

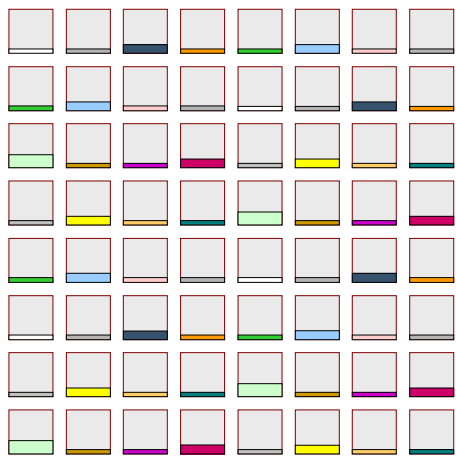
A large white play button icon (a triangle pointing right) centered within a dark blue circular area, which is part of a larger graphic of concentric circles and grid lines on a server rack background.

BMC BladeLogic for Cisco UCS

Tore Brynaa
Business Solution Manager, BMC Software

Gartner Group: Virtualizing the Data Center

Sprawled
Component-Orientation



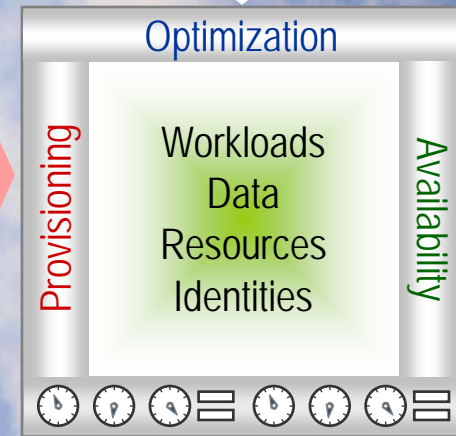
2002

Virtualized
