Packaging and Deploying VMware Fusion with the Casper Suite

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JAMF Software 1011 Washington Ave South Suite 350 Minneapolis, MN 55415 (612) 605-6625

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Introduction

Target Audience

This paper is intended for system administrators who are planning to deploy VMware Fusion on the Mac OS platform.

How to Use This Guide

This guide is intended to walk you through the steps necessary to build packages of the VMware application and Virtual Machine and then deploy these packages at imaging time, via Casper Remote, a policy or the Self Service application. Following the steps contained herein you should be able to deploy the necessary components to hundreds of machines.

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Prerequisites

The Casper Suite allows you to easily package and deploy VMware Fusion along with one or many Virtual Machines to Macs on your network. Deploying VMware Fusion uses the original installer package for VMware Fusion and two packages created with Composer: One for a Virtual Machine and one for the VMware Fusion application settings.

Before you get started, please check the list below and ensure that you have the following components:

Requirements:

- VMware Fusion 2 with license key
- · Existing virtual machine or installer media
- Composer.app
- Casper Admin.app
- Access to your JAMF Software Server (JSS)
- Casper Remote (optional)
- Casper Imaging (optional)
- Self Service (optional)

Useful Links on Related Topics

VMWare

For additional information from VMware on mass deployment strategies outside of the Casper Suite, please refer to their document titled "Mass Deployment of VMware Fusion"

www.vmware.com/files/pdf/Mass_Deployment_of_VMware_Fusion_wp2.pdf

Apple Computer

http://www.apple.com/downloads/macosx/system_disk_utilities/ vmwarefusion.html

http://www.apple.com/business/profiles/ocsd/

Wikipedia

http://en.wikipedia.org/wiki/VMware_Fusion

JAMF Software

http://www.jamfsoftware.com/ libraries/pdf_library/ VMware_and_CasperSuite.pdf

Packaging VMware Fusion

Deploying VMware Fusion uses the installer package from VMware Fusion and two packages created with Composer: One for a Virtual Machine, and one for the VMware Fusion application settings.

Preparing the VMware Fusion installer for use in the Casper Suite:

1. Create a text file that contains your VMware Fusion license key and save it to your desktop as "license.txt" (see fig.1).

0 0	🖹 license.txt
xxxxx-xxxxx-xxxxx	

- 2. Mount the VMware Fusion disk image in the Finder.
- 3. Navigate to the VMware Fusion disk image and control-click on the "Install VMware Fusion" icon and choose "Show Package Contents".
- 4. Copy the package named "Install VMware Fusion.pkg" to your desktop.
- 5. Control-click on the "Install VMwareFusion.pkg" that you copied to your desktop and choose "Show Package Contents" (see fig. 2).



fig. 1

6. Navigate to Contents/Plugins/licensingPane.bundle, control-click and choose "Show Package Contents" (see fig. 3).

00		Plugins	\bigcirc
Contents	Archive.bom Archive.pax.gz Info.plist PkgInfo Plugins Resources	 InstallerSections.plist licensingPane.bundle macFusePane.bundle 	▼ Preview:
			Name licensingPane.bu ndle Kind Bundle Size 1 MB on disk Created Modified 2/13/09 7:14 PM Last opened Version 1.0 More info
		н	II

7. Place the license.txt file from your desktop into Contents/Resources and then close all open windows. You can also copy this file using Terminal.app with the following command (see fig. 4):

cp ~/Desktop/license.txt ~/Desktop/Install\ VMware\
Fusion.pkg/Contents/Plugins/licensingPane.bundle/Contents/
Resources/



- 8. Install VMware Fusion by launching the "Install VMware Fusion.pkg".
- 9. Register VMware Fusion when prompted and configure preferences as necessary.
- 10. Quit VMware Fusion.

