (47)</li> <li>Banking (74)</li> <li>Chemicals &amp; Petroleum (40)</li> <li>Computer services (54)</li> <li>Consumer products (53)</li> <li>Education (43)</li> <li>Electronics (48)</li> <li>Energy &amp; Utilities (52)</li> <li>Financial markets (57)</li> <li>Government (42)</li> <li>Healthcare (58)</li> <li>Insurance (64)</li> <li>Life sciences (47)</li> <li>Media &amp; Entertainment (44)</li> <li>Other industries (56)</li> <li>Retail (54)</li> <li>Telecommunications (56)</li> <li>Travel &amp; Transportation (47)</li> <li>Wholesale distribution (51)</li> </ul>	<p><a href="#">oxaion open</a> Version: 2.0 System: IBM PureFlex System Provided by: <a href="#">oxaion ag</a></p> <hr/> <p><a href="#">S2K Enterprise Management Solutions</a> System: IBM PureFlex System Provided by: <a href="#">Vormittag Associates Inc.</a></p> <hr/> <p><a href="#">eyeOS Professional Edition</a> Version: 1.1 System: IBM PureFlex System Provided by: <a href="#">eyeOS S.L.</a></p> <hr/> <p><a href="#">The Red Bend Software Management Center</a> Version: 4.5 System: IBM PureApplication System Provided by: <a href="#">Red Bend Software</a></p> <hr/> <p><a href="#">Alteon Virtual Appliance (VA) for IBM PureSystems</a> Version: Alteon-25.1.2.3_kvml.tgz System: IBM PureFlex System Provided by: <a href="#">Radware Ltd.</a></p>
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avtenta.

SmartIS  
PAMETNI INFORMACIJSKI SISTEMI

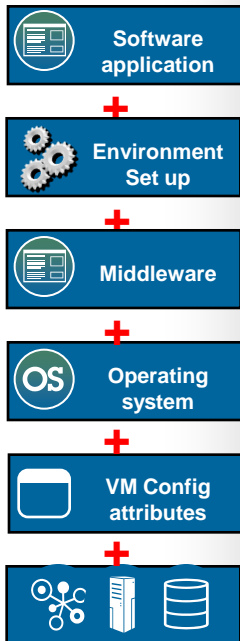
# How to enable applications for IBM PureFlex System



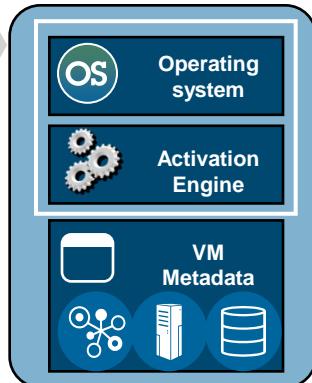
SW  
Architect

## IBM Virtual Appliance Factory with Image Construction and Composition Tool *Capture once, deploy with consistency and ease*

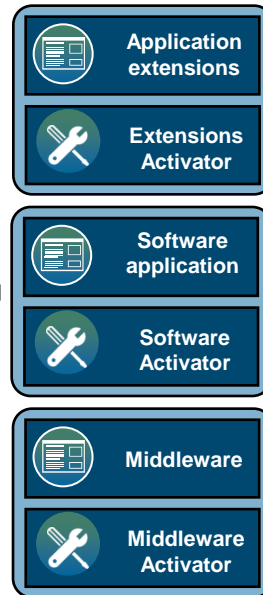
Traditional Workload  
Deployment Components



