

Virt-Manager

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Résumé

Rapport sur le test de déploiement de virt-manager sur Grid5000.
Pour cela nous avons réservé 10 noeuds sur Grid5000 : un sera dévoué à virt-manager, les autres contiendront des machines virtuelles

1 Contexte

Environnements déployés : Debian Squeeze (squeeze-x64-xen)
griffon-50.nancy.grid5000.fr sera le noeud principal sur lequel sera installé virt-manager. Les autres noeuds utilisés pour héberger des machines virtuelles :

- griffon-51.nancy.grid5000.fr
- griffon-53.nancy.grid5000.fr
- griffon-65.nancy.grid5000.fr
- griffon-68.nancy.grid5000.fr
- griffon-70.nancy.grid5000.fr
- griffon-77.nancy.grid5000.fr
- griffon-79.nancy.grid5000.fr
- griffon-87.nancy.grid5000.fr
- griffon-90.nancy.grid5000.fr

Nous allons déployer 7 machines virtuelles sur chacun des noeuds.

2 Déploiement

Paquets mis à jour sur les noeuds

```
1 root@griffon-50:~# apt-get upgrade
2 Reading package lists... Done
3 Building dependency tree
4 Reading state information... Done
5 The following packages will be upgraded:
6   base-files bzip2 curl dpkg dpkg-dev file firmware-linux-free ia32-libs
7   lib32bz2-1.0 libbz2-1.0 libc-bin libc-dev-bin libc6 libc6-dev libc6-
   i386
8   libcurl3 libdpkg-perl libgnutls26 libgssapi-krb5-2 libk5crypto3 libkrb5
   -3
```

```

9  libkrb5support0 libmagic1 libpng12-0 librpm1 librpmbuild1 librpmio1
10 libssl10.9.8 libxenstore3.0 libxml2 linux-base linux-headers-2.6.32-5-
    amd64
11  linux-headers-2.6.32-5-common linux-image-2.6.32-5-xen-amd64 linux-libc
    -dev
12  locales module-init-tools openssl perl perl-base perl-modules rpm rpm-
    common
13  rpm2cpio tzdata xen-hypervisor-4.0-amd64 xen-utils-4.0 xenstore-utils
14 48 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
15 Need to get 110 MB of archives.
16 After this operation, 434 kB disk space will be freed.
17 Do you want to continue [Y/n]?

```

Installation de libvirt

```

1  root@griffon-50:~# apt-get install libvirt-bin
2 Reading package lists... Done
3 Building dependency tree
4 Reading state information... Done
5 The following extra packages will be installed:
6  dnsmasq-base ebttables libaio1 libasynccns0 libbluetooth3 libbrlapi0.5
7  libcap-ng0 libcurl3-gnutls libdirectfb-1.2-9 libflac8 libnl1 libogg0
8  libparted0debian1 libpciaccess0 libpulse0 libsdl1.2debian
9  libsdl1.2debian-alsa libsndfile1 libsvg1 libts-0.0-0 libvdeplug2
    libvirt0
10 libvorbis0a libvorbisenc2 libx86-1 libxml2-utils libxtst6 netcat-
    openbsd
11 qemu-kvm tsconf
12 Suggested packages:
13  parted nparted libparted0-dev libparted0-i18n pulseaudio policykit-1
    vde2
14  samba
15 The following NEW packages will be installed:
16  dnsmasq-base ebttables libaio1 libasynccns0 libbluetooth3 libbrlapi0.5
17  libcap-ng0 libcurl3-gnutls libdirectfb-1.2-9 libflac8 libnl1 libogg0
18  libparted0debian1 libpciaccess0 libpulse0 libsdl1.2debian
19  libsdl1.2debian-alsa libsndfile1 libsvg1 libts-0.0-0 libvdeplug2
20  libvirt-bin libvirt0 libvorbis0a libvorbisenc2 libx86-1 libxml2-utils
21  libxtst6 netcat-openbsd qemu-kvm tsconf
22 0 upgraded, 31 newly installed, 0 to remove and 0 not upgraded.
23 Need to get 8,044 kB of archives.
24 After this operation, 21.7 MB of additional disk space will be used.
25 Do you want to continue [Y/n]?