Create a VMware Fusion Virtual Machine package with Composer

- 1. Launch VMware Fusion from /Applications.
- 2. Create or add a new virtual machine, ensuring it is saved in /Users/Shared/VM.
- 3. Configure the virtual machine as desired for deployment. (If you are creating a Virtual Machine for Windows, now is a good time to run sysprep to prepare the Virtual Machine for enterprise deployment.)
- 4. Quit VMware Fusion and navigate to /Users/Shared/VM.
- 5. Control-click on the virtual machine file and choose Show Package Contents.
- 6. Open the file with the suffix ".vmx" (your Virtual Machine settings file) with TextEdit and remove any lines beginning with the following:

ethernet0.addressType =
uuid.location =
uuid.bios =
ethernet0.generatedAddress =
ethernet0.generatedAddressOffset =

7.Locate the text:

"sharedFolder1.hostPath = "/Users/<username>"

8. Replace the path "/Users/<username>" with "~"

9. Save the .vmx file.

10. Launch Composer. (If you are presented with a New Package dialog, click Cancel.)

11. Drag the Virtual Machine file from /Users/Shared/VM into Composer's Sources column.

00	Composer 7.0	\Box
New Package Show I	E Sinder Ouick Look Delete	Qr 💿
SOURCES VM-WindowsXP_S PACKAGES	22 ▼ Shared ▼ WM ▼ WM	Jewen
	Owr Gro Windows XP Professional.vmwarevm	R W X her: root (0) ↓ ✓ ✓ ✓ up: admin (80) ↓ ✓ ✓ ✓ ne: ✓ ✓ ✓ ✓
+ - 💠		Build as DMG Build as PKG

- 12. When the copy is finished, a package icon will appear in the Sources column. Control-click this icon to rename it to something like "VM-WindowsXP_SP2".
- 13. Verify the permissions on the Virtual Machine file within Composer and click Build as DMG.

Create a VMware Fusion Application Settings package with Composer:

- 1. Launch Composer. (If you are presented with a New Package dialog, click Cancel.)
- 2. Navigate to /Users/<username>/Library/Preferences.

fig. 5

- 3. Locate the file named "com.vmware.fusion.plist" and the directory named "VMware Fusion".
- 4. Drag both of these files at the same time into the Sources column in Composer (see fig. 6).
- 5. When the copy is finished, a package icon will appear in the Sources column. Control-click this package to rename it to "VMware Fusion Settings".

	00	Com	poser 7.0		\bigcirc
	New Package Show In Fin	der Quick Look Delete		Q.	\otimes
	SOURCES VM-WindowsXP_SP2 VM-ware Settings PACKAGES		st		
		com.vmware.fusion.plist	Owner: root (0) Group: admin (80) Everyone:	R W X ▼ ✓ ✓ ■ ▼ ✓ ✓ ■ Mode: 664	
g. 6	+ - \$			Build as DMG Build	as PKG

6. Verify the permissions on the settings files within Composer and click Build as DMG (see fig. 7).



fig. 7

When you have finished creating these packages, drag them into Casper Admin to make them available for use within Casper. You will then need to set the package options to ensure proper installation order and to allow them to be later uninstalled.

Configure package options in Casper Admin:

1. Click "New Category" in Casper Admin and create a new category titled "VMware".

2. Drag the three VMware Fusion packages into this new category.

3. Click the VMware category and highlight all of the VMware Fusion packages (see fig. 8).

New Config New Category Hide Parent Add Printer Add Dock Item New Adobe Install Info Index Remove REPOSITORY All All Categories All Categories All Categories All Items Standard Packages Ock Items All Categories Browsers Office Office Office Ock VMware Adobe Installer Images Mware Mware	00		Caspe	r Admin 6.01				\bigcirc
REPOSITORY View Type All Items All Packages Browsers Scripts Office Printers Os Dock Items Adobe Installer Images Mame Format Categories Install VMware Fusion Apple Package VMware VM-WindowsXP_SP2 DMG Package VMware VMware 12 Yes VMware Settings DMG Package VMware	New Config New Ca	ategory Hide Parent	Add Printer	dd Dock Item New Ad	obe Install	info Index	Remove	X
IOCAL DRIVES Name Format Category Priority FUT FEU Index LOCAL DRIVES Install VMware Fusion Apple Package VMware 10 No No No VM-WindowsXP_SP2 DMG Package VMware 15 No No No VMware Settings DMG Package VMware 12 Yes Yes No	REPOSITORY Configurations Standard FILE SERVERS	View Type All Packages Scripts Printers Dock Items Adobe Installer Images		Categ All Ca Brows Office VMwa	ories tegories ers re			
	LOCAL DRIVES	Name Install VMware Fusion VM-WindowsXP_SP2 VMware Settings	Format Apple Package DMG Package DMG Package	Category VMware VMware VMware	Priority 10 15 12	FUT No No Yes	FEU No No Yes	Index No No No

