ctys-**VNC**(1)
Virtual **N**etwork **C**onsole

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Contents

.

1 NAME

ctys-RDP - Remote Desktop Protocol Interface

2 SYNTAX

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

3 DESCRIPTION

ATTENTION: This plugin is actually in **alpha-release**, thus might have some drawbacks. The interface and integration of tools is going to be extended, currently **rdesktop** is the only supported client.

This plugin manages RDP sessions to LINUX/UNIX OS. Due to the intention of the RDP protocol this plugin has only a client component and utilizes any server providing RDP client attachement. The RDP plugin encapsulates and handles the complete interaction with the local and remote components provided by means of the client **rdesktop**.

SSH based connections are the only one supported, thus the only actual connections allowed are to 'localhost'. In case of servers not offering the local-only attachement the user should setup additional security measures e.g. by activating packetfilter rules.

The sessions are generally categorized into two basic configurations, the coallocation of the client with the targeted server - **DISPLAYFORWARDING** - and the distributed client and server location on different hosts - **CONNECTIONFORWARDING**. In the latter case an intermediary SSH tunnel is created.

4 OPTIONS

-a action[=<suboptions>]

CANCEL

```
CANCEL=(<machine-address>){1,n}
  |ALL
  (
    [FORCE|STACK][,]
    [SELF][,]
    [
      RESET|REBOOT
      |(INIT:<init-state>)
      |(PAUSE|S3)|(SUSPEND|S4)
      |((POWEROFF|S5)[:<timeoutBeforeKillVM>]
    ][,]
  [CLIENT|SERVER|BOTH]
  )
```

<machine-address>
For VNC the following parts of a <machine-address> are applicable: ID|I, LABEL|L

When the VNCviewer/VNCserver is used in the default shared-mode, the address applies to all sharing VNCclients/vncviewer are handled as one logical unit and CANCEL is applied to all at once.
The address could be supported with multiple instances.

ALL|BOTH|(CLIENT|SERVER)

ALL and BOTH kill clients and servers on local machine. Remote clients by CONNECTION-FORWARDING might be exiting when server-loss is detected.

The **SERVER** scope is actually for VNC the same as ALL or BOTH, this is due to the default (non-server) behaviour of attached clients, which exit when detecting a server-loss.

The **CLIENT** scope just kills all client processes by means of OS, which is simply calling kill on their PID. The server processes remain untouched.

REBOOT|RESET|INIT|SUSPEND
These methods just behave as a "soft-kill" which is a more or less soft shutdown, for VNC only! Application shutdown is not supported. So in this case first all clients are killed, following a call to "vncserver -kill :<id>" for all matched. No additional action is performed in case of a failure.

POWEROFF
These method could be seen as a "hard-kill" which is a trial to "soft-kill" and an immediate following process kill by means of native OS. Thus there might be definetly no difference to a controlled shutdown of VNC managing unprepared applications.
The session(s) are basically just killed, so the caller is resposible for appropriate handling of contained jobs.

CREATE

```
CREATE=[<machine-address>]
   [REUSE|CONNECT|RECONNECT|RESUME]
   [CONSOLE:<rdesktop>]
   [(CALLOPTS|C):<callopts>]
   [(XOPTS|X):<xopts>]
   [(SHELL|S):<shell>]
   [(CMD):<cmd>]
   [(INSECURE):<ext-host>]
```

<machine-address>
For VNC the following parts of a <machine-address> are applicable: LABEL|L
When the VNCviewer/VNCserver is used in shared-mode, the address applies to all sharing VNCclients/vncviewers. The LABEL suboption is here mandatory.

BOOTMODE
Not applicable.

CONNECT
Almost the same as REUSE, but no new server will be started if missing.

CONSOLE
Current version supports **rdesktop**.

INSECURE
The external(!=localhost) host to be accessed by remotely attached RDP client. This is foreseen for blackboxes and access to MS-Windows(TM) based hosts. It should not be forced for UNIX/Linux based boxes.

PING
Not applicable.

RECONNECT
Similiar to REUSE, with the difference, that any previous active client will be killed before attaching ONE new client. Therefore in shared mode, when multiple clients could simultaneously share one server, all sharing clients are handled as one logical unit and will be thus killed together. Specific exchange of a single client is not supported.

RESUME
Not applicable.

REUSE
When a server process with matching ID or LABEL is already running it will be used, else a

new one will be started. In case of non-shared-mode operations of VNC any running vncviewer will be killed by disconnecting through the VNCserver. This is almost the same behaviour as for RECONNECT. When running in shared-mode, just an additional vncviewer will be attached to the server.

SSHPING
: Not applicable.

USER
: Not applicable.

VNCPORT:<literal-port>
: Port to be used literally, required for several VMs with fixed Server-Ports.

WAITC:<delay-after-viewer-call>
: Delay after start of vncviewer, internally used as delay before check of PID for JOBDATA. Might not be really required to be varied, but provided for completeness.

WAITS:<delay-before-viewer-call>
: Delay for start of vncviewer, required when the execution is too fast for the VNCserver to finish it's init.

  The practical application could be the usage within a GROUP and/or MACRO, where for security reasons a password based access to multiple <exec-targets> is provided, e.g. for root accounts within a admin group. With setting of this parameter the initial output of VNCviewer is delayed due to it's own delay, thus a series of password requests occur without beeing poisoned by trace messages of the parallel executed VNCviewer.

ENUMERATE
: Not applicable.

LIST
: Almost the same output as common standard, with following changes in semantics.

  id: The DISPLAY used by the vncviewer and/or vncserver. For the actual display of the server two cases has to be distinguished:

  DISPLAYFORWARDING
  : The DISPLAY of vncviewer and vncserver are identical.

  CONNECTIONFORWARDING
  : The DISPLAY of vncviewer and vncserver are different, this is due to the intermediate tunnel, which handles the port-forwarfing and an has to do a remapping due to ambiguity within the network scope. The following values are not applicable:

    `uuid, mac, tcp`

5 SEE ALSO

ctys(1), *ctys-uc-VNC(7)*, *ctys-plugins(1)*, *vncpasswd(1)*, *vncviewer(1)*, *vncserver(1)*

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