```

Il faut ensuite activer l'utilisation des sockets Unix pour permettre à libvirt de communiquer avec xen. Ceci se fait dans le fichier `/etc/xen/xend-config.sxp` en ajoutant ou activant la ligne (*xend-unix-server yes*) puis en redémarrant le service xen.

On s'assure que le service est bien actif

```

1 root@griffon-50:~# virsh version
2 Compiled against library: libvir 0.8.3
3 Using library: libvir 0.8.3
4 Using API: Xen 3.0.1
5 Running hypervisor: Xen 4.0.0

```

Ensuite on installe le client virsh (uniquement sur griffon-50 dans notre cas)

```

1 root@griffon-50:~# apt-get install virt-manager
2 Reading package lists... Done
3 Building dependency tree
4 Reading state information... Done
5 The following extra packages will be installed:
6   consolekit dbus-x11 dosfstools esound-common etherboot-qemu gconf2
7   gconf2-common gnome-icon-theme gnome-mime-data gvfs hdparm libart-2.0-2
8   libatasmart4 libaudiofile0 libavahi-glib1 libblas3gf libbonobo2-0
9   libbonobo2-common libbonoboui2-0 libbonoboui2-common libck-connector0
10  libcroco3 libdbus-glib-1-2 libeggdbus-1-0 libesd0 libfam0 libffi5
11  libgail18
12  libgconf2-4 libgdu0 libgfortran3 libglade2-0 libgnome-keyring0
13  libgnome2-0
14  libgnome2-common libgnomecanvas2-0 libgnomecanvas2-common libgnomeui-0
15  libgnomeui-common libgnomevfs2-0 libgnomevfs2-common libgnomevfs2-extra
16  libgsf-1-114 libgsf-1-common libgtk-vnc-1.0-0 libgudev-1.0-0 libhal-
17  storage1
18  libhal1 libidl0 liblapack3gf libntfs-3g75 libntfs10 liborbit2
19  libpam-ck-connector libpcap0.8 libpolkit-agent-1-0 libpolkit-backend
20  -1-0
21  libpolkit-gobject-1-0 librsvg2-2 librsvg2-common libsgutils2-2
22  libsmbclient
23  libtalloc2 libvde0 libvte-common libvte9 libwbclient0 libxaw7 libxcb-
24  atom1
25  libxmu6 libxpm4 libxt6 libxv1 libxxf86dga1 mtools ntfs-3g ntfsprogs
26  openbios-ppc openbios-sparcopenhackware policykit-1 policykit-1-gnome
27  python-cairo python-dbus python-gconf python-glade2 python-gnome2
28  python-gobject python-gtk-vnc python-gtk2 python-libvirt python-libxml2
29  python-numpy python-pycurl python-pyorbit python-urlgrabber python-vte
30  qemu
31  qemu-keymaps qemu-system qemu-user qemu-utils seabios udisks vde2
32  vgabios
33  virt-viewer virtinst x11-utils
Suggested packages:
  esound-clients gconf-defaults-service gvfs-backends apmd libbonobo2-bin
  esound fam gnome-keyring desktop-base libgnomevfs2-bin librsvg2-bin
  sg3-utils floppyd python-dbus-doc python-dbus-dbg python-gnome2-doc
  python-gtk2-doc python-gobject-dbg python-numpy-doc python-numpy-dbg
  python-nose python-dev gfortran libcurl4-gnutls-dev python-pycurl-dbg
  qemu-user-static samba xfsprogs reiserfsprogs mdadm cryptsetup vde2-
  cryptcab
  ssh-askpass mesa-utils