- 4. With the packages highlighted, select the Index icon at the top of the Casper Admin window and allow the process to complete.
- 5. Double-click the "Install VMware Fusion.pkg" in Casper Admin's package list and set the following options (see fig. 9):
 - In the Options tab, set the priority to 10
 - Click the checkbox to "Allow this package to be uninstalled by Casper or a Policy." Set the "Install Only if Processor is:" option to "x86"
- 6. Click OK to save the changes.

fig. 8

- 7. Double-click the "VMware Fusion Settings" package in Casper Admin's package list and set the following options (see fig. 10):
 - In the Options tab, set the priority to 12. This ensures the settings file is installed after the VMware Fusion application.
 - Click "Fill User Templates" and "Fill Existing User Home Directories"
 - Click "Allow this package to be uninstalled by Casper or a Policy."
 - Set the "Install Only if Processor is:" option to "x86"

Package Options		
Priority: 10	Fill U	ser Templates
Requires Reboot	📃 Fill E	xisting User Home Directorie
Package Limitations		
Stage: Deployable	÷	
Allow this package to	he uninstalled h	v Casper or a Policy
Allow this package to	be uninstaned b	y casper of a roncy
OS Requirements:		
Enter possible matche would like to include	s (such as 10.4 or 1 all versions of 10.4,	.0.4.1) separated by commas. If yo enter "10.4.x".
🗹 Install Only if Process	or is: x86	÷
If the target comput	er is not x86	Do not install
		a ac available
Install only if SWU rep	orts the package	e as avallable

8. Click OK to save the changes.

- 9. Double-click the virtual machine package(s) in Casper Admin's package list and set the following options (see fig. 11):
 - In the Options tab, set the priority to 15. This ensures the virtual machine is installed after the required components.
 - Click "Allow this package to be uninstalled by Casper or a Policy."
 - Set the "Install Only if Processor is:" option to "x86"

Priority: 12	🗹 Fill User Templates
Requires Reboot	Fill Existing User Home Directories
Package Limitations	
Stage: Deployable	\$
Allow this package to	be uninstalled by Casper or a Policy
OS Requirements:	
Enter possible matches would like to include a	; (such as 10.4 or 10.4.1) separated by commas. If you II versions of 10.4, enter "10.4.x".
🗹 Install Only if Processo	or is: x86
	er is not x86 Do not install
If the target compute	

10. Click OK to save the changes.

fig.

11. From the File menu, choose Save and quit Casper Admin.

Package Options		
Priority: 15	Fill User Templates	
Requires Reboot	Fill Existing User Hor	ne Directories
Package Limitations		
Stage: Deployable	•	
Allow this package to	be uninstalled by Casper or a Po	olicy
OS Requirements:		
Enter possible matche would like to include	s (such as 10.4 or 10.4.1) separated b all versions of 10.4, enter "10.4.x".	y commas. If you
🗹 Install Only if Process	or is: 🛛 🗙 🗘	
If the target comput	er is not x86 Do not insta	II

Deploying VMware Fusion

fig. 1

Once you have created the packages above, you can now easily deploy the VMware Fusion application, settings, and Virtual Machines to Macs on your network.

The Casper Suite offers four primary methods of distributing VMware Fusion to your managed Macs, all of which can be enabled at the same time:

- Using Casper Remote, when immediate deployments are required.
- Automatically via Casper's Policy Engine, which allows for unattended, automatic installation when clients appear on the network.
- During the imaging process, eliminating further steps to make a computer ready for a user.
- User-initiated via the Self Service application, allowing the user to install VMware Fusion or additional Virtual Machines when they need it.

Deploying VMware Fusion with Casper Remote

The Casper Remote application can be used to immediately deploy VMware Fusion and associated Virtual Machine(s) to you managed Macs. This method is best for an immediate deployment. However, it will overwrite any existing VMware Fusion installation and also requires the target system to be connected to the network.

