

# **MobileIron Quick Integration Guide**

for PacketFence version 7.4.0

#### MobileIron Quick Integration Guide

by Inverse Inc.

Version 7.4.0 - Jan 2018 Copyright © 2014 Inverse inc.

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## About this Guide

This guide has been created in order to help sales engineers, product managers, or network specialists demonstrate the PacketFence capabilities on-site with an existing or potential customer. It can also provide guidelines to setup a proof of concept for a potential PacketFence deployment using the **MobileIron mobile device manager**.

# Assumptions

- You have a configured PacketFence environment with working test equipment;
- You have access to a MobileIron cloud account.

# **Quick installation**

### Step 1: Configure MobileIron

First of all you will need to configure the basic functionality of MobileIron using their documentation.

### MDM profile

One important step is to enable the MDM profile like in this screenshot. Note that this will require you to create an MDM certificate with Apple. Refer to the MobileIron documentation for specifics about this step.

	DASHBOARD	USERS & DI	EVICES A	DMIN	APPS	POLICIE	S & CONFIGS	SETTINGS	LOGS & EVENTS
	Preferences	Sentry	Connector	LDAP	Ope	erators	Local CA	Service Diagnos	tics Templates -
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Remove Wi-Fi settings for cellul	lar-enabled devices								
Remove Wi-Fi settings for cellul	lar-enabled and Wi-l	Fi only devices							
Clear passcode									
APNs Preferences									
Use Enterprise Issued APNs certi	ificate 🕕								
View Certificate	-								
MDM Preferences									
Enable MDM Profile									
View MDM Alerts									
Enable Profile Encryption									
Permit expired client certificates	MDM Certifica	<u>ate</u>							
Enable MDM for iOS 4.1 and great	ater 🕕								
Install MDM Certificate	View Certific	ate							
Save User Password Preferences									
Save User Password: O Yes O	No								
Registration PIN code Preferences									
Passcode Length: 6	(6-12	2)							
Save									

## Step 2: Create an API user

Next, we will need a user that has the rights to access the MobileIron API in order to verify the state of the devices directly from PacketFence.

First go in the USERS & DEVICES tab and then in Users and click Add local user.

	DASHBOARD	USERS & DEVICES	ADMIN APPS	POLICIES & CONFIGS	SETTINGS LOGS & EVENTS
	Devices	ActiveSync Associations	Labels User	s	
Actions - Add - Resync W	ith LDAP				
EDIT Add Local User		USER ID	EMAIL		CREATION DATE
admin		admin	address@	domain.com	2014-07-31 5:17:39 PM
julien semaan		julien	jsemaan@	)inverse.ca	2014-08-06 1:28:26 PM
zammit		zammit	zammit@	zammit.com	2014-08-15 11:16:40 AM
https://m.mobileiron.net/inverseca/a	admin/vsp.html#				

Now enter the information about your user and note the user ID and password for usage in the PacketFence configuration, then hit *Save*.

ARD	USERS & DEVICES	ADMIN AF	PPS POLICIES &	CONFIGS SETTING	S LOGS & EVENTS			
s	ActiveSync Associations	Labels	Users					
	USER ID admin julien pfapi zammit	Add s 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	New User Jser ID First Name Last Name Display Name Password Confirm Password Email	pfapi pf api  pfapi@example.com	Save	× ] ] ] ] ] ]	To Authorized SOURCE Local C C Local C C Local C C	User Portal User Portal User Portal User Portal User Portal
	✓ per page							

Now go in the ADMIN tab, check the box next to your newly created user and then in Actions select Assign to Space.

Mobile Iron	DASHBOARD	USERS & DEVICES	ADMIN	APPS	POLICIES & CONFIGS	SETTINGS	LOGS & EVENTS
	ADMINS	DEVICE SPACES					
Actions -							
Edit Roles	USER ID		EMAIL			SOURCE	ROLES
Assign to Space	admin		address@	domain.com	I	Local	API, Add dev
julien semaan	julien		jsemaan@	inverse.ca		Local	
🔽 pf api	pfapi		pfapi@inv	erse.ca		Local	
zammit	zammit		zammit@z	ammit.com		Local	

Select the Global space at the top and then check API at the bottom. You should now see API in the roles list of your newly created user when viewing the users list.

## Step 3: Gather the boarding host

To find the boarding host, add a fake device to MobileIron and at the end of the process you will see the registration instructions.

In it you will find the boarding host and port for the PacketFence configuration. In this case, the boarding host is **m.mobileiron.net** and the boarding port is **50291**.



### Step 4: Configure PacketFence

In PacketFence, MDM are referred to as provisioners. This will walk you through adding MobileIron as a provisioner.