Layer-Orientation



2002 to 2012

Automated
Service-Orientation



2010 to 2020

Hardware costs down, flexibility up

Cloud enabled

Service levels and agility up

Gartner

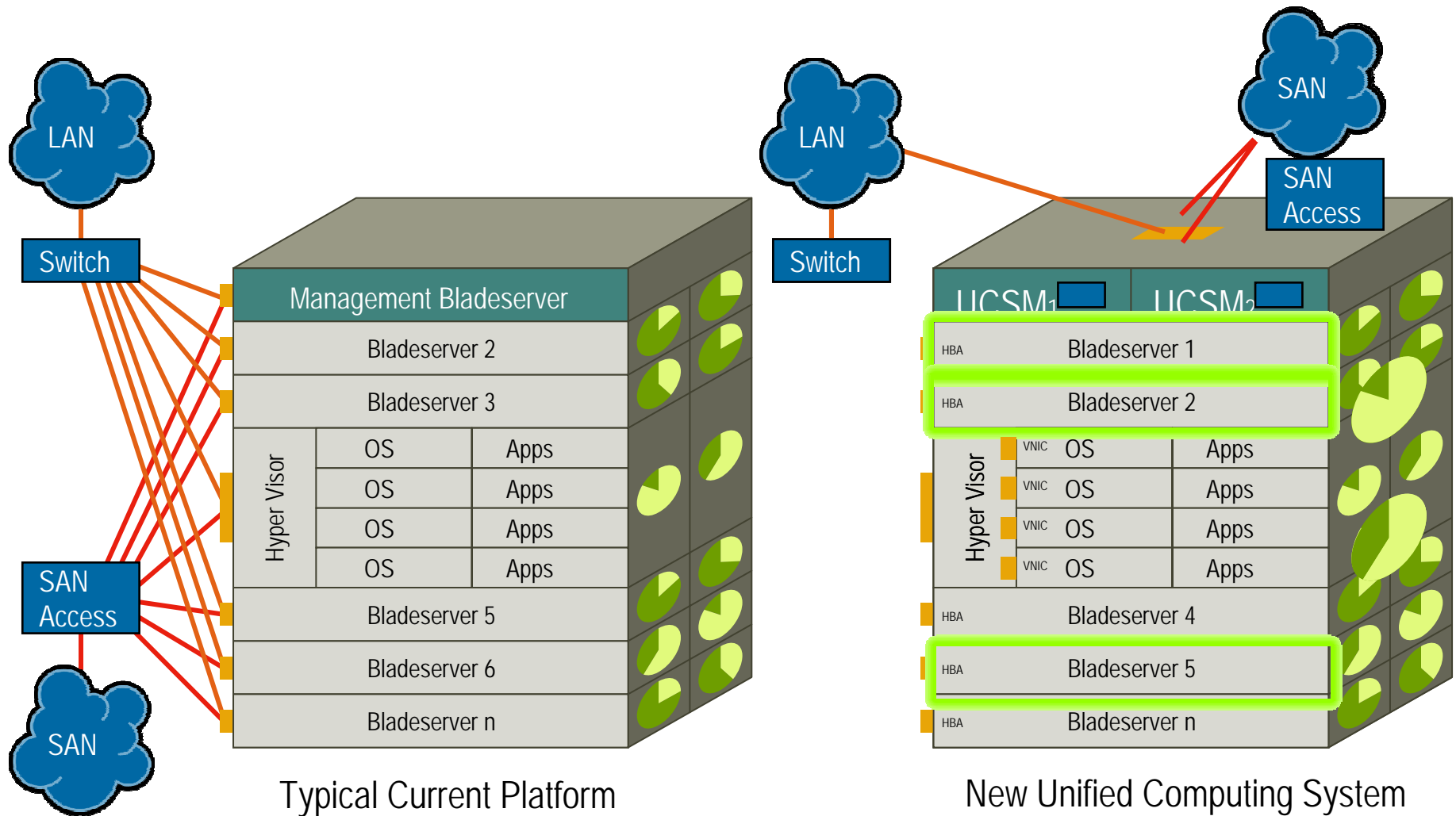
$$100 - 90 = 110$$

$$100 - 90 = 120$$

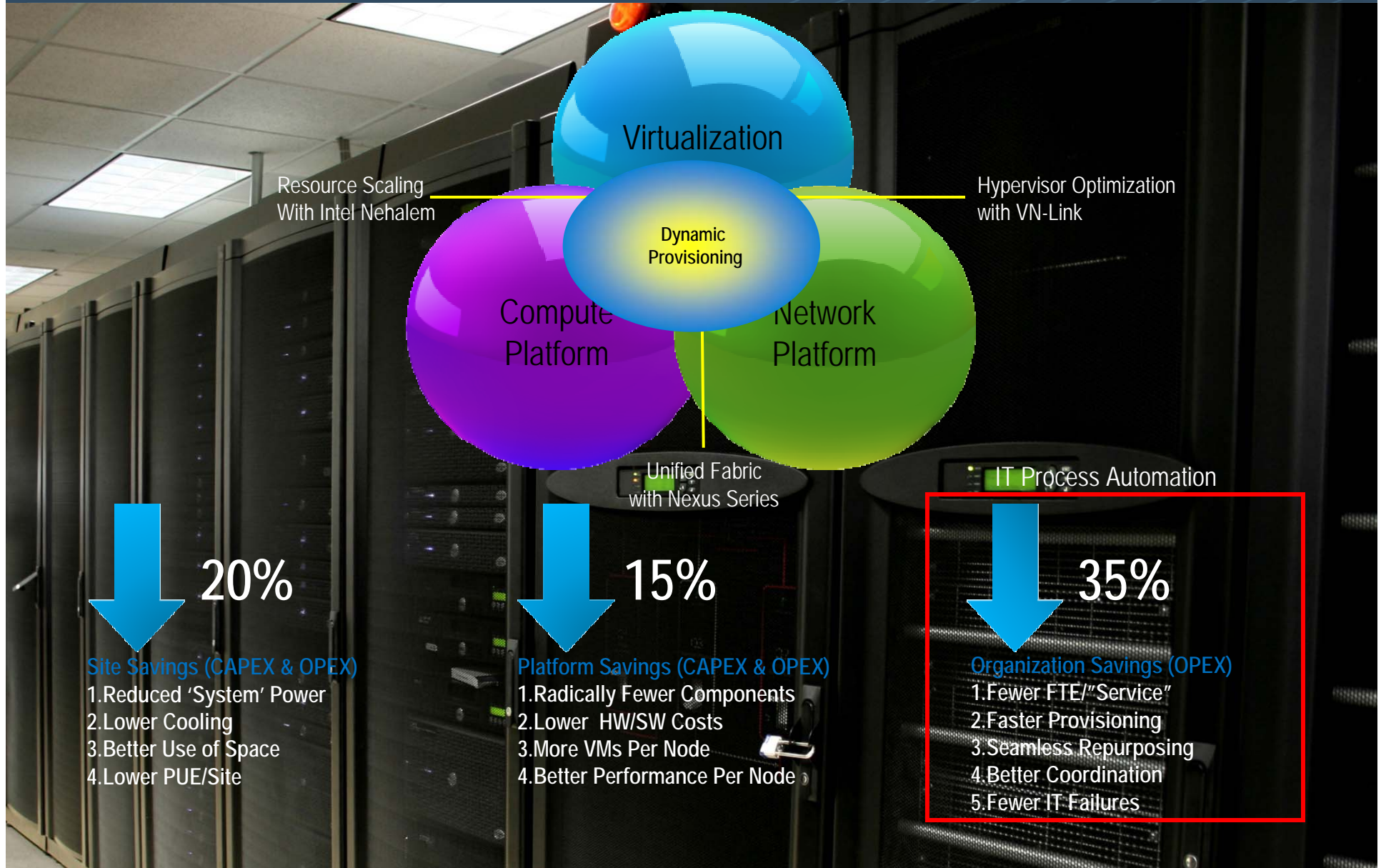
- ▶ Cisco's Unified Computing System Review
 - ▶ What Does Cisco OEM from BMC?
 - ▶ Why Do UCS Customers Need It?
 - ▶ How's it Work?
 - ▶ What Makes BladeLogic for Cisco's UCS Better?