- 1. Launch Casper Remote and authenticate to your JAMF Software Server (JSS).
- 2. In the Computers tab, select the target systems to which VMware Fusion will be deployed.
- 3. In the packages tab, select the VMware Fusion installer package, the VMware Fusion settings package, and the Virtual Machine you wish to deploy.
- 4. Ensure that the VMware Fusion settings package has the options selected to "Fill User Templates (FUT)" and "Full Existing User Home Directories (FEU)" (see fig. 12).

	Casper 0.01			ation (1	computer	,	
	6	A Contraction of the second se	(L	5		Q-F	lter Package
Window Contro	l Observe (Override Defa	aults Refres	h Data Sl	now Plan		
Computers	Packages	Scripts	Printers	Dock	Accounts	s Reboot	Advanced
Backages 3 Co	ented						
Packages - 5 Se	ected						
▶ Office							
► OS							
▼ VMware							
Install	/Mware Fusion						\checkmark
VM_Wir	dowsXP_SP2						
VIVI - 111	100/03/11_51/2						
VMware	Settings						⊻ ⊻
VMware	Settings						⊻ ⊻
VMware	Settings						⊻ ⊻
VMware	Settings						
VMware No Description	s Settings						⊻
VMware No Description	s Settings						⊻ ∑
VMware No Description VMware Setting:	Settings	▼ Fill User	r Templates		ill Existing	Users 🗆 U	M M ■
VMware No Description VMware Settings Action: Instal	Settings	▼ Fill User	r Templates	F	ill Existing	Users 🗌 U	pdate Autorun
VMware No Description VMware Setting: Action: Instal	ages	√ Fill User	r Templates	∑ F Software	ill Existing Update	Users 🗌 U	pdate Autoru
VMware No Description VMware Setting: Action: Install All Cached Pack	ages	€ Fill User	r Templates	√ F Software □ Set	ill Existing Update Server	Users 🗌 U	pdate Autorun
VMward No Description VMware Setting: Action: Install All Cached Pack	ages I Cached Packa	€ Fill User ges	r Templates	Software	ill Existing Update Server	Users 🗌 U	pdate Autorun
VMward No Description VMware Setting: Action: Install All Cached Pack	ages I Cached Packa	I Fill User ges	r Templates	Software	ill Existing Update Server	Users 🗌 U	pdate Autorun
VMward No Description VMware Setting: Action: Install All Cached Pack	ages I Cached Packa	I Fill User ges	r Templates	Software	ill Existing Update Server	Users U	pdate Autorun

fig. 12

- 5. In the Advanced tab check "Update Inventory (Recon)".
- 6. Click "Show plan" in the toolbar of the Casper Remote window and verify that the appropriate computers are selected.
- 7. Click Go to begin the installation.

Deploying VMware Fusion with a Policy

Policies allow you to automatically install VMware Fusion along with a Virtual Machine onto a specific group of computers based on a certain trigger such as startup, login, or a particular timed event such as a known maintenance window.

- 1. Connect to the web interface of your JSS.
- 2. Click Management and choose Policies.
- 3. In the Policies window, click "Create New Policy..."
- 4. In the General tab, enter something like "Install VMware Fusion" as the Display Name and set the Category to "VMware Fusion".
- 5. In the "Triggered by" drop down menu, choose the trigger you would like to begin the installation ("startup" is recommended).
- 6. In the "Execution Frequency" drop down menu, choose "Once Per Computer".
- 7. Choose any days or time range where you do not want the installation process to occur (see fig. 13).

Policy O	/erview							
Dis	play Name:	nstall VMware Fu	sion 2				Categor	y: VMware
Executio	n Options							
	Triggered	By: startup					÷	
Be	comes Active	On: 2 🛟 /	12 🗘 / 2	009 🛟 at	1 🛟 : 00	0 🛟 🛛 PM	\$	
	Expires	On: 🗘 /	🗘 /	- 🛟 at	🔹 :	- +	•	
Exe	cution Freque	ncy: Once Per	Computer 🛟					
D	o Not Execute	On: 🗌 Sun 📄	Mon 📃 Tue 🗄	Wed 🗌 Th	u 🗏 Fri 🗏 Sa	at		
Do Not	Execute Betw	een: 💶 🗧 :	🗘	😫 and 🦳	- 🗘 : 💶	•		
		📃 Make /	Available Offlir	ne (For Ongo	ing Policies (Only)		

