在Raspberry PI上安装Postfix邮件服务器

目标

本文档提供有关如何将星号闪存到SD卡并安装Webmin和Postfix邮件服务器的说明。目标是将 Postfix邮件服务器安装到Raspberry Pi上,以便进行测试。

Raspberry Pi不是思科支持的产品。本文档仅用于支持目的,不是解决方案文档。

什么是Webmin?

Webmin是用于类似Unix系统的系统管理的图形用户界面(GUI)。Unix是支持并允许多任务和多用户 功能的操作系统。您可以轻松地在Webmin上安装模块,如Postfix Mail Server、轻量目录访问协议 (LDAP)服务器、Procmail Mail过滤器、点对点隧道协议(PPTP)VPN服务器等。您还可以设置用户 帐户、DNS、文件共享和其他需要的配置,而无需手动编辑每个Unix配置文件。如果您不喜欢使用 命令行,而是希望使用GUI来帮助您配置和添加新功能,则这是一个好解决方案。

要了解有关Webmin的详细信息,请单<u>击此处</u>。

什么是Postfix邮件服务器?

Postfix邮件服务器是开源邮件传输代理。它是用于发送和接收邮件的应用。Postfix邮件服务器可与 其他模块(如Dovecot)一起使用。Dovecot是一种开源互联网邮件访问协议(IMAP)和邮局协议 3(POP3)服务器,用作邮件存储服务器。

要了解有关后期修复的详细信息,请单<u>击此处</u>。

为什么要安装Postfix邮件服务器?

每个人都使用电子邮件。用户可以托管自己的邮件服务器,也可以与第三方提供商联系。当使用第 三方提供商时,人们最关心的问题之一是:"我对此感到满意吗?"大多数用户可能希望使用第三方 提供商,因为他们的安全性优于家庭或小型企业;但有些用户宁愿在内部托管它。托管您自己的邮 件服务器时,您可以完全控制您自己的数据。

此外,托管您自己的邮件服务器意味着您可以使用您的域名(即Bob@esupport.com)控制您自己的<u>邮件</u>地址。对于业务演示,哪项看起来比使用第三方域名(如Bob@hotmail.com)更好。 用户在托管自己的邮件服务器时有许多选择。有Exchange、Sendmail、Groupwise、Postfix等。有些服务器是免费的,但有些不是。在本例中,Postfix是一个免费的开源邮件服务器,用户可以在其Raspberry Pi上安装。

要求

- Raspberry Pi(Pi 3 B+、Pi 3、Pi 2、B+、B和A型号) 有关详细信息,请查看:<u>raspberry-</u> <u>asterisk.org</u>)
- <u>星号图像</u>
- <u>埃彻</u>
- SD卡(最少32 GB)
- SD卡适配器(可选 如果您的设备有SD卡端口)
- 域名(可选 取决于您的使用案例)

目录

- 1. <u>在Raspberry Pi上安装星号</u>
- 2. 使用SSH连接到Raspberry Pi
- 3. <u>在Raspberry Pi上安装Webmin</u>
- 4. <u>访问Webmin并安装Postfix邮件服务器</u>
- 5. <u>结论</u>

在Raspberry Pi上安装星号

第1步

在Raspberry—<u>星号下载页</u>中,向下滚动直到您看到可下载的最新映像。在本示例中,我们选择**了** HTTP字段旁边的*raspbx-04-04-2018.zip*。zip文件应开始安装。

确保您的SD卡上有足够的存储。本教程将使用32GB SD卡。

The latest image available for download includes:

- Asterisk 13.20.0
- FreePBX 14.0.2.10

Torrent	raspbx-04-04-2018.zip.torrent
HTTP	raspbx-04-04-2018.zip
SHA-1	8f473d01935da0347fbafb7f71c649914934c5b6

A 4GB card is required.

