ctys-**VMW**(1)
VMW Interface

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Contents

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1   NAME

ctys-VMW - VMware(TM) Interface

2   SYNTAX

```
ctys -t VMW  -a action[=<suboptions>] ...
ctys -T VMW  -a action[=<suboptions>] ...
ctys -T ALL  -a action[=<suboptions>] ...
```

3   DESCRIPTION

The **VMW** plugin adds support for sessions to **VirtualMachines** of type **VMware(TM)**.
The management of the virtual machines include particularly the support of boot and shutdown for local and remote virtual machines including an inventory with accessible machines. Stored machines on network devices could be accessed by multiple worker-machines, providing a multipath-registration within the inventory. The inventory is populated automatically by scanning the local and remote filesystems and collecting the information of detected VMs into a local ASCII file-database.

The access to VMs is supported by the full scope of the <**machine-address**>, thus e.g. a user defined LABEL as a shortcut-alias could be used. The VMW plugin is "**VM-STACK safe**" as it handles running embedded virtual machines and emulators by propagating state change events(e.g. SHUTDOWN) of the execution platform to contained hypervisors and emulators.

The scope comprises for now the products WMware-Workstation, WMware-Server, and VMware-Player, which are all TradeMarks of VMware Inc. The supported product versions are automatically detected, thus no furter parameters for version distinction are required. Current version supports the **Server(1.x, 2.x)** and **Player(1.x, 2.x, 3.x)** and the **Workstation(6.x, 7.x)** variants.
Additional information for installation is available from **ctys-configuration-VMW**, information containing use-cases with application examples is available from **ctys-uc-VMW**.

4   OPTIONS

-a action[=<suboptions>]

For the complete Syntax refer to the depicted generic superset within the call-framework **ctys(1)** .

CANCEL

Following applies to the generic framework interface:

CLIENT

The client server communications is handeled by a proprietary frontend, which implements the sharing of a single port, by default 904. This requires some specific treatment particularly for the case of CONNECTIONFORWARDING.
The headless-mode(NONE) for CONSOLE is not supported as initial call, the console could be detached without shutting down the server component later, when background-mode is preconfigured.
This is not applicable for VMplayer.

SERVER

This is not applicable for VMplayer.

BOTH
When this keyword is present the server and client processes of the previous set are filtered.

Particularly the wildcard-attribute **ALL** is provided for application on all sessions of selected and permissive user-scope.

CREATE
VM or Team to be loaded and options passed through. For additional information refer to the related documentation from VMware. E.g. "Workstation User's Manual " Workstation 6.0 Appendix A "Workstation Command-Line Reference"; pg. 403.

<callopts>
When <callopts> are given, these will be passed through to the call:

`vmware <callopts> <vmx-path>`

The "−" double hyphen is inserted as required.
Be aware, that some of these such as "-geometry" and "-name" are already implicitly utilized by other options, thus use this if, than CAREFULLY.

CONSOLE
All available console types for the supported VMware versions could be used, but the specific support of the versions may vary. An overview of provided CONSOLE types is listed within the description of the standard call for CREATE.
Particularly the following console types are available for VMW:

VMW
The standard frontend, is available for all. When configured within the VM a detach and re-attach to the running VM is possible. The background mode is required here, which is not available for at least some versions of the Player. For the newer versions beginning with Server/Player-2.x the browser interface is opened.

VMWRC
This is the remote console standalone starter for **vmware-vmrc**, which is available within the Server package. For additional descrition refer to the ctys-HOWTO/Examples. The login requires proper authentication, thus the USER-parameter should be used in companion. Othewise a login dialogue occurs.
The following paths are probed for the executable in given order for a custom installed copy.
1. $MYADDONSPATH/vmware-rc-x64
2. $HOME/vmware/vmware-rc-x64
3. /opt/vmware/vmware-rc-x64
4. /usr/bin
5. /usr/local/bin
6. /usr/share/vmware-rc
7. /usr/share/vmware-rc-x64
8. /usr/share/vmware-rc-x86
9. /opt/bin
10. /opt/vmware/vmware-rc

FIREFOX
This is the starter for the remote console as standard plugin.

NONE
The initial headless mode, available for Server and Workstation, requires some specific configuration of the VM.

VNC

The use of VNCviewer as frontend, available for Workstation-Version-6, requires configuraition of VM. The port has to be configured statically within the VM, but is evaluated dynamically by mapping of the <machine-address> at runtime.

ENUMERATE

Enumerates all VMW sessions, therefore the vmx-files will be scanned and the matched attributes displayed. Therefore the following order of files will be scanned for values, in each case the searched key is expected to have the prefix #@# within the file.

<pname>

The standard configuration file for VM, as given.

<pname-prefix>.ctys

The prefix of given filename with the **.ctys** suffix.

<pname-dirname>.ctys

The dirname of given file with **.ctys** suffix.

-g <geometry>|<geometryExtended>

The geometry has a slightly different behaviour to the standard when specific options of proprietary WS-CONSOLE are switched on.

- The positioning parts of parameters of <geometryExtended> seem to work in any case correctly.
- The offset of <geometry> seems to work proper in any case too.
- The size of <geometry> seems to work proper when **AutofitWindow** and **AutofitGuest** are switched off.

— As could be seen, shortly after start of CONSOLE it will resize itself, if previous parameters are set. Which is indeed a pretty well behaviour. What else should that options of CONSOLE control?

-L <execution-location>

```
<execution-location>=(
   (LOCALONLY|LO)
   | (CONNECTIONFORWARDING|CF)
   | (DISPLAYFORWARDING|DF)
   | (SERVERONLY|SO)
 )
```

Currently the following selections are supported:

Product/Version	LO	CF	DF	SO
VMware-WS		no	yes	1)
VMware-Server		yes	yes	1)
VMware-Player				

Forwarding modes and call locations for VMW versions

1)The background-server-mode is currently implicitly supported only.

This requires the options to be selected within the products - which are slightly different, but are almost commonly supported - and will be implicitly started only when starting the whole product.

The server component continues execution when the client is canceled, but could not be started separately. A CONNECT to a running server is supported.

5 PREREQUISITES

Supported products:

Product	Tested Versions
VMware-WS	6.x, 7.0.1
VMware-Server	1.0.3-1.0.10, 2.0.2
VMware-Player	1.0.5-1.0.6, 2.5.1, 3.0.1

Supported products

background operations

The background operations for the server component of the VM has to be set explicitly for some variants. This is not required for server-products, but should be done for workstation products.

Not setting this leads to an immediate termination of the server, when client closes. Not necessarily with a soft-shutdown!!!

tabs-mode

The tabs-mode for the proprietary CONSOLE should be set off. Even though a tabbed-view could be used too.

Due to the embedded dispatcher for the display the CONSOLE requires here a user interaction for selecting the target display in any case(by tabs, or by menu "tabs"), but when only one display per window is assigned it appears to be little more straight-forward.

authentication

User authentication is for **-P <port>** access even for **-h localhost** required, so for CONNECTION-FORWARDING in any case the user seems to have to perform a login. In addition, it seems that the user has to be a local user on that machine.

As far as I can say for now, only in case of DISPLAYFORWARDING SSO has an effect on sessions. Let me please know, when this is wrong, and don't forget to explain how.

Headless-Start

Found a "nogui" param for vmrun, will be introduced asap.

6   SEE ALSO

ctys(1) , *ctys-plugins(1)* , *ctys-VMW(1)* , *vmware(1)*

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8   COPYRIGHT

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