- 8. Click the Scope tab and choose which computers, groups, departments, or buildings will receive VMware Fusion. It is highly recommended that in addition to a department or building you also scope the policy to a specific Smart Computer Group that is set to the minimum hardware requirements and disk space required for VMware Fusion. If necessary, limit the installation to a particular network segment. For example; you could exclude your wireless or VPN network segment to only allow the installation when the client system is physically plugged into the network.
- 9. In the packages tab, click "Add Package" and choose the Install action for the VMware Fusion installation package, the settings file, and at least one Virtual Machine.
- 10. Click "Add Package(s)" to add the packages to the policy.
- 11. Ensure that the VMware Fusion settings package has the options selected to "Fill User Templates (FUT)" and "Full Existing User Home Directories (FEU)" (see fig. 14)

askages								
Packag	ae Name		ction	FUT	FEU	Autoru	n	Remove
VMware Settings	je Hume	, Ir	istall					Remove
Install VMware Fusio	n	Ir	nstall					Remove
VM-WindowsXP_SP2		Ir	nstall					Remove



12. In the Advanced tab, check "Update Inventory (Recon)" (see fig. 15).

General Scope Self Servic	e Packages Scripts Printers	Dock Accounts Reboot Advanced
Maintenance		
🗹 Update Inventory	📃 Update Prebindings	Flush System Caches
Reset Computer Names	Fix Permissions	Flush User Caches
Self Heal Packages	Fix ByHost Files	Verify Startup Disk

13. Click the Save Policy button at the bottom of the browser window.

When a client meeting the scope criteria (group membership, network segment, department, etc) checks in with the JSS on the specified trigger, it will automatically pull down the VMware Fusion packages and log the action to the JSS when the installation is complete.

Deploying VMware Fusion During the Imaging Process

VMware Fusion can be deployed when a Mac is imaged with Casper Imaging. However, the VMware Fusion installer can only be run when the computer is booted off the primary drive. To automate this process you will need to create a script to call a policy as soon as the computer reboots. This ensures VMware Fusion is installed on the correct drive and still allows the imaging process to be automated.

To create a script to trigger a policy at reboot:

1. In TextEdit, create a new file called "FirstBoot.sh" containing the following lines:

#!/bin/bash

This is a script to automatically run any policies trigged #### by the manual run action of "firstboot", allowing you to #### install packages that require the Mac to be booted to the #### primary boot volume.

/usr/sbin/jamf policy -trigger firstboot

2. Save this file in plaintext and drag it into Casper Admin.

3. Double click on the script inside Casper Admin and click the Options tab.

4. Set the Priorit	y drop down	menu to "At Reboot	t" (see fig. 15).
--------------------	-------------	--------------------	-------------------

		Summary	Info	Options	
Script	Options				
Prie	ority: At Reboo	ot ≑			
The	first 3 parameters are	predifined in every	script as m	nount point, computer name and user	nam
Par	ameter 4 Label:		Para	meter 8 Label:	
Par	ameter 5 Label:		Para	meter 9 Label:	-
Par	ameter 6 Label:		Param	aeter 10 Label:	_
Dee	The second second		Paran	reter 10 Label.	_
Par	ameter 7 Label:		Param	heter 11 Label:	
Script	Limitations				
Sta	ge: Deployable	: 🛟			
OS	Requirements:				
	Enter	oossible matches (such as 1	0.4 or 10.4.1) separated by comm	as.
	you we	ould like to include	e all versio	ons of 10.4, enter "10.4.x".	

5. Click OK and save your changes in Casper Admin.

Next, create a policy similar to the one above with the following changes:

1. In the General tab, set the Triggered by: drop down menu to "other" and enter "firstboot" in the run action field.

2. In the Execution Frequency drop down menu, choose "Ongoing" to allow the option to install VMware Fusion again if the computer is ever re-imaged.