步骤 2

下载zip文件后,导航至zip文件的位置。右键单击zip文件,然后选择"全部解压……"

<u>请随时使用其他软件(如7-Zip、WinRAR、</u>WinZip等)解压压缩文件。

	শ	Open Open with Code
		Extract All
		7-Zip
		CRC SHA
		Pin to Start
raspbx-04	۲	Scan for threats
-2018.z		Edit with Notepad++
	Ê	Share
		Open with
		Give access to
		Restore previous versions
		Send to
		Cut
		Сору
		Create shortcut
		Delete
		Rename

应显示"提取压缩(压缩)文件夹"窗口。单击Extract以解压当前所在文件夹中的zip文件。

<u>请随意将其解压到其他文件夹。为此,请单击"浏 览……"</u>并选择其他文件夹。



步骤 4

解压文件后。您应该看到解压缩的文件夹。



步骤 5

跑巴**莱纳**。

<u>如果您尚未</u>安装Etcher,请单击此处查看其 <u>网站</u>。



步骤 6

此时应会出现"Etcher"窗口。单击"选择图像"。

💱 Etcher	-	×
		0 ¢
+	4	
Select image		
img, iso, zip, and many more		



出现"打开"窗口。导航至raspbx映像的位置。选择raspbx-04-04-2018.img,然后单击Open。



步骤 8

确保已选择SD卡。单击**Change**以选择其他SD卡。单击**Flash!**准备好将raspbx映像闪存到SD卡时。 将映像闪存到SD卡上需要一些时间。请别打断。当将图像闪烁到SD卡上时,它会提示您。



确保SD卡已插入设备。如果设备没有SD卡端口,则可能需要适配器。

现在,您应该已使用raspbx映像成功映像SD卡。

使用SSH连接到Raspberry Pi

第1步

通过安全外壳(SSH)连接到Raspberry Pi,或通过HDMI将Rassbery Pi连接到计算机显示器。在您使

用SSH访问Raspberry Pi之前,您需要了解Rassbery Pi的IP地址。在本例中,PuTTY用于SSH到 Raspberry Pi。

您可以尝试Raspberry Pi文档中的一些方法来查找Rassberry Pi的IP地址: Raspberry Pi IP地址。

PuTTY Configuration		×
Category:		
Session	Basic options for your PuTTY se	ession
- Logging	Specify the destination you want to conner	ct to
Keyboard	Host Name (or IP address)	Port
Bell		22
- Appearance	Connection type: Raw Telnet Rlogin SS	H 🔿 Serial
Behaviour	Load, save or delete a stored session	
Selection	Saved Sessions	-
Colours		
Data	Default Settings	Load
−Proxy −Telnet		Save
−Rlogin +SSH		Delete
Serial		
	Close window on exit: Always Never Only on c	lean exit
About	Open	Cancel

步骤 2

在Host Name(**或IP地**址)字段中输*入Raspberry Pi的IP地*址。确保端口为**22**,SSH被选作连*接类型*。 单击**Open**以启动会话。

😹 PuTTY Configuration		×
Category:		
 Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin SSH Serial 	Basic options for your PuTTY sess Specify the destination you want to connect Host Name (or IP address)	sion to Port 2 22 O Serial Load Save Delete
	Close window on exit: Always Never Only on cle	an exit
	4	
About	Open	Cancel

步骤 3

将显示PuTTY安全警报。单击Yes继续连接。



步骤4.系统将提示您登录。输入用户名root和raspberry作为默认密码。



在Raspberry Pi上安装Webmin

我们将使用的一些命令可在此页上找到。有关最新命令,请参阅提供的链接。

第1步

输入以下命令以安装依赖项。提示继续时,按键盘上的y继续。

sudo apt-get install perl libnet-ssleay-perl openssl libauthen-pam-perl libpam-runtime libio-



步骤 2

输入以下命令,将Webmin的DEB版本下载到Raspberry Pi。DEB文件扩展名是Debian软件包文件 。这主要用于基于Unix的操作系统,其中包含可执行文件、文档和库的存档。