```

```

34 The following NEW packages will be installed:
35 consolekit dbus-x11 dosfstools esound-common etherboot-qemu gconf2
36 gconf2-common gnome-icon-theme gnome-mime-data gvfs hdparm libart-2.0-2
37 libatasmart4 libaudiofile0 libavahi-glib1 libblas3gf libbonobo2-0
38 libbonobo2-common libbonoboui2-0 libbonoboui2-common libck-connector0
39 libcroco3 libdbus-glib-1-2 libeggdbus-1-0 libesd0 libfam0 libffi5
    libgail18
40 libgconf2-4 libgdu0 libgfortran3 libglade2-0 libgnome-keyring0
    libgnome2-0
41 libgnome2-common libgnomecanvas2-0 libgnomecanvas2-common libgnomeui-0
42 libgnomeui-common libgnomevfs2-0 libgnomevfs2-common libgnomevfs2-extra
43 libgsf-1-114 libgsf-1-common libgtk-vnc-1.0-0 libgudev-1.0-0 libhal-
    storage1
44 libhal1 libidl0 liblapack3gf libntfs-3g75 libntfs10 liborbit2
45 libpam-ck-connector libpcap0.8 libpolkit-agent-1-0 libpolkit-backend
    -1-0
46 libpolkit-gobject-1-0 librsvg2-2 librsvg2-common libsgutils2-2
    libsmbclient
47 libtalloc2 libvde0 libvte-common libvte9 libwbclient0 libxaw7 libxcb-
    atom1
48 libxmu6 libxpm4 libxt6 libxv1 libxxf86dga1 mtools ntfs-3g ntfsprogs
49 openbios-ppc openbios-sparc openhackware policykit-1 policykit-1-gnome
50 python-cairo python-dbus python-gconf python-glade2 python-gnome2
51 python-gobject python-gtk-vnc python-gtk2 python-libvirt python-libxml2
52 python-numpy python-pycurl python-pyorbit python-urlgrabber python-vte
    qemu
53 qemu-keymaps qemu-system qemu-user qemu-utils seabios udisks vde2
    vgabios
54 virt-manager virt-viewer virtinst x11-utils
55 0 upgraded, 110 newly installed, 0 to remove and 0 not upgraded.
56 Need to get 63.5 MB of archives.
57 After this operation, 186 MB of additional disk space will be used.
58 Do you want to continue [Y/n]?
59 root@griffon-50:~# apt-get install virt-manager
60 Reading package lists... Done
61 Building dependency tree
62 Reading state information... Done
63 The following extra packages will be installed:
64 consolekit dbus-x11 dosfstools esound-common etherboot-qemu gconf2
65 gconf2-common gnome-icon-theme gnome-mime-data gvfs hdparm libart-2.0-2
66 libatasmart4 libaudiofile0 libavahi-glib1 libblas3gf libbonobo2-0
67 libbonobo2-common libbonoboui2-0 libbonoboui2-common libck-connector0
68 libcroco3 libdbus-glib-1-2 libeggdbus-1-0 libesd0 libfam0 libffi5
    libgail18
69 libgconf2-4 libgdu0 libgfortran3 libglade2-0 libgnome-keyring0
    libgnome2-0
70 libgnome2-common libgnomecanvas2-0 libgnomecanvas2-common libgnomeui-0
71 libgnomeui-common libgnomevfs2-0 libgnomevfs2-common libgnomevfs2-extra
72 libgsf-1-114 libgsf-1-common libgtk-vnc-1.0-0 libgudev-1.0-0 libhal-
    storage1

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73 libhal1 libidl0 liblapack3gf libntfs-3g75 libntfs10 liborbit2
74 libpam-ck-connector libpcap0.8 libpolkit-agent-1-0 libpolkit-backend
    -1-0
75 libpolkit-gobject-1-0 librsvg2-2 librsvg2-common libsgutils2-2
    libsmbclient
76 libtalloc2 libvde0 libvte-common libvte9 libwbclient0 libxaw7 libxcb-
    atom1
77 libxmu6 libxpm4 libxt6 libxv1 libxxf86dga1 mtools ntfs-3g ntfsprogs
78 openbios-ppc openbios-sparc openhackware policykit-1 policykit-1-gnome
79 python-cairo python-dbus python-gconf python-glade2 python-gnome2