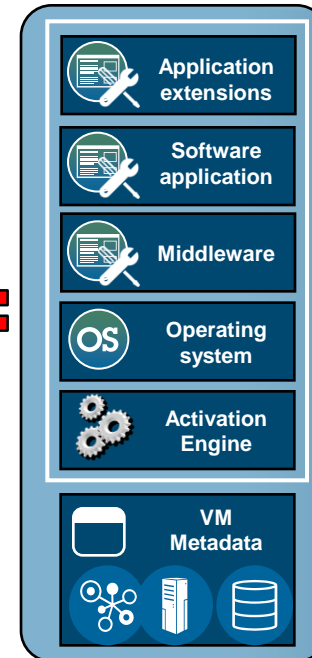
Build Base  
Virtual Image



Add bundles that  
contain product  
software and activators



Capture

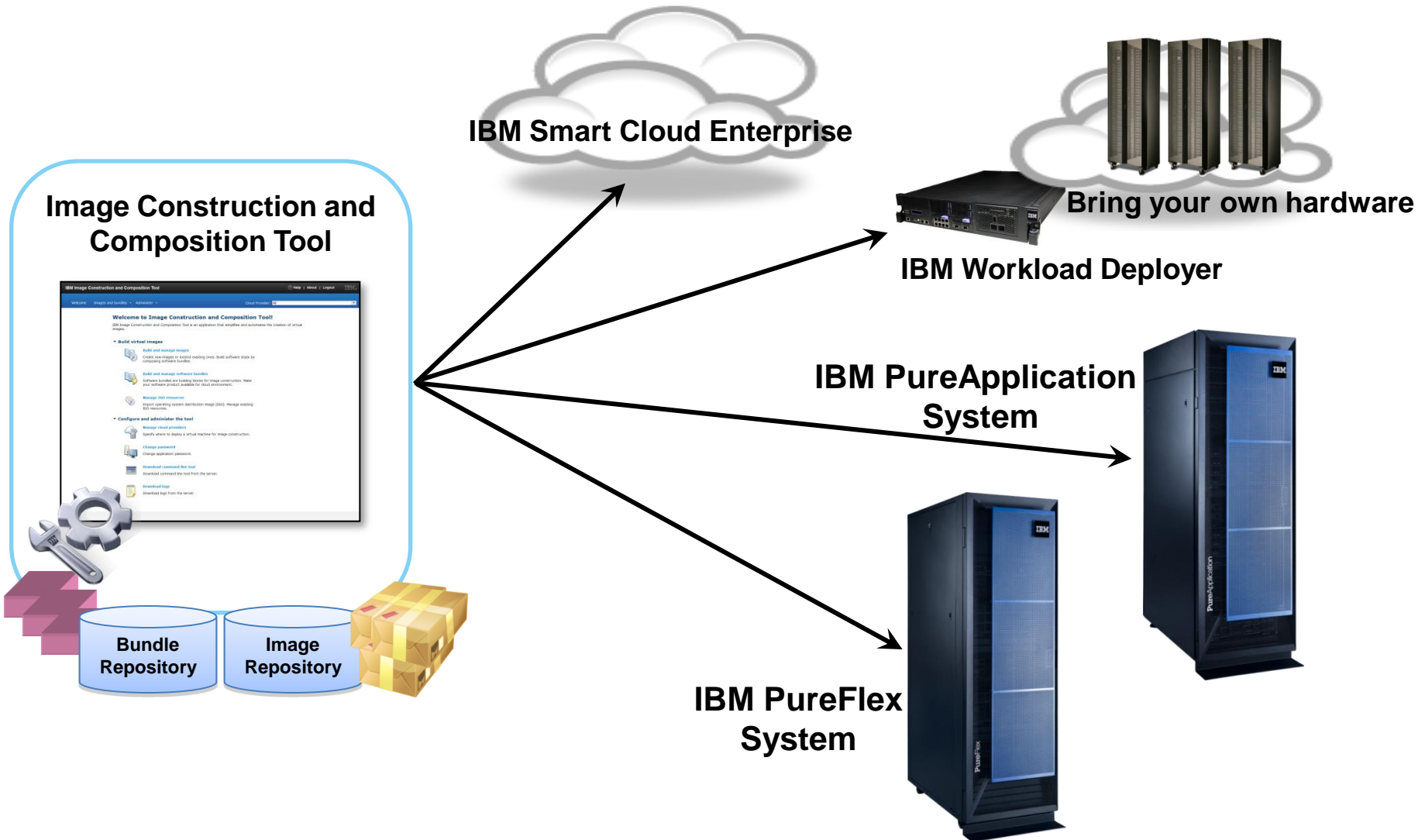


Store in Image  
Repository, ready to  
be deployed using  
VMControl, Flex  
System Manager,  
IBM SmartCloud  
Entry, etc





# Support for Multiple Cloud Providers



## Welcome to Image Construction and Composition Tool!

IBM Image Construction and Composition Tool is an application that simplifies and automates the creation of virtual images.

### Build virtual images



#### Build and manage images

Create new images or extend existing ones. Build software stack by composing software bundles.



#### Build and manage software bundles

Software bundles are building blocks for image construction. Make your software product available for cloud environment.



#### Manage ISO resources

Import operating system distribution image (ISO). Manage existing ISO resources.

### Configure and administer the tool



#### Manage cloud providers

Specify where to deploy a virtual machine for image construction.



#### Change password

Change application password.



#### Download command line tool

Download command line tool from the server.

Welcome | Images and bundles | Administer

Cloud Provider: KVM3650x

Images



Type search text...