root@raspbx:~# wget http://prdownloads.sourceforge.net/webadmin/webmin 1.900 all .deb --2019-04-26 22:36:27-- http://prdownloads.sourceforge.net/webadmin/webmin 1.90 0 all.deb Resolving prdownloads.sourceforge.net (prdownloads.sourceforge.net)... 216.105.3 8.13 Connecting to prdownloads.sourceforge.net (prdownloads.sourceforge.net) |216.105. HTTP request sent, awaiting response... 301 Moved Permanently Location: http://downloads.sourceforge.net/project/webadmin/webmin/1.900/webmin 1.900 all.deb [following] --2019-04-26 22:36:28-- http://downloads.sourceforge.net/project/webadmin/webmi n/1.900/webmin_1.900_all.deb Resolving downloads.sourceforge.net (downloads.sourceforge.net)... 216.105.38.13 Reusing existing connection to prdownloads.sourceforge.net:80. HTTP request sent, awaiting response... 302 Found Location: https://newcontinuum.dl.sourceforge.net/project/webadmin/webmin/1.900/ webmin_1.900_all.deb [following] --2019-04-26 22:36:28-- https://newcontinuum.dl.sourceforge.net/project/webadmi n/webmin/1.900/webmin_1.900_all.deb Resolving newcontinuum.dl.sourceforge.net (newcontinuum.dl.sourceforge.net)... 6 Connecting to newcontinuum.dl.sourceforge.net (newcontinuum.dl.sourceforge.net) | HTTP request sent, awaiting response... 200 OK Length: 15846232 (15M) [application/octet-stream] Saving to: 'webmin 1.900 all.deb' in 3.6s 2019-04-26 22:36:33 (4.25 MB/s) - 'webmin 1.900 all.deb' saved [15846232/1584623 21

步骤 3

输入以下命令以安装Webmin。

管理用户名设置为 root, 密码为您当前 的root密码。

dnkg =install webin 1 900 all deb root@raspbx:~# dpkg --install webmin_1.900_all.deb Selecting previously unselected package webmin. (Reading database ... 50832 files and directories currently installed.) Preparing to unpack webmin_1.900_all.deb ... Unpacking webmin (1.900) ... Setting up webmin (1.900) ... Webmin install complete. You can now login to https://raspbx:10000/ as root with your root password, or as any user who can use sudo to run commands as root. Processing triggers for systemd (232-25+deb9u2) ...

您应该已成功在Raspberry Pi上安装Webmin。

访问Webmin并安装Postfix邮件服务器

在Web浏览器的URL中输入https:// IP_address_of_your_raspberry_pi:10000以访问Webmin的网页 。在本例中,输入了https://192.168.86.39:10000。

A Not secure | https://192.168.86.39:10000

如果您不记得Raspberry Pi的IP地址,则可以尝试使用https://raspbx:10000访问 它。

▲ Not secure | https://raspbx:10000

步骤 2

登录Webmin的Web配置页面。

注意:用户名设置为**root**,密码是您当前的root密码。如果在"使用SSH连接到树莓Pi"部分的<u>步骤4</u> 中更改了密码,则输入您更改的密码。

Yo	Webmin ou must enter a username and ssword to login to the server on 192.168.86.39	
.	Username	
	Password	
Rer	nember me	
	➔ Sign in	

步骤 3

在Webmin*选项*卡中,单**击Un-used Modules**下拉列表。

必 Webmin	🎯 Dashboard
Search	Q
🌣 Webmin	٩
🖋 System	•
 Servers 	4
🔦 Others	4
Networking	4
🖨 Hardware	4
ථ Cluster	4

步骤 4

在"未使*用的模块"下*拉列表中,找到**Postfix邮件服**务器并单击它。

	ሌ	Ch and a start of the start of
	Webmin	C Dashboard
þ	LDAP Server	
þ	LDAP Users and	d Groups
¢	Linux RAID	
¢	Logical Volume	Management
¢	MON Service M	onitor
0	Network Service	es
¢	Network Service	es and Protocols
0	NFS Exports	
0	OpenSLP Serve	r
$\mathbf{\mathbf{\overline{+}}}$	Postfix Mail Sei	rver
φ	PostgreSQL Dat	tabase Server
φ	PPP Dialin Serv	er
þ	PPP Dialup Clie	nt
þ	PPTP VPN Clier	nt
þ	PPTP VPN Serv	er
þ	Procmail Mail F	ilter
þ	ProFTPD Server	r
þ	QMail Mail Serv	ver
ļ	Scheduled Com	imands

Sendmail Mail Server

步骤 5

在Postfix邮件服务器中,单击Click here 按钮下载并安装Postfix。它将查找您尚未安装的软件包。

 Postfix Mail Server 	٩
The Postfix control command /usr/sbin/postfix is not installed on your system. Maybe your module configuration is incorrect, or Postfix is not interpreted and installed using APT.	ot installed.

步骤 6

单击"Install Now(**立即安**装)"按钮。

Install Packages

Building complete list of packages .

Are you sure you wish to install the 2 packages listed below? This may include dependencies of packages that you selected.