 - ▶ What's the Proof?



Unified Fabric & Integrated Management



The Cisco Unified Computing System



What Does Cisco OEM from BMC?

- ▶ Cisco's Unified Computing System Review
- ▶ **What Does Cisco OEM from BMC?**
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- ▶ What Makes BladeLogic for Cisco's UCS Better?
- ▶ How Do You Position it in HP Accounts?
- ▶ What's the Proof?

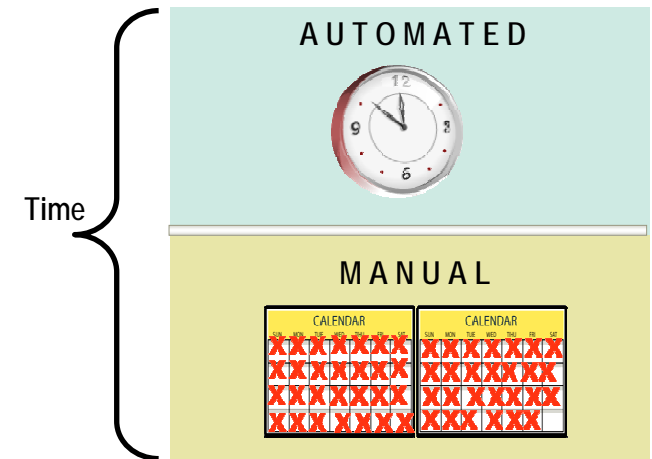
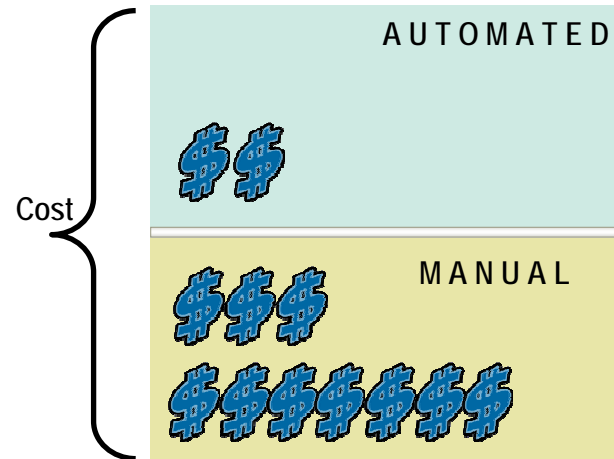