General	Scope	Self Service	Раскадез	Scripts	Printers	DOCK	Accounts	Reboot	Advance
Policy Ove	rview								
Disp	lay Name:	Install VMware Fu	sion 2				Categor	y: VMware	\$
Execution	Options Triggere	d By: other (Ma	nually specify th	e run at actio	on in this field))>	🗘 fitsj	tboot	
Bec	omes Activ	e On: 2 🛟 /	12 🗘 / 2	009 🛟 at (1 🛟 : 00	PM	\$		
	Expire	s On: 🛟 /	+ / -	- 🛟 at (🗘 : 🕒	- 🗘 [÷		
Do	Not Execut	e On: Sun	Mon 🗌 Tue 🗌	Wed 🗌 Th	u 🗏 Fri 🗏 Sa	at			
Do Not E	xecute Bet	ween: 🛊 :	🗘	and -		•			
		📃 Make A	Available Offlin	e (For Ongo	ing Policies C	Only)			
							Override [Default Setting	gs for Policy

3. In the Scope tab, you can choose "Assign to All Computers" as the deployment will be specified with a configuration in Casper Admin or at image time with Casper Imaging.

Finally, to deploy VMware Fusion when imaging you have two options:

1. Drag the FirstBoot script into the desired configuration in Casper Admin so as to be automatically applied to any Mac imaged with that configuration.

00		Casper A	Admin 6.01				\bigcirc
	*	-	XX		i 🗔	\odot	>>
New Config New Ca REPOSITORY All Items CONFIGURATIONS √ Standard	ttegory Hide Parent View Type All Packages Scripts Printers Dock Items	Add Printer Add	Dock Item New Adobe Categorie: Browsers OS VMware	Install I s ories	nfo Index	Remove	
* jss.casperdemo.c	Adobe Installer Images	Format	▼ Category	Priority	FUT	FEU	Index
LOCAL DRIVES	First8oot MacOS 10.5.6 Microsoft Office 2008	Script DMG Package DMG Package	VMware OS Office	At Reboot 1 10	No No	No No	No No
							//



OR

2. When using the Casper Imaging application, click the Scripts tab and select the FirstBoot script. Ensure it is set to run At Reboot (see fig 18).

Show	/ Plan					
	Instal	Scripts	Printers	Accounts	Network Advan	ced
	Scripts – 1 Selected			Options fo	or FirstBoot	
	VMware			< <i>n</i>	not specified>	
	FirstBoot		⊻	< <i>n</i>	not specified>	
				<n< td=""><td>not specified></td><td></td></n<>	not specified>	
				< <i>n</i>	not specified>	
				<n< td=""><td>not specified></td><td></td></n<>	not specified>	
				< <i>n</i>	not specified>	
				< <i>n</i>	not specified>	
	No Description			< <i>n</i>	not specified>	
				⊖ Bef	ore 🔘 After	💽 At Reboo

Deploying VMware Fusion with the Self Service Application

By configuring a policy to be triggered by Self Service, your users can install VMware Fusion and Virtual Machines on demand without assistance from IT. This offers the flexibility of also allowing the users to choose exactly when the installation will occur, as well as allowing them to reinstall a corrupt Virtual Machine or upgrade to a new one.

Create a Self Service policy for the VMware Fusion application:

1. Connect to the web interface of your JSS.

- 2. Click the Management tab and choose Policies.
- 3. Click "Create New Policy..."

fig. 19

install the software.

- 4. In the General tab, enter something like "Install VMware Fusion" as the Display Name and set the Category to "VMware Fusion".
- 5. In the "Triggered by" drop down menu, choose "None (or Self Service Only)".
- 6. In the "Execution Frequency" drop down menu, choose "Once Per Computer".
- 7. Choose any days or time range when you do not want the installation process to occur (see fig. 19).

Policy Overview	
Display Name:	Install VMware Fusion 2 Category: VMware
Execution Options	
Trigger	red By: None (or Self Service Only)
Becomes Activ	ve On: 2 🗘 / 12 🗘 / 2009 🗘 at 1 🗘 : 00 🗘 (PM 🗘
Expir	es On: + / + / + at + : + +
Execution Freq	uency: Once Per Computer 💠
Do Not Execu	te On: 🗌 Sun 📄 Mon 📄 Tue 📄 Wed 📄 Thu 📄 Fri 📄 Sat
Do Not Execute Bet	tween: 💠 : 💠 💠 and 💠 : 💠 💠
	C Make to the Office (Fee Operating Patients Oph)

- 8. Click "Scope" and choose which computers, groups, departments, or buildings will receive VMware Fusion. You will still want to make special note of the scoping options to ensure only appropriate computers are able to
 - 9. Click "Self Service" and choose Allow this Policy to be used for Self Service.
 - 10. Enter a brief description of the VMware Fusion application along with the current version you are deploying.
 - 11. Click "Choose File..." and locate an icon to represent VMware Fusion. This icon can be a PNG, JPEG, or ICNS file. (You can find the actual icon file in / Applications/VMware Fusion.app/Contents/Resources/fusion.icns) Upload the selected file and you will be returned to the Self Service tab.