😂 Install Now

系统将显示一个软件包列表,其中显示要安装的软件包。如果安装尚未启动,请再次单**击"立**即安装 "按钮以开始安装。

Install Packages

Building complete list of packages ..

Are you sure you wish to install the 2 packages listed below? This may include dependencies of packages that you selected.

$oldsymbol{\mathcal{C}}$ Install Now			
Package	Current version	New version	Description
postfix	None	3.1.9-0+deb9u2	
postfix-sglite	None	3.1.9-0+deb9u2	

步骤 8

 \leftarrow

应安装Postfix。您应该看到下图。

Install Packages	
Now installing postfix	
installing package(s) with command apt-get -y install postfix	
<pre>Reading package lists Building dependency tree Reading state information The following additional packages will be installed: postfix-sqlite Suggested packages: procmail postfix-mysql postfix-pgsql postfix-ldap postfix-pcre postfix-lmdb sas12-bin dovecot-common postfix-db ufw postfix-doc The following packages will be REMOVED: exim4 exim4-base exim4-config exim4-daemon-light The following NEW packages will be installed: postfix postfix-sqlite 0 upgraded, 2 newly installed, 4 to remove and 149 not upgraded. Need to get 1673 kB of archives. After this operation, 305 kB of additional disk space will be used. Get:1 http://mirrors.ocf.berkeley.edu/raspbian/raspbian stretch/main armhf postfix armhf 3.1.9-0+deb9u2 [1354 kB] Get:2 http://mirrors.ocf.berkeley.edu/raspbian/raspbian stretch/main armhf postfix-sqlite armhf 3.1.9-0+deb9u2 [319 kB]</pre>	

步骤 9

安装Postfix后,您应在底部收到通知,说明"安装完成"或"成功安装2个软件包"。

	Adding group postdrop' (GID 118)
	Done.
	setting myhostname: raspbx.lan
	setting alias maps
	setting alias database
	setting myorigin
	setting destinations: \$myhostname, noreply.raspbx.org, raspbx, localhost.localdomain, localhost
	setting relayhost:
	setting mynetworks: 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128
	setting mailbox_size_limit: 0
	setting recipient_delimiter: +
	setting inet_interfaces: all
	setting inet_protocols: all
	WARNING: /etc/aliases exists, but does not have a root alias.
	Postfix (main.cf) is now set up with a default configuration. If you need to
	make changes, edit /etc/postfix/main.cf (and others) as needed. To view
	Postfix configuration values, see postconf(1).
	After modifying main.cf, be sure to run 'service postfix reload'.
	Running newaliases
	Processing triggers for systemd (232-25+deb9u2)
	Processing triggers for rsysiog (8.24.0-1)
	install complete.
Succes	ssfully installed 2 packages.
e Re	turn to Software Packages

导航至左**侧菜单上**的"Postfix Mail Server"。Postfix Mail Server可能位于*Servers*或*Un-used Modules*下拉列表中。在本示例中,Postfix邮件服务器位于*Un-used Modules*下拉列表中。

Webmin Dashboard	Postfix Mail Server Postfix version 3.1.9								٩
ISCST rarget ISCST TGTd Jabber IM Server Kerberos5 LDAP Client LDAP Server LDAP Users and Groups	General Options	Address Rewriting and Masquerading	Wail Aliases	Canonical Mapping	Virtual Domains	Transport Mapping	Relocated Mapping	Header Checks	
Linux RAID Logical Volume Management MON Service Monitor Network Services Network Services and Protocols NFS Exports	Body Checks	BCC Mapping	Sender Dependent Transport Mapping	Local Delivery	General Resource Control	SMTP Server Options	SMTP Client Options	SMTP Authentication And Encryption	
OpenSLP Server Postfix Mail Server PostgreSQL Database Server PPP Dialin Server PPP Dialup Client PPTP VPN Client	SMTP Client Restrictions	Delivery rates	Debugging features	Server Processes	Mail Queue O messages	Configuration Check	User Mailboxes	Edit Config Files	

您应该已成功在Raspberry Pi上安装Postfix邮件服务器。要开始为邮件服务提供Postfix,在大多数 情况下需要配置三种配置。单击**General Options**,然*后配置What domain to use in outbound mail, What domains to receive mail for and local networks*。单击"保**存并应用"**按钮保存更改。