Built-in Automation in Cisco UCS Powered by BMC BladeLogic



Configuration Standards

- Hardware
- Operating System
- Applications
- Compliance



AUTOMATED

> 4 days	N/A	Minutes	N/A	Minutes	Minutes	Minutes
----------	-----	---------	-----	---------	---------	---------

MANUAL

< 14 days	> 10 days	> 8 days	> 5 days	> 7 days	> 8 days	> 3 days
<ul style="list-style-type: none"> •Receive authorized change request •Prepare change plan •Receive change approval •Acquire BOM and parts •Schedule install in DC 	<ul style="list-style-type: none"> •Bios firmware and settings •Local storage firmware/settings •Install Blade firmware •UUID and Boot order •CNA firmware and settings 	<ul style="list-style-type: none"> •Virtual port groups-virtual machines •Switch uplink/downlink definitions •MAC and WWN address pinning •Vlan, Vsan, QOS, bandwidth allocation •Ethernet Channels to upstream Lan 	<ul style="list-style-type: none"> •Configure/deploy Op. System •Patch Op. System •Validate OS Configuration •Create App. configuration •Install App. stack •Validate application stack 	<ul style="list-style-type: none"> •Update CMDB •Close change request 		
Change Preparation	Cabling and physical install	Set Up Servers	Cabling and physical install	Set Up Network	Set Up App. Stack	Change Close

Why Do UCS Customers Need It?

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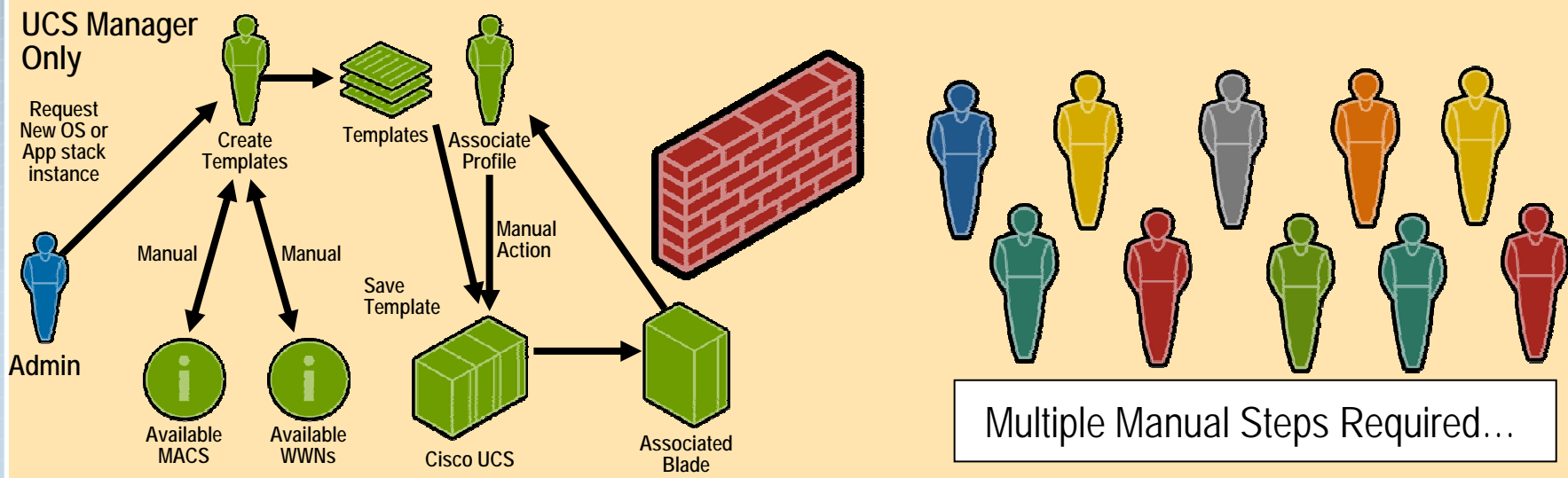
Required Capabilities

