Installation des VMs

Objectif

Le but ici est d'installer notre machine virtuelle sous l'environnement SUSE 12 SP1, principalement utiliser au sein du département.

La machine dispose des spécifications indiquées dans le document "Ressources nécessaires au maquettage".

Une fois prête, nous y installerons Docker.

Système

Installation

Nous décidons de laisser le système en anglais pour une utilisation simplifiée (généralement les traductions sont quelques peu approximatives) puis acceptons les termes de la licence.

Sur l'écran d'identification, nous indiquons que nous souhaitons faire l'enregistrement auprès de SUSE plus tard. Nous n'installons pas de produit supplémentaire.

Lors du partitionnement, de base SUSE propose de partitionner le disque avec BtrFS le nouveau système de fichier journalisé (plus d'informations ici), dans notre cas cela n'a pas grand intérêt puisque le système est installé sur une machine virtuelle dans la ferme. Nous modifions donc ce choix en cliquant sur le bouton Expert *Partitioner*. On sélectionne la partition et l'édition avec un clique droit puis *Edit*. On remplace BtrFS par Ext4. On valide le changement et passons à l'étape suivante. Étape qui consiste à sélectionner la timezone de la VM, Europe/Paris.

Vient ensuite la création de l'utilisateur. Nous l'appelons **user** et choisissons le mot de passe habituellement utiliser au sein du service pour le dev.

On personnalise l'installation en cliquant sur software et déselectionnons les options d'interface graphique. Nous finissons en lançant l'installation.

Configuration

Pour effectuer la configuration, nous allons utiliser l'utilitaire YaST. Il se lance avec la commande **yast**. Nous commençons par sélectionner *System* puis *Network Settings*. La navigation dans les menus se fait à l'aide des flèches directionnelles et des touches tabulation et entrer.

Afin de rendre l'utilisation de yast plus lisible dans un terminal putty en SSH il faut ajouter cette ligne : Pour un utilisateur seulement à la racine de son dossier home (\sim) :

```
echo "export NCURSES_NO_UTF8_ACS=1" >> .bashrc
```

Pour tout les utilisateurs :

echo "export NCURSES_N0_UTF8_ACS=1" >> /etc/bash.bashrc.local

YaST Control Center				
Software : System Hardware Network Services Security and Users Virtualization Support Miscellaneous	<pre>/etc/sysconfig Editor Boot Loader Date and Time Kernel Kdump Language Network Settings Partitioner Services Manager</pre>			
Helpl		EBun HQu i		

Nous nous rendons dans l'onglet Global Options pour y désactiver l'IPv6 :

12 - Tan @ STESGOCKErdEV2		
twork Settings Hobal Options—Overview—Hostname-DMS—Routin General Network Settings— Network Setup Method Wicked Service	Ng	
IPu6 Protocol Settings [] Enable IPu6		
DHCP Client Options DHCP Client Identifier		
Hostname to Send AUTO [x] Change Default Route via DHCP		
191	[Cance]]	

On retourne ensuite dans Overview et éditons notre première carte réseau (eth0) pour y configurer son adresse IP, son masque et son hostname.

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IPv1 Address Label IP Address Netwask [Netwask] [Add][Edit][Delete]	tional Addresses	
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Thur I can the letel	IPv4 Address Label IP Address Netmask	
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IDI LBackI ICanceII	IPv4 Address Label IP Address Netwask Add][Edit][Delete]	

On effectue la même manipulation pour la seconde carte, eth1. Cette dernière n'aura cependant rien dans le champ *Hostname*.

Une fois terminer, nous passons à l'onglet *Hostname/DNS* dans lequel on entre le nom de la machine, son domaine et effectuons la configuration DNS dont les adresses sont **192.168.113.241** et **192.168.113.242**.

YaST2 - lan @ slesdockerdev2		
Network Settings Global Options—Overview—Hostname>DNS—Routin Hostnane and Donain Name Hostnane slesdockerdev2 [x] Change Hostnane via DHCPNo interface with [] Assign Hostnane to Loopback IP Nodify DNS Configuration Custom Policy Rule Use Default Policy Mane Servers and Donain Search List Name Server 1 192.168.113.241 Name Server 2 192.168.113.242 Name Server 3 Name Server 3	g Domain Nanc sirius.proto dhcp	
(Help) F1 Help F9 Cancel F10 JK	[Cance]] [[נאנ

On terminé notre configuration avec l'onglet *Routing*. On configure l'adresse de la passerelle par défaut et l'interface qui doit être utilisé. On active également le *forwarding* sur l'IPv4 pour Docker.

YASTZ - Tan W slesdockerdev2 Network Settings folobal Options—Overview—Hostname>DMS—Rout	t ing	
Default IPv4 Gateway 192.168.113.1 Default IPv6 Gateway	Device eth0 Device	
Routing Table		5
Destination Gateway Genmask Device Op	ptions	
[Add][Edit][Delete]	
[x] Enable IPv4 Forwarding [] Enable IPv6 Forwarding		
(Help)	[Cance]]	L OK

On configure ensuite le serveur de temps, pour ce faire il faut aller dans le menu *System* puis *Data and Time*.