Search

- Search all these words
- Search any of these words

ThinkEHR [1.0.0.0]

SLES11 [1.0.0.0]

323 [1.0.0.0]

VestigoCBS [1.0.1.0]

Smartis\_maximo\_RHEL62 [1.0.0.0]

AventaTSM-RH [1.0.0.0]

SLES11

Completed

Description:	The import image operation has started.; Image containing Suse Linux Enterprise Server 11.
Universal ID:	com.ibm.si.iic.SLES11
Version:	1.0.0.0
Extends Image:	
Image Status:	<input checked="" type="checkbox"/> Completed
Created on:	September 21, 2012 1:27:06 PM CEST
Updated date:	September 21, 2012 1:29:57 PM CEST
Operating System:	Type: Linux Distribution: SUSE Linux Enterprise Server (SLES) Version: 11 Activation Framework: Enablement Bundle SLES11 for KVM express
Cloud Provider:	KVM3650x

Software Bundles:

- SUSE Linux Enterprise Server (SLES) [11]

Sort: [Alphabetically](#), By installation order

Welcome Images and bundles Administer

Cloud Provider: KVM3650x

Images

SLES11

Completed

Type search text...

Search

Description:

The import image operation has started.; Image containing Suse Linux Enterprise Server 11.

- Search all these words
- Search any of these words

Create image

How do you want to create your image?

- Create image from an ISO image
- Create image from a running virtual machine

Proceed

Cancel

ThinkEHR [1.0.0.0]

SLES11 [1.0.0.0]

323 [1.0.0.0]

VestigoCBS [1.0.1.0]

Smartis\_maximo\_RHEL62 [1.0.0.0]

AventaTSM-RH [1.0.0.0]



Updated date:

September 21, 2012 1:29:57 PM CEST

Operating System:

Type: Linux  
Distribution: SUSE Linux Enterprise Server (SLES)  
Version: 11  
Activation Framework: Enablement Bundle SLES11 for KVM express

Cloud Provider:

KVM3650x

Software Bundles:

Sort: Alphabetically, By installation order

SUSE Linux Enterprise Server (SLES) [11]

Bundles



moj prvi bundle



Type search text... Search

- Search all these words
- Search any of these words

- Enablement Bundle RHEL6 for KVM exp...
- Enablement Bundle AIX6 for PowerVM ...
- icct-install [1.0.2.0]
- Enablement Bundle for VMware [1.0.0.8]
- Linux/AIX Enablement Bundle for IBM ...
- installksh [1.0.0.0]
- Enablement Bundle SLES11 for KVM ex...
- Enablement Bundle for IBM SmartClou...
- icct-install - Clone [1.0.1.0]
- Enablement Bundle Linux for IBM Sma...
- icct-install [1.0.3.0]

General Requirements Install Configuration Firewall Reset

Define how to install the bundle

**Files to Copy**

Files to be copied to the target machine: +

Source (URI or file name)	Executable
None defined	

**Command**

Run Command:  Hide Preview  
Select an executable script to run

---

Run As:

Parameter Style:

**Arguments:** +

Name	Label	Value	Hide Value
None defined			

# Virtual Application Pattern

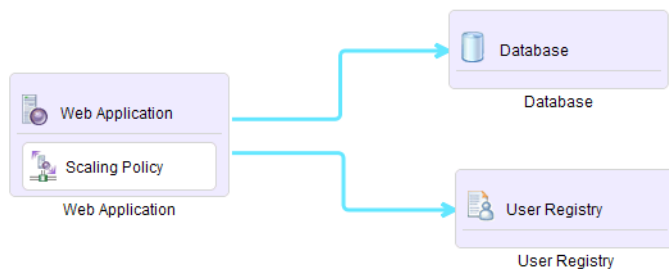
IWD in work

A Virtual Application represents a collection of application components, behavioral policies and their relationships

Core components of the pattern include web applications, databases, queues, connections to existing resources, business process models, batch jobs, mediations, etc.

