${\bf ctys\text{-}genmconf}$

generates the configuration entry

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1 NAME

ctys-genmconf - generates the configuration entry

2 SYNTAX

ctys-genmconf

```
[-d <debug-options>]
[-h]
[-H <help-options>]
[-I <TCP-address>]
[-k <ctys-vhost-search-key>]
[-1 <remote-user>]
[-M <MAC-address>]
[--no-progress]
[--progress]
[-r [(WITHIP|WITHMAC|ALL)]]
[--rounds=<rounds>%<cpu-cycles>%<hdd-cache-cycles>\
    %<hdd-write-through-cycles>]
[--testfs=<test-directory-storage>]
[-u]
[-U <UUID>]
[-V]
[-X]
[-x (PM|VM)]
<execution-target-list>
```

3 DESCRIPTION

ctys-genmconf generates the initial configuration entry for a PM or VM for

• "/etc/ctys.d/[pv]m.conf".

The content of this file is required by the VMSTACK feature during validation of static consistency and dynamic applicability of the stack members. This is particularly required for hidden files in case of nested VMs to be started, where this data is required to be cached for pre-access within cacheDB. Several additional approaches are available, but this is the most versatile concept, even though it requires some pre-caching efforts.

The current version supports one context only, thus for each change of the booted kernel the differences could require a new generation of the configuration file, including the update of the cacheDB. Future versions are going to support multiple boot-contexts for each PM and VM, which will include the decision for booting the appropriate kernel as decided by the foreseen load-balancing mechanism.

The utility could be performed locally or remotely by full support of remote ctys-addressing.

The generation of data requires root access for some tools. Namely the utility "dmiencode", which is used to evaluate the UUID of the machine requires for execution root-permissions. Anyhow, some older machines may not have a readable UUID at all. The utility should therefore be executed once on each participating PM and VM by the administrator during installation, and should be completed manually with additional data.

Preferably the rpm package should be installed during initial installation phase, which will generate the appropriate configuration entries. The data from the pm.conf is required for the ctys-vhost utility and is therefore fetched by the ctys-vdbgen utility and is evaluated by ctys-dnsutil for dynamic decision of node type.

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4 OPTIONS

-d < debug-args >

Refer to "ctys" generic options for additional information.

-h

Show help.

-H <help-option>

The extended help option is based on system interfaces for display of manpages, PDF and HTML documents. This comprises the man pages and installed manuals.

For additional help refer to the documents or type ctys -H help.

$ext{-I} < ext{TCP-address} >$

Preset value.

-k <ctys-vhost-search-key>

The search key to be used as filter for match-only results from the "macmap.fdb" avoiding the usage of local parameters for "host, TCP/IP, and OS". Any valid VHOST-SEARCH-ARGS argument for "ctys-vhost" is applicable.

-l <remote-user>

Refer to "ctys" generic options for additional information.

-M < MAC - address >

Preset value.

-no-progress

Suppresses the displays of progress indicators.

-P

Generates standard file path '/etc/ctys.d/[pv]m.conf'.

Default output is stdout.

-progress

Displays various progress indicators for HW capabilities measurements.

-r < args >

The range of interfaces to be included, current version supports ethernet interfaces only with the following ranges:

- WITHIP Requires an IP address, which is the "inet" line, currently for IPv4 only. This is current default.
- WITHMAC Requires a MAC address. An IP address is not neccessary, but could be present.
- $\bullet \ \ ALL \ Enumerates \ all \ ethernet \ interfaces \ which \ is \ "WITHIP||WITHMAC", local host \ is \ excluded.$

-rounds=<args>

The rounds argument changes the basic amount of measurement cycles for predefined measurement patterns. The following arguments could be applied:

• <rounds>

The number of cycles for all tests except the write-through tests.

• <cpu-cycles>

The number of cycles for the CPU load test pattern.

• <hdd-cache-cycles>

The number of apllied cache-storage pattern

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• <hdd-write-through-cycles>

The number of write-through pattern. This test is frequently long running, the data is scaled to 2*RAM when the storage space is available, else to storage/2.

-testfs = < test-filesystem >

The testfilesystem for storage of data, teh default is set to '/var/tmp'.

-u

Generate a UUID.

-U <UUID>

Preset value.

 $-\mathbf{V}$

Show version.

-x <category>

Configuration files for the various machine categories. The output is slightly different.

- PM Generates the file "/etc/ctys.d/pm.conf".
- VM Generates the file "/etc/ctys.d/vm.conf".

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5 ARGUMENTS

An optional list of <execution-target>. When the "-P" option is choosen, the remote files will be updated, when suffitient permissions are available, else the output is collected locally. The call is simply mapped to a call of the CLI plugin with the option CMD, thus works synchronuous and sequential.

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6 EXIT-VALUES

0: OK: Result is valid.

1: NOK: Erroneous parameters.

2: NOK: Missing an environment element like files or databases.

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7 SEE ALSO

```
ctys plugins PMs ctys-PM(7)
ctys executables ctys-plugins(1)
system executables dmidecode(8)
```

8 AUTHOR

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9 COPYRIGHT

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