- › Discovery of Cisco UCS hardware, profiles, and policies.
- › Single console management of Physical and Virtual Environments
- › Seamless management of Cisco UCS Templates across UCS instances
- › Global management of MAC, WWN and UID across UCS instances
- › Settings and Drift Management (device, baseline, policy) with automated way to consistently remediate non-authorized changes (non-compliant devices)

Without BMC BladeLogic for Cisco UCS: Full Stack Server Provisioning

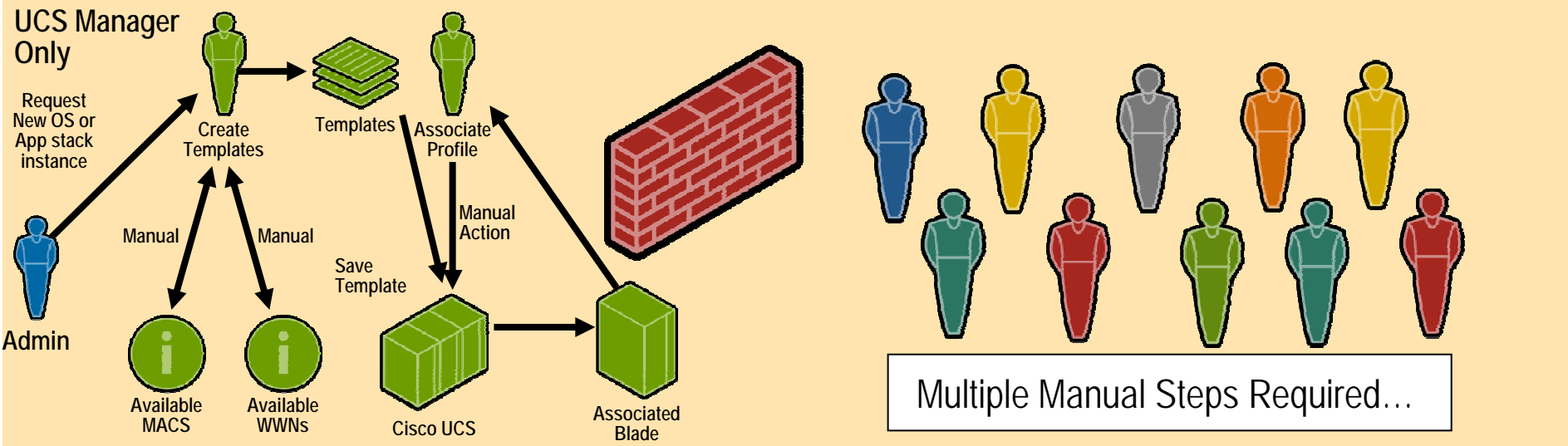
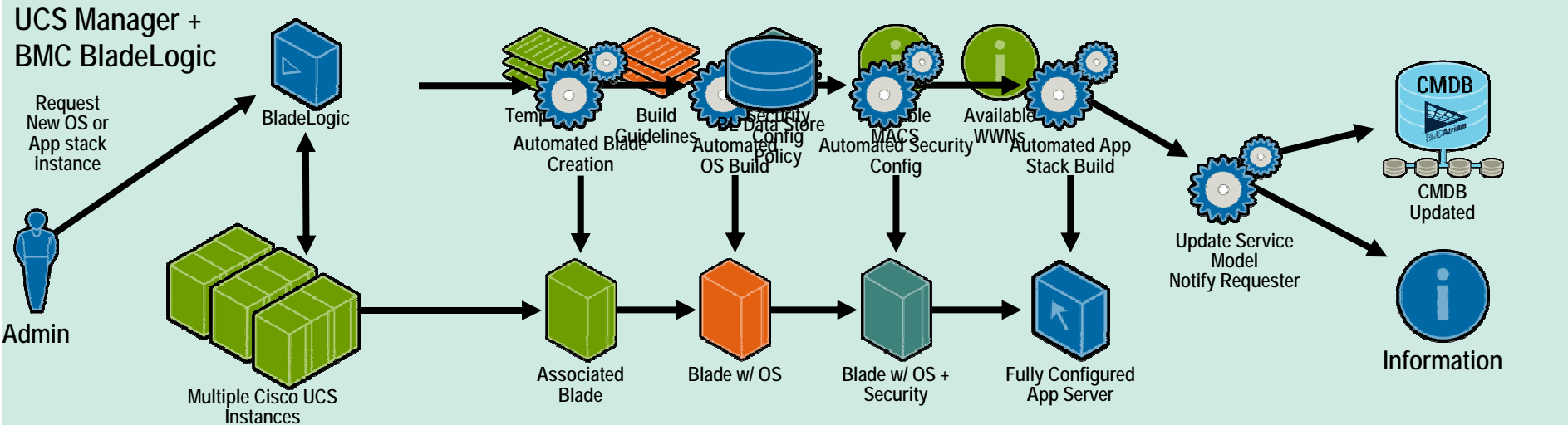
UCS Manager Only Limitations