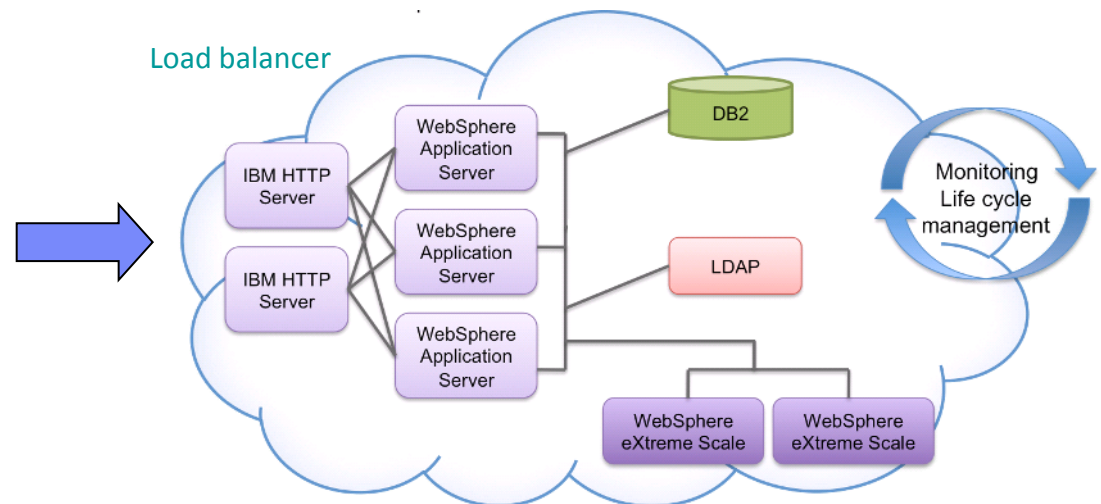
Core policies of the pattern include high availability, SLAs, security, multi-tenancy, isolation, etc.

## Virtual Application Pattern



Initial instance = 3

## Virtual Application Instance



WAS cluster configured with session replication

# Consolidate through patterns

Virtual application patterns allow more dense:

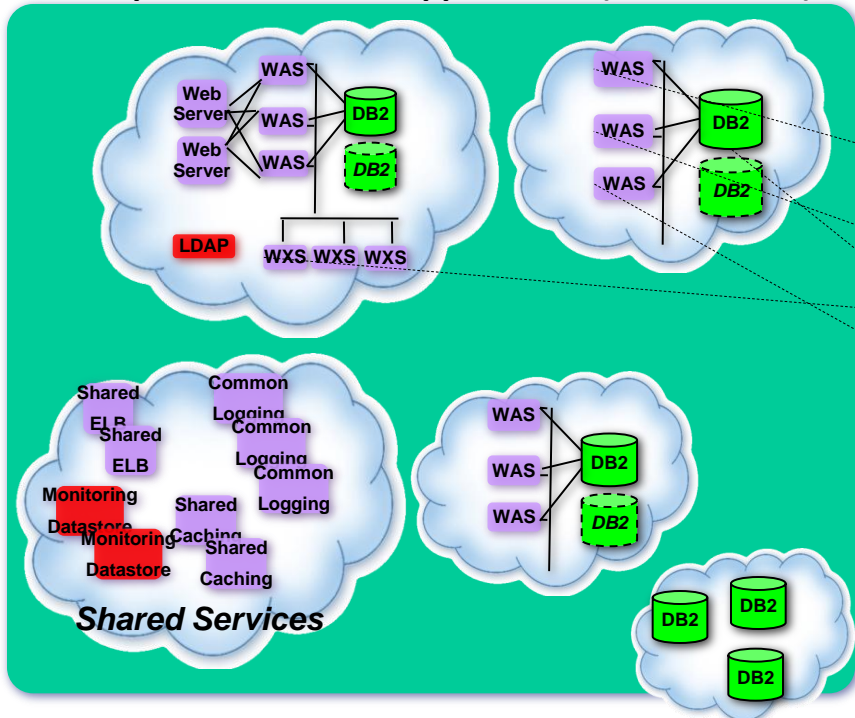
packing of applications in server space

Due to shared services & smart placement algorithms

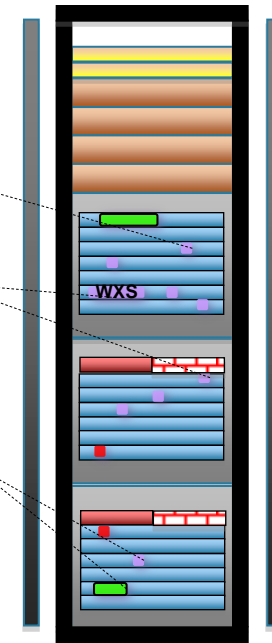
allocation of applications to admins

Due to improved efficiency in management

Multiple Consolidated Applications (Virtual View)



Multiple Consolidated Applications (Physical View)



The New Era of Computing with

# PureSystems

*The world's first family of expert integrated systems*

**IBM PureSystems**

Prilagodljivi, enostavni in prožni sistemi  
z vgrajenimi izkušnjami.

