

ctys-config-guest-sources(7)

Configure installation automation of GuestOSs

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1 General

This document describes the provisioning of automated installation procedures by **ctys-createConfVM**, either **semi-automatic** or **fully automatic**.

The almost only required configuration is the access path to the installation media for the GuestOS. The media could be accessed by various protocols, either local or remote, in general more or less any URI is supported.

The resulting degree of automation depends on the provided means of the GuestOS. When a method like **kickstart** is provided this could be configured as a parameter and provides a full turn-key automation. In case of means of offline installation like **debootstrap** a full degree of installation automation is provided too.

The predefined parameters may be used in cases of configuration-only calls too, where specific parameters for defined versions could be predefined. This also comprises the abort of the installation for unsupported configuration requests.

The only drawback of a missing default set is the mandatory requirement of interactive proceeding.

2 Preparations

The first step is the configuration of the installation sources for **ctys-createConfVM**. These are looked up first in the user's home directory

```
`${HOME}/.ctys/ctys-createConfVM.d/defaults-`${C_SESSIONTYPE}`.ctys
```

second within the installation currently executed path

```
`${MYCONFPATH}/ctys-createConfVM.d/defaults-`${C_SESSIONTYPE}`.ctys
```

Additionally new files have to be registered in the file

```
`${MYCONFPATH}/ctys-createConfVM.d/hook.sh
```

The priority is to use the first matched value.

The installation by usage of a boot media does not require additional configurations, whereas the application of PXE may require some additional setup. This comprises the network services including the appropriate setup of the local BIOS, and probably the use of some initial boot-up media.

Once this step is completed, the option ' **-auto** ' and **-auto-all** ' could be applied for semi or full-automation.

3 Receipts

3.0.1 First Call Example

The configuration could be proceeded by editing the appropriate configuration file as defined in the preparations section.

The sources could be either provides by local file access including NFS mounts, or by use of protocols such as FTP or HTTP as provided by the installer of the guest system. The setup of PXE requires various additional configurations.

The hypervisors **VirtualBox** and **VMware** are supported by interactive configuration and manual installation of guest systems only.

The following call creates a dummy VM with a small dummy-image by application of **-auto-all**, which supports the complete automation of configuration and guest systems.

```
MAC=00:11:22:33:44:55 \
IP=12.12.12.12 \
TCP=gecko \
HDDBOOTIMAGE_INST_SIZE=128M \
HDDBOOTIMAGE_INST_BLOCKSIZE=32M \
```

```

HDDBOOTIMAGE_INST_BLOCKCOUNT=4 \
ctys-createConfVM \
  -t XEN \
  --label=tst02 \
  --auto-all \
  --create-image

```

Attributes of the created VMs could be varied by application of the utility **ctys-attribute**.

4 ENVIRONMENT

The following keys are available for selection. These partly depend on additional attributes, e.g. the ARCH or ACCEL keys.

Key	Description
ACCELERATOR	Available and actually supported accelerators for the HostOS.
ARCH	Architecture of the GuestOS distribution.
DIST	The GuestOS distribution to be installed.
DISTREL	The release of the distribution sources.
GuestOS	The OS contained in the source, here descriptive text only.
Instmode	The supported modes for interactive installation and automation by
	DEFAULTINSTMODE.
TYPE	The session type - actually the hypervisor - as runtime environment.

The current present configuration sources are listed within the following table. The configured paths has to be adapted within the configuration files. Missing configuration options are supported by interactive configuration only.

The distribution names and OS names are owned by their suppliers and may/are protected by trademarks.

4.1 Android

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
1.6	i386	QEMU	QEMU,KVM	CD	Android 1.6
2.2	i386	QEMU	QEMU,KVM	CD	Android 2.2

4.2 CentOS

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
5, 5.0	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5, 5.0	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
5.5	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5.5	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
5.*	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5.*	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*

4.3 debian

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
4.0_r3, 4.*	i386,amd64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5.0.0	amd64	XEN	PARA,HVM	CD,PXE	Linux-*
5.0*	i386,amd64	XEN	PARA,HVM	CD,PXE	Linux-*

4.4 eeDroid

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
2.2	i386	QEMU	QEMU,KVM	CD	Linux-*

4.5 EnterpriseLinux

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
5, 5.0	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5, 5.0	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
5.0	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5.5	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5.5	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
5.*	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
5.*	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*

4.6 Fedora

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
8	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
10	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*
10	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
12	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
13	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*

4.7 FreeBSD

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
7.*	X86_64	XEN	PARA,HVM	CD,PXE	FreeBSD-7.*
7.*	X86_64	QEMU	QEMU,KVM	CD,PXE	FreeBSD-7.*
8.*	X86_64	XEN	PARA,HVM	CD,PXE	FreeBSD-8.*
8.*	X86_64	QEMU	QEMU,KVM	CD,PXE	FreeBSD-8.*