12. If you would like this policy to appear on the first page presented to the user when they launch the Self Service application, click the box next to "Feature this Policy on the Main Page". Otherwise choose "Display" and/or "Featured" for the policy to appear in the VMware Fusion category inside the Self Service application (see fig. 20).

	🗹 Allow th	is Policy to	be used for	Self Service			
Description:	This will inst	all VMware Fu	ision 2 into yo	ur Mac			
					/		
lcon:	S 1						
lcon:	Fusion.ie	cns Change	e Delete	-			
Icon:	Feature	cns Change This Policy	e Delete on the Main	Page			
lcon: Categories:	fusion.iv Feature Category Browsers	cns Change This Policy Display	e Delete on the Main Featured	Page			
lcon: Categories:	€ fusion.ie Feature Category Browsers Office	cns Change This Policy (Display	e Delete on the Main Featured	Page			
lcon: Categories:	fusion.ie Feature Category Browsers Office OS	Cns Change This Policy (Display	e Delete on the Main Featured	Page			

- 13. In the Packages tab, click "Add Package" and choose the Install action for the VMware Fusion installation package and settings file.
- 14. Click "Add Package(s)" to add the packages to the policy.
- 15. Ensure that the VMware Fusion settings package has the options selected to "Fill User Templates (FUT)" and "Full Existing User Home Directories (FEU)" (see fig. 21)

							1
	Packag	e Name	Action	FUT	FEU	Autorun	Remove
Install V	Install VMware Fusion		Install				Remove
VMware	VMware Settings		Install				Remove
	ched Packages Software Update						
All Cache	u Packages						

16. In the Advanced tab, check the box next to "Update Inventory (Recon)" (see fig. 22).

General Scope Self Service	Packages Scripts Printers	Dock Accounts Reboot Advanced
Maintenance		
🗹 Update Inventory	📃 Update Prebindings	📃 Flush System Caches
📃 Reset Computer Names	Fix Permissions	Flush User Caches
Self Heal Packages	Fix ByHost Files	Verify Startup Disk

fig. 22

17. Click "Save Policy" at the bottom of the browser window.

Create a Self Service policy for a VMware Fusion Virtual Machine:

- 1. Connect to the web interface of your JSS.
- 2. Click "Management" and choose "Policies".
- 3. Click "Create New Policy..."
- 4. Click "General" and enter something like "VM-Windows XP" as the Display Name and set the Category to "VMware".
- 5. In the "Triggered by" drop down menu, choose "None (or Self Service Only)".
- 6. In the "Execution Frequency" drop down menu, choose "Ongoing" to allow users to reinstall the Virtual Machine if necessary.
- 7. Choose any days or time range when you do not want the installation process to occur (see fig. 23).

Policy Ove	rview								
Displ	ay Name:	VM-Windows XP					Categor	y: VMware	•
Execution	Options								
	Triggere	d By: None (or	Self Service Only	y)			÷		
Beco	omes Active	e On: 2 🛟 /	12 🔷 / 2	2009 🛟 at	2 🛟 : 0	0 🔹 PM	\$		
	Expires	s On: 💶 🗘 /	🗘 /	🛟 at	🔹 :	- 🗘	\$		
Execu	ition Freque	ency: Ongoing	•						
Do	Not Execute	e On: 🗌 Sun 📄	Mon 🗏 Tue 🛛	Wed 🗌 Th	u 🗌 Fri 🗌 S	at			
Do Not E	xecute Betw	veen: 💶 🗧 :	🗘	🔹 and 📒	- 🔹 : 💶	• •			



8. Click "Scope" tab and choose which computers, groups, departments, or buildings will receive the Virtual Machine. You will still want to make special note of the scoping options to ensure only appropriate computers are able to install the software. If you are deploying a Virtual Machine that requires a specific version of VMware Fusion, be sure to consider that selection criteria in the Smart Computer Group along with available disk space. If you are introducing a new virtual machine to your environment, you can simply create a Smart Computer Group containing only those computers that have VMware Fusion already installed.