#### Create the provisioner

Login in the PacketFence administration interface, then go in the *Configuration* tab, then in *Provisioners*. Click *Add provisioner* then select *mobileiron*.

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care     care     admin       Admin     Password				Roles		Clone Delete		
Add provident * Add download uri @ https://m.mobilerion.net/ivversec.ado * Add provident * Add provident * Add provident * Add download uri @ https://m.mobilerion.net/ivversec.ado * Conse sectors * Conse sectors			Username	admin		Clone Delete		
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anfaza Manana RAR RAR Revel					Close			

Now configure this new provisioner with the information you got above.

- The Provisioning ID is the friendly name of the provisioner.
- The Username is the user you created with API access above.
- The password is the password of the API user.
- The host is the domain name of the instance + your account name if you have a cloud account (ex: m.mobileiron.net/accountName)
- Now add the download URI for the agent. See below for more details.
- The Boarding host is the host that you got in step 3.
- The Boarding port is the port that you got in step 3.

Here are the URIs that should work by default. Replace **accountName** by your real account/instance name at MobileIron.

- Android: https://m.mobileiron.net/accountName/c/d/android.html
- IOS devices: https://m.mobileiron.net/accountName/c/d/ios.html
- Windows: https://m.mobileiron.net/accountName/EnrollmentServer/Discovery.svc

#### Add the provisioner to the connection profile

In order for the provisioner to be used by your captive portal you need to add it in its configuration. Go in *Connection Profiles*, then select the portal you want to modify and add *mobileiron* as a provisioner.

PacketFence 🎫 Status	Reports Nodes Users	Configuration 🕹 admin + 😗
Registration Self Registration	Profile Name O	(efault
Billing Alerting	Profile Description	Default Profile
Scan Maintenance	Logo 🛛	/common/packet/ence-cp.png
Expiration Services	Redirection URL 0	http://www.packettence.org/ Default URL to redirect to on registration/miligation release. This is only used if a per-violation redirect URL is not defined.
Inline Service watch	Force redirection URL	Under most circumstances we can redirect the user to the URL he originally intended to visit. However, you may prefer to force the captive portal to redirect the user to the redirection URL.
Captive portal Advanced Provisioning	Reuse dot1x credentials	0
Web Services Portal Profiles	Enable Billing Engine	When enabling the billing engine, all authentication sources below are ignored.
Admin Access	Number of Registration Pages	0
Interfaces Switches	Languages	1 en_US •
Floating devices Firewall 550	Sources	1 mil •
USERS Roles		
Access Duration Sources	Provisioners	1 mobileron •

### Step 5: Add the necessary passthroughs

Next, still in the PacketFence administration console, go in *Fencing* in the left menu, then scroll then to *Passthroughs*.

Check the Passthrough box above the field and add the following domains to the passthrough list.

- m.mobileiron.net
- \*.itunes.apple.com
- itunes.apple.com
- play.google.com
- \*.play.google.com

PacketFence 🕬 Status Repo	orts Nodes Users	Configuration & admin + 0
Provisioners	Wirelass IDS	Choose between our supported IDS engine.
COMPLIANCE Violations Statement of Health		If enabled, we will act on wirelessIPS traps sent by Wireless controllers.
IDENTIFICATION Fingerprints	Wireless IPS threshold	90 Percentage of matching you want to alert the admin on a wirelessIPS trap.
User Agents MAC Addresses	Passthrough	R when enabled, PacketFence uses pldms if you defined Passthroughs or Apache mod-proxy if you defined Proxy passthroughs to allow trapped devices to reach web sites.
	Passthroughs	IT. mobilieron neś * Ameria apole.com televi doseje.com televi doseje.com televi doseje.com
	Proxy Passthroughs	Comma-delimited list of domains to be used as HTTP and HTTPS passthroughs to web sites. The configuration parameter passthrough must be enabled for passthroughs to be effective.
		~
		Comma-delimited list of domains to be used with apache passthroughs. The configuration parameter passthrough must be enabled for passibroughs to be effective.
	Proxy Interception	If enabled, we will intercept proxy request on the specified ports to forward to the captive portal.
	Proxy Interception Port	8080 3128

#### **Restart PacketFence**

In order to enable the boarding passthrough for the device enrollment, you will need to restart the iptables service of PacketFence.

You can do this using the command line by doing /usr/local/pf/bin/pfcmd service iptables restart or in the administration interface under *Status* / Services.

## Step 6: Test

You can now test that MobileIron is mandatory after the device registration. Connect a device to your test network and register like you normally would. At the end of the registration process you will be presented a page asking you to install the MobileIron on your device. After you install the agent click *Continue*. If your access is enabled than this means the connectivity between PacketFence and MobileIron is good.