- Templates can NOT be shared across UCS instances
- Available MAC addresses are scoped per UCS Manager instance
- Available WWN addresses are scoped per UCS Manager instance
- Available UUIDs are scoped per UCS Manager instance



Multiple Manual Steps Required...

With BMC BladeLogic for Cisco UCS: Full Stack Server Provisioning



How's it Work?

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Discovery...

The screenshot displays the BMC BladeLogic Configuration Manager interface. On the left, a tree view shows the hierarchy of objects, with 'Blades' selected under the 'Physical' folder. The main pane shows a table of discovered objects:

Object Type	Name	Blades Name	Blade Name
Blade	blade-7		
Blade	blade-8		

A yellow callout box points to the table with the text: "Note the physical blades that are available."

At the bottom of the interface, a 'Tasks in Progress' section is visible, and the status bar shows '2 objects' and the user 'BLAdmins : BLAdmin' at IP '10.20.38.11:9841'.

Provisioning...

The screenshot shows the BMC BladeLogic Provisioning Manager interface. The title bar reads "BMC BladeLogic Provisioning Manager". The menu bar includes "File", "Edit", "View", "Actions", "Tools", and "Help". The toolbar contains various icons for file operations. The main window is titled "win2k8std64". On the left, a "System Packages" tree shows "win2k8std64" selected and highlighted with a red box. The central pane displays "Disk Partition" options, including "Pre-Install Scripts", "Disk Partition", "Post-disk Partition", "Basic Config", "Computer Settings", and "OS Components". A table shows disk partitioning details:

Drive Letter	Type	Size (MB)	Primary Partition	Fill
C	NTFS	15000	true	false

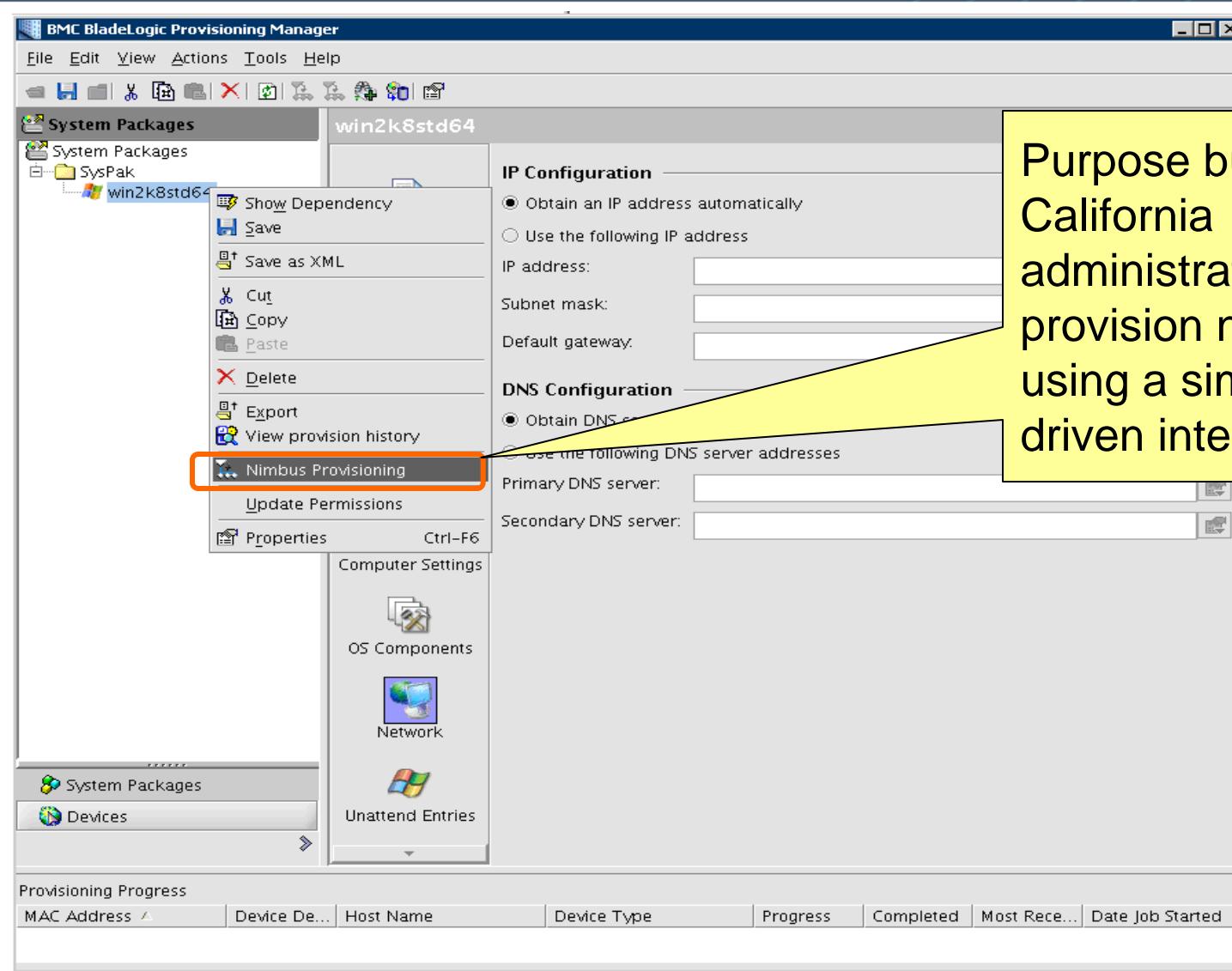
Below the table, there is a checkbox for "Use script for disk partitioning" which is checked. A text area contains the following script:

```
select disk 0
clean
create partition primary
select partition 1
active
FORMAT fs=NTFS LABEL="DISK_VOL1" QUICK
```

At the bottom, there is another checked checkbox: "Reboot after the script is executed". The bottom of the window features a "Provisioning Progress" table with columns: "MAC Address", "Device De...", "Host Name", "Device Type", "Progress", "Completed", "Most Rece...", and "Date Job Started".

Pre-Built OS and Application Stacks are available for provisioning.

Provisioning wizard...



Purpose built integration to California allows administrators to quickly provision new systems using a simplified wizard driven interface.

Provisioning wizard...