要了解有关此项的详细信息,请参阅Webmin的Postfix基<u>本配置文档</u>。

		& Ø								
	١	Webmin Dashboard	← 0	General Options						
4		Kerberos5								
		LDAP Client								
		LDAP Server	Most Userul General options							
		LDAP Users and Groups	What domain to use in outbound mail	⊖ U:	e hostname 🔾	Use doma	ainna	esupport.com		
		Linux RAID	What domains to receive mail for	⊖ Lo	cal machine					
		Logical Volume Management	al Volume Management		Default Selected below					
		Non Service Monitor		bou 2bc	bounce - Bounced mail 2bounce - Double-bounced ma		ail			
1	Network Services		dela	delay - Delayed mail						
		Network Services and Protocols	What trouble to report to the postmast	er poli	r policy - Policy rejected clients protocol - Client protocol errors					
Î		NFS Exports	SLP Server		resource - Resource problem					
ı İ		OpenSLP Server			ware - Software	problems				
1		Postfix Mail Server								
Î		PostgreSQL Database Server				Othe	r Ge	eneral Options		
1		PPP Dialin Server	Send outgoing mail via host	 Deliver directly Image: Construction of the second /li>						
		PPP Dialup Client	Address that receives bcc of each	None 18000s			Default database type			
		PPTP VPN Client	message						hash	
1		PPTP VPN Server							nasii	
Ì			Mail Filter Default message delivery transport		smtp		Sender address for bounce mail		double-bounce	
Î		ProF I PD Server	Number of subdir levels below the aueue dir	1	1		Name of queue dirs split accross subdirs		deferred, defer	
1	QMail Mail Server		Oth		Othe	Time in hours before conding a warning for no		Postfix default		
		⇔ ⊘								
		Webmin Dashboard	Send outgoing mail via host	O Deliv	Deliver directly 🖲					
		LDAD Client	Address that receives bcc of each message	None					A	
		LDAP Server	Timeout on handling requests	18000s			Default database type		hash	
		LDAP Users and Groups	Default message delivery transport	smtn		Sender address for bounce mail		der address for bounce mail	double-bounce	
		Linux BAID	Number of subdir levels below the	ump			oen		double bounce	
		Logical Volume Management	queue dir	1			Name of queue dirs split accross subdirs		deferred, defer	
		MON Service Monitor	Max number of <i>Beceived</i> : headers	50			Time in hours before sending a warning for no		Postfix default	
		letwork Services				delivery				
		Network Services and Protocols	Network interfaces for receiving mail	⊖ All (All 🖲 all					
		NFS Exports	Idle time after internal IPC client	5s		Т		Timeout for I/O on internal comm channels	3600s	
		OpenSLP Server	ursconnects Mail system name		Destfix		Mail owner		postfix	
		Postfix Mail Server	Official mail system version	2.1.0	21.0				positiv	
•		PostgreSQL Database Server	abase Server		3.1.9					
		PPP Dialin Server	Time to wait for next service request	100s Default (provided by system) Default (provided by system) Default (all attached networks)			Max	service requests handled before exiting	100	
		PPP Dialup Client	Internet hostname of this mail system			system)	•	raspbx.lan		
		PPTP VPN Client	Local internet domain name			system)				
		PPTP VPN Server	Local networks) I27.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/12		В		
		Procmail Mail Filter	Automatic local networks	Same	IP subnet	,	Send postmaster notice on bounce to		Default	
		ProFTPD Server	Send postmaster notice on 2hounce	 Defa 	Default 🔾					
		Mail Mail Server to			Sen	d postmaster notice on delay to	• Default			
				Defe	- 4					



您应该已成功在Raspberry Pi上安装Postfix邮件服务器。

其他信息

如果您对不同的方法感兴趣,但仍使用Raspberry Pi,请查看以下教程:

这些教程将使用命令行界面设置邮件服务器。如有任何问题或疑问,请与他们联系。 简化教程 — <u>使用Raspberry Pi 3制作邮件服务器</u> 具有其他功能的深入教程:<u>Sam Hobbs - Raspberry PI电子邮件服务器第1部分:后修补教程</u>

我们将不使用上述两个教程。这些资源可能对您有用。 要了解如何使用Raspberry Pi创建基本语音网络,请单<u>击此处</u>。