80 python-gobject python-gtk-vnc python-gtk2 python-libvirt python-libxml2
81 python-numpy python-pycurl python-pyorbit python-urlgrabber python-vte
    qemu
82 qemu-keymaps qemu-system qemu-user qemu-utils seabios udisks vde2
    vgabios
83 virt-viewer virtinst x11-utils
84 Suggested packages:
85 esound-clients gconf-defaults-service gvfs-backends apmd libbonobo2-bin
86 esound fam gnome-keyring desktop-base libgnomevfs2-bin librsvg2-bin
87 sg3-utils floppyd python-dbus-doc python-dbus-dbg python-gnome2-doc
88 python-gtk2-doc python-gobject-dbg python-numpy-doc python-numpy-dbg
89 python-nose python-dev gfortran libcurl4-gnutls-dev python-pycurl-dbg
90 qemu-user-static samba xfsprogs reiserfsprogs mdadm cryptsetup vde2-
    cryptcab
91 ssh-askpass mesa-utils
92 The following NEW packages will be installed:
93 consolekit dbus-x11 dosfstools esound-common etherboot-qemu gconf2
94 gconf2-common gnome-icon-theme gnome-mime-data gvfs hdparm libart-2.0-2
95 libatasmart4 libaudiofile0 libavahi-glib1 libblas3gf libbonobo2-0
96 libbonobo2-common libbonoboui2-0 libbonoboui2-common libck-connector0
97 libcroco3 libdbus-glib-1-2 libeggdbus-1-0 libesd0 libfam0 libffi5
    libgail18
98 libgconf2-4 libgdu0 libgfortran3 libglade2-0 libgnome-keyring0
    libgnome2-0
99 libgnome2-common libgnomecanvas2-0 libgnomecanvas2-common libgnomeui-0
100 libgnomeui-common libgnomevfs2-0 libgnomevfs2-common libgnomevfs2-extra
101 libgsf-1-114 libgsf-1-common libgtk-vnc-1.0-0 libgudev-1.0-0 libhal-
    storage1
102 libhal1 libidl0 liblapack3gf libntfs-3g75 libntfs10 liborbit2
103 libpam-ck-connector libpcap0.8 libpolkit-agent-1-0 libpolkit-backend
    -1-0
104 libpolkit-gobject-1-0 librsvg2-2 librsvg2-common libsgutils2-2
    libsmbclient
105 libtalloc2 libvde0 libvte-common libvte9 libwbclient0 libxaw7 libxcb-
    atom1
106 libxmu6 libxpm4 libxt6 libxv1 libxxf86dga1 mtools ntfs-3g ntfsprogs
107 openbios-ppc openbios-sparc openhackware policykit-1 policykit-1-gnome
108 python-cairo python-dbus python-gconf python-glade2 python-gnome2
109 python-gobject python-gtk-vnc python-gtk2 python-libvirt python-libxml2

```

```

110 python-numpy python-pycurl python-pyorbit python-urlgrabber python-vte
    qemu
111 qemu-keymaps qemu-system qemu-user qemu-utils seabios udisks vde2
    vgabios
112 virt-manager virt-viewer virtinst x11-utils
113 0 upgraded, 110 newly installed, 0 to remove and 0 not upgraded.
114 Need to get 63.5 MB of archives.
115 After this operation, 186 MB of additional disk space will be used.
116 Do you want to continue [Y/n]?

```

Après on peut lancer virt-manager via un tunnel X11 avec la commande *virt-manager*

3 Installation

On lance ensuite l'installation de 7 machines virtuelles sur chacun des noeuds via le script crée par Augustin. Afin de contrôler les vms installés sur d'autres noeuds, il est nécessaire de passer via un tunnel ssh. Pour faire elà nous avons crée un couple clé privé/publique spécifique : *key_virt* et *key_virt.pub*. Nous copions ces clefs sur tous les noeuds puis nous ajoutons le contenu de *key_virt.pub* dans le fichier *.ssh/authorized_keys*.

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