4.8 Gentoo

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
2008.0*	X86_64	XEN	PARA,HVM	CD,PXE	Linux-*
2008.0*	X86_64	QEMU	QEMU,KVM	CD,PXE	Linux-*

4.9 Knoppix

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
6.2.1, 6.2*	X86_64	XEN	PARA,HVM	CD	Linux-*
6.2.1, 6.2*	X86_64	QEMU	QEMU,KVM	CD	Linux-*

4.10 Mandriva

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
2009*	i386, X86_64	XEN	PARA,HVM	CD	Linux-*
2009*	i386, X86_64	QEMU	QEMU,KVM	CD	Linux-*
2010*	i386, X86_64	XEN	PARA,HVM	CD	Linux-*

4.11 MeeGo

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
1.0*	i386	QEMU	QEMU,KVM	CD	Linux-*

4.12 MS-Windows - MSProducts

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
WNT4WS	i386	XEN	HVM	CD	MS-Windows-NT-4.0-WS
WNT4S	i386	XEN	HVM	CD	MS-Windows-NT-4.0-S
W2KWS	i386	XEN	HVM	CD	MS-Windows-2000-WS
W2KS	i386	XEN	HVM	CD	MS-Windows-2000-Server
WXP	i386	XEN	HVM	CD	MS-Windows-XP
W7	x86_64	XEN	HVM	CD	MS-Windows-7
W2003	x86_64	XEN	HVM	CD	MS-Windows-2003
W2008	x86_64	XEN	HVM	CD	MS-Windows-2008
WNT4WS	i386	QEMU	KVM	CD	MS-Windows-NT-4.0-WS
WNT4S	i386	QEMU	KVM	CD	MS-Windows-NT-4.0-S
W2KWS	i386	QEMU	KVM	CD	MS-Windows-2000-WS
W2KS	i386	QEMU	KVM	CD	MS-Windows-2000-Server
WXP	i386	QEMU	KVM	CD	MS-Windows-XP
W7	x86_64	QEMU	KVM	CD	MS-Windows-7
W2003	x86_64	QEMU	KVM	CD	MS-Windows-2003
W2008	x86_64	QEMU	KVM	CD	MS-Windows-2008

4.13 NetBSD

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
5.0.2	X86_64	QEMU	QEMU,KVM	CD,PXE	NetBSD-5.0.2
5.*	X86_64	QEMU	QEMU,KVM	CD,PXE	NetBSD-5.*

4.14 OpenBSD

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
4.8	X86_64	QEMU	QEMU,KVM	CD,PXE	OpenBSD-4.8
4.8	X86_64	XEN	PARA,HVM	CD,PXE	OpenBSD-4.8

4.15 OpenSolaris

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
2009.6	i386(x86_64)	QEMU	QEMU,KVM	CD,PXE	OpenSolaris-2009.6
2009.6	i386(x86_64)	XEN	PARA,HVM	CD,PXE	OpenSolaris-2009.6

4.16 OpenSUSE

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
11.*	X86_64	QEMU	QEMU,KVM	CD	Linux-*
11.*	X86_64	XEN	PARA,HVM	CD	Linux-*

4.17 RHEL

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
6, 6.0	X86_64	QEMU	QEMU,KVM	CD	Linux-*
6, 6.0	X86_64	XEN	PARA,HVM	CD	Linux-*
5, 5.0	X86_64	QEMU	QEMU,KVM	CD	Linux-*
5, 5.0	X86_64	XEN	PARA,HVM	CD	Linux-*
5.5	X86_64	QEMU	QEMU,KVM	CD	Linux-*
5.5	X86_64	XEN	PARA,HVM	CD	Linux-*
5.*	X86_64	QEMU	QEMU,KVM	CD	Linux-*
5.*	X86_64	XEN	PARA,HVM	CD	Linux-*

4.18 Scientific

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
5.*	X86_64	QEMU	QEMU,KVM	CD	Linux-*
5.*	X86_64	XEN	PARA,HVM	CD	Linux-*

4.19 Solaris

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
10*	i386(x86_64)	QEMU	QEMU,KVM	CD,PXE	Solaris-10*
10*	i386(x86_64)	XEN	PARA,HVM	CD,PXE	Solaris-10*

4.20 Ubuntu

DISTREL	ARCH	TYPE	ACCELERATOR	Inst	GuestOS
8.04	amd64	QEMU	QEMU,KVM	CD,PXE	Linux-*
8.04	amd64	XEN	PARA,HVM	CD,PXE	Linux-*
9.10	amd64	QEMU	QEMU,KVM	CD,PXE	Linux-*
9.10	amd64	XEN	HVM	CD,PXE	Linux-*
10.10	amd64	QEMU	QEMU,KVM	CD,PXE	Linux-*
10.10	amd64	XEN	HVM	CD,PXE	Linux-*

5 SEE ALSO

UserManual , *CommandReference* , *HowTo*

ctys-attribute(1) ,
ctys-cloneVM(1) ,
ctys-createConfVM(1) ,
ctys-convertVM(1)

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7 COPYRIGHT

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