The screenshot shows the BMC Provisioning Wizard interface. The main window is titled "Provision CAM Device: Step 3 of 9 (Basic Config)". On the left, a sidebar lists various configuration steps: System Packages, Pre-Install Scripts, Disk Partition, Post-disk Partition, Basic Config, Computer Settings, and OS Components. The "Basic Config" step is currently selected. The main area displays the "Local Settings" section, which includes fields for "Computer name" (Payroll-Fin-23), "OM server name" (PayrollFinance23), "Administrator password", and "Confirm password". Below this, the "Workgroup or Domain" section is visible, with "Workgroup" selected and "mshome" entered. There are also options for "Windows server domain" and "Create a computer account in the domain". At the bottom of the window, there are navigation buttons: "Back", "Next", "Finish", and "Cancel".

Administrator

Administrator can customize "OS" setting information as needed.

Provisioning in progress...

The screenshot displays the BMC BladeLogic Provisioning Manager interface on the left and a KVM Console window on the right. The provisioning manager shows a package named 'win2k8std64' with various configuration options like 'Disk Partition', 'Post-disk Partition', 'Basic Config', 'Computer Settings', and 'OS Components'. The KVM Console shows a command prompt window with the following text:

```
XC:\Windows\system32\cmd.exe - startnet.cmd
BMI : Execute next state
BMI : spawn process : In RunProcess: exitCode =
BMI : Send state status
BMI : Send return data
-----
Output of this state
XC:\Windows\system32>call X:\Windows\System32\BladeLogic\bin\startnet.cmd
XC:\Windows\system32>set dskprt=1
XC:\Windows\system32>set MACADDR=02-60-8C-00-00-5B
XC:\Windows\system32>call X:\Windows\System32\BladeLogic\bin\startnet.cmd
XC:\Windows\system32>DiskPart /s X:\Windows\System32\BladeLogic\bin\part.txt
Microsoft DiskPart version 6.0.6001
Copyright (C) 1999-2007 Microsoft Corporation
On computer: MINI NT-5JMBMQD

Disk 0 is now the selected disk.

DiskPart succeeded in cleaning the disk.

DiskPart succeeded in creating the specified partition.

Partition 1 is now the selected partition.

DiskPart marked the selected partition as active.

100 percent completed.

DiskPart successfully formatted the volume.

XC:\Windows\system32>call X:\Windows\System32\BladeLogic\bin\startnet.cmd
XC:\Windows\system32>X:\Windows\System32\BladeLogic\bin\startnet.cmd
Target volumes will be updated with NTLDR compatibility.
Could not map drive c: to an associated volume device.
```

Two yellow callout boxes provide additional context:

- Provisioning process starts automatically.** (Points to the KVM Console window)
- Administrator can monitor provisioning process as needed.** (Points to the Provisioning Progress table)

MAC Address	Device De...	Host Name
02-60-8C-00-00-...	description	PayrollFinance23

What Makes BladeLogic for Cisco USC Better?



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What Makes Us Better?

BMC BladeLogic for Cisco UCS



Unified Policy Model

- › Single Consolidated Management interface for the full stack, physical and virtual
- › Real-time granular configuration access and control

Global Management of UCS

- › Ability to centrally manage MAC, WWN, and UUIDs across UCS instances
- › Ability to create and centrally manage UCS hardware service profiles

Role-Based Access Control and Segregation of Duties

- › Restrict access at three levels: task, configuration and policy
- › Increased security
- › Task delegation to low skilled resources

Composite Packaging

- › Standards based and cross platform
- › Built-in roll back
- › Easy re-use of packages

Closed-Loop Compliance

- › Audit and remediate with surgical precision
- › Handle exceptions and complex policy rules

What's the Proof?

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- › **BMC Automation Reduces Deployment Time and Server Administration Costs for an Online Professional Services Company**
 - 95% Reduction in crashes caused by configuration changes
 - 90% Reduction in emergency system changes
 - Operations can automatically track changes and delegate selected administrative tasks to subgroups

	Before BMC	With BMC
Provisioning Time (95 servers)	3 months	2 days
Improved Server to Admin Ratio	60:1	120:1



Thank You

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