	cope Self Serv	ice Packages	Scripts	Printers	Dock	Accounts	Reboot	Advance
Assign this Po	icy to these Com	puters						
Assign to A	l Computers							
Assign to St	ecific Computers							
Add Computer	Groups Add Individu	al Computers Add De	partments	Add Buildings				
Computer Grou	IDS Back to top							
computer and	po back to top							
Computer Gro	up Source Re	move						
VMware-read	y JSS Re	move						
Use this Policy	only for Comput	ers that are in thes	e Networ	k Segments				
	tion from Any ID A	ddrocc						
Allow Exacu	uon non Any IF A	uuless						
Allow Execu								
 Allow Execu Allow Execu 	tion from Specified	Network Segments						
 Allow Execu Allow Execu 	tion from Specified	Network Segments						
 Allow Execu Allow Execu Display Name 	tion from Specified Starting Address	Ending Address						
 Allow Execution Allow Execution Display Name Wired LAN 	tion from Specified Starting Address 10.0.0.1	Ending Address 10.0.0.254						
 Allow Execution Allow Execution Display Name Wired LAN Wireless LAN 	tion from Specified Starting Address 10.0.0.1 10.1.0.1	Ending Address 10.0.0.254 10.1.0.254						

9. Click Self Service and choose Allow this Policy to be used for Self Service.

10. Enter a brief description of the Virtual Machine you are deploying.

fig. 24

11. Click "Choose File..." and locate an icon to represent the virtual machine. This can be in the format of a PNG, JPEG, or ICNS file. Upload the selected file and you will be returned to the Self Service tab.

12. If you would like this policy to appear on the first page presented to the user when they launch the Self Service application, click the box next to "Feature this Policy on the Main Page". Otherwise choose "Display" and/or "Featured" for the policy to appear in the VMware Fusion category inside the Self Service application (see fig. 25).

Self Service	Options						
	🗹 Allow th	his Policy to	be used for S	If Service			
Description:	This will install Windows XP SP2 with all updates as of Jan, 2009.						
					11		
lcon:	A						
lcon:	🔑 window	vs_xp_logo.j	pg Change	Delete			
lcon:	window Feature	vs_xp_logo.j This Policy	pg Change on the Main Pa	Delete I ge			
Icon: Categories:	window	vs_xp_logo.j This Policy Display	pg Change on the Main Pa Featured	Delete ge			
Icon: Categories:	window Feature Category Browsers Office	vs_xp_logo.j This Policy Display	pg Change r on the Main Pr Featured	Delete Ige			
lcon: Categories:	Window Feature Category Browsers Office OS	vs_xp_logo.j	pg Change r on the Main Pr Featured	Delete I ge			

13. In the Packages tab, click "Add Package" and choose the Install action for the Virtual Machine.

14. Click "Add Package(s)" to add the packages to the policy (see fig. 26)

rackages						
	Package Name	Action	FUT	FEU	Autorun	Remove
VM-Wir	dowsXP_SP2	Install				Remove
			C - 6	re lindate		
All Cache	ed Packages		Softwa	ie opuate		

15. In the Advanced tab, check "Update Inventory (Recon)".

16. To ensure this Virtual Machine is listed in the Virtual Machine Library once installed, enter the following command in the "Run Unix Command" field of the advanced tab (this assumes that the Virtual Machine is located at "/Users/ Shared/VM/Windows XP Professional") (see fig. 27):

defaults write com.vmware.fusion VMFavoritesListDefaults2
-array-add `{name = "Windows XP Professional"; path = "/
Users/Shared/VM/Windows XP Professional.vmwarevm";}

Update Prebindings			
Update Prebindings			
	Flush System Caches		
Fix Permissions	Flush User Caches		
Fix ByHost Files	Verify Startup Disk		
	📃 Update Locate		
	📃 Kill if found		
te com vmware fusion VMFavoritesI istDefaults2	2 -array-add '(name = "Windows		
	Fix Permissions Fix ByHost Files Fix ByHost Files		

17. Click Save Policy at the bottom of the browser window.

When users launch the Self Service application, they will be presented with the VMware Fusion and Virtual Machine policies and can install them without local administrator rights to their computer (see fig. 28).