	YaST Control Center	
Software Hardware System Network Devices Network Services Security and Users Virtualization Support Hiscellaneous	<pre>/etc/sysconfig Editor Boot Loader Date and Time Kernel Kdump Language Partitioner Services Manager</pre>	
Help]		ın I (Qu

On sélectionne ensuite la branche Other Settings pour configurer la synchronisation du temps par internet

Region	Tine Zone
Africa	Austria
Argentina	Azores
Asia	Belarus
Atlantic	Belgium
Australia	Bosnia & Herzegovina
Brazil	Bulgaria
Canada	Canary Islands
Central and South America	Croatia
Etc	Czech Republic
Europe	Denmark
Global	Estonia
Indian Ocean	Finland
1exico	France
Pacific	Gernany
Russia	Gibraltar
JSA	Greece
	Guernsey
	Hungary
	Iceland
	Ireland
	Isle of Man
	Italu
	Jerseu
	Latuia
	Liechtenstein
	Lithuania
Date and Time 2016-01-08 - 10:53:52	Ex] Hardware Clock Set to U LOther Settings

Une fois sur cette interface, on peut configurer l'adresse du serveur NTP :

YaST2 - timezone @ slesdockerdev2
Change Date and Time
() Hanually
Current Time in HH:MM:SS Format 10 10 24 24 24
Current Date in DD-MM-YYYY Format 08 10 2016
ExJ Change the Time Now
(x) Synchronize with NTP Server
NIP Server Address [Synchronize now] 192.168.113.241 Ex3 Run NIP as daemon [x] Save NIP Configuration
[Accept] [Cancel]
F9 Cancel F10 Accept

Nous allons ajouter le dépôt de l'openSUSE 42.1 qui repose sur le noyau de la SLES 12 pour pouvoir utiliser les paquets les plus à jour. On utilise ici le dépôts sur un ISO puisque le dépôts du département ne contient pas SLES 12, actuellement toujours en SLES 11.

	YaST Control Center
Software Systen Hardware Network Services Security and Users Virtualization Support Miscellaneous	Online Update Software Management Add-On Products Media Check Product Registration Software Repositories
Helpl	(Run) (

On sélectionne dans ce menu le type de média souhaité, ici DVD :

YaST2 - repositor	ies @ slesdockerdev2		
Add On Product			
	<pre>) Scan Using SLP) Extensions and Modules from B) Specify URL) FTP) HTTPS) HTTPS) SMB>CIFS) NFS) CD) USB Mass Storage (USB Stick,) Local Directory) Local ISO Image] Download repository descripti] Download repository descripti</pre>	egistration Server Disk) on files	
[Help]	(Back)	[Abort]	[Next]

Puis on accepte la clé de notre DVD ainsi que l'EULA:

YaST2 - repositories 0 slesdockerdev2	
Adding a New Repository	
x Check Repository Type => Add Repository - Read Repository License	
Inport Untrusted GnuPG Key The following GnuPG key has been found in repository openSUSE 42.1-0 (dvd:///):	
ID: B8882FD43DBDC284 Name: openSUSE Project Signing Key Fingerprint: 2208 7BA5 3417 8CD8 2EFE 22AA B888 2FD4	
You can choose to import it into your keyring of trusted public keys, meaning that you trust the owner of the key. You should be sure that you can trust the owner and that the key really belongs to that owner before importing it.	
[Trust] [Cancel]	
Refreshing Repository 33%	
[Back] [Abort]	[Next]
F9 Cancel F18 Trust	



Et pour finir on désactive l'ancien dépôt SLES qui est sur le DVD maintenant inexistant.

Ya	YaST2 - repositories 🖗 slesdockerdev2									
C	onfigured Sof	tware Rep	ositories							
									Vicu	
									HII reposi	tories
	Priority	Enabled	Autorefresh	Nane		Service	URL			
	99 (Default) 99 (Default)	×		OpenSUSE 4 SLES12-SP1	12.1-0 1-12.1-0		dvd:/// cd:////dei	vices=/	deuzd iskzbu	-idzata
ู่ เ										
ľ	1 Enabled					Prior	ity			
ļ	1 Automatica	lly Refre	sh [] Reep	Downloaded	l Package	es 4 9	191	Depe	water Sam	-Comb 11
TH	elp]	ietel				E	Cancell	ruru	NeysItr	E OK 1
124				PG Reference	- RO - 2		10 02			

Docker

Avant de procéder à l'installation de Docker, nous devons ajouter un nouveau dépôts nommer *Virtualization:Containers*. Nous suivons la même méthode que précédemment en utilisant cette fois l'option *Specify URL*... et en saisissant l'adresse de dépôt suivante :

http://download.opensuse.org/repositories/Virtualization:/containers/openSUSE
_Leap_42.1/

Ensuite, pour que Docker puisse avoir accès à Internet et effectuer les opérations voulus, nous devons au préalable configurer le proxy du département. Nous allons donc éditer le fichier /etc/sysconfig/docker et ajoutons une nouvelle ligne :

HTTPS_PROXY="http://adresse:port/"

Il nous reste alors à activer le démarrage automatique du service Docker avec le système :

systemctl enable docker

Et démarrer le service manuellement la première fois

```
systemctl start docker
```

On lance ensuite l'image hello-world de Docker pour vérifier que ce dernier fonctionne correctement :

docker run hello-world



Il existe un module d'auto-complétion pour Docker, il n'est cependant pas "trouvé" par Zypper qui retourne une erreur. Nous allons procéder à l'installation en téléchargeant le paquet et en l'installant grâce aux commandes suivantes :

wget

```
http://download.opensuse.org/repositories/Virtualization:/containers/openSUS
E_Leap_42.1/noarch/docker-bash-completion-1.9.1-53.4.noarch.rpm
rpm -i docker-bash-completion-1.9.1-53.4.noarch.rpm
rm docker-bash-completion-1.9.1-53.4.noarch.rpm
```

From: https://wiki.viper61.fr/ - **Viper61's Wiki**

Permanent link: https://wiki.viper61.fr/sio/stage2/install_sles?rev=1453197686

Last update: 18/09/2016 02:54