# ctys-plugins(1)

# for verification of current install status

## $June\ 4,\ 2010$

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## 1 NAME

ctys-plugins - verifies of current install status

## 2 SYNTAX

```
[-d <common-debug-option>]
[-E ]
[-h]
[-H <help-options>]
[-1 <remote-user>]
[-t <plugin-type>]
[-T <plugin-preload-typelist>]
[-V]
[-X]
[-Z <set-sudo-ksu>]
<set-accounts>
```

## 3 DESCRIPTION

ctys-plugins is a test-tool for verification and analysis of the current status of the installation of ctys and present plugins.

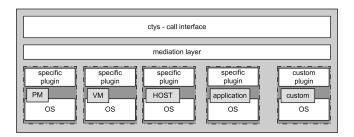


Figure 1: ctys SW-Layers and plugins

Due to some restrictions it operates partly on a basic level, involving some specific pre-defined trace levels for output control. The required options are documented in the following sections. Extended trace-levels neccessarily require some deeper familiarity with internal design, which is normally not required for top-level handling.

The utility could be performed locall or remotel by full support of ctys-addressing but without context options on the command line. If for whatever reasons remote context options are reuqired, than could be applied to macro definitions only. For now the following main tasks are performed by ctys-plugin:

- Display of operational states and capabilities of plugins
- Distinguish the check-scope of verified features by "-E" for client-site call-RELAY and server-site final-EXECUTION
- Display of called system tools with the actual resolved path-prefix

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• Display of the actual access permissions as configured by one of:

```
/etc/sudoers
$HOME/.k5users
$HOME/.k5login
```

• display of any level of system initialization traces during call bootstrap, refer to common ctys-standard "-d" option

The output is splitted into **3 sections**:

- The first section is the bootstrap of the tool itself, this includes the basic intialization of the framework, where only framework specific options are evaluated. Typical for this is the "-d" option, which is prefetched by the library itself.
- The **second section** contains the trace output during **initialisation of the plugins**. The content dependes on the choosen debug level. Error messages are displayed in any case.

```
Checking PLUGINS-STATEs now...
<trace-output>
-----
...results to:
```

• The **third section** contains the **processed results** of the evaluated raw component states. Therefore an basic overview of the hosting system is given, followed by a sum-up of the various sets of plugings related to the different operational states. The final list contains the operational details for each inidividual plugin.

## 4 OPTIONS

### -d <common-debug-option>

This option is the common analysis and debugging facility of the UnifiedSessionsManager. Due to the wide scope it is maybe somewhat "like a developer interface".

Anyhow, the **most important application** is for installation and first time systems configuration by **analysis of the called system utilities**. The difficulties with the bunch of utilized systems calls frequently leads to some trouble, which becomes immediately obvious, once the output of the following call is displayed:

```
"ctys-plugins -d 64,P -T all -E"
```

This call checks all system calls for the **current node as a final execution location**. The availability as well as (some) access permissions are evaluated. When things don't work, this call is the first instance to "ask". The "-d" option activates a bit-pattern style debug-level by "P" suboption. Than the bit "64" is set, which is the predefined variable "D\_SYS", tracing the internal call-wrapper, almost exclusively used for system calls. When not appropriate, the workaround is implemented in a neatless style. The "-T" option sets simply "all" plugings to be loaded and initialized. The "-E" option executes a final destination call, instead of an initial or intermediary RELAY-call.

The following call performs almost the same, but as the current node as a client or RELAY.

```
"ctys-plugins -d 64,P -T all"
```

-**E** 

Check for **local host as final execution target**, this forces full verification. If "-E" is not set, only required functionality for a client role is validated, which could be for some packages almost the same and though treated as.

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- This is e.g. the case for PM.
- This is e.g. not the case for XEN, which obviously requires a completly different runtime environment for it's clients than within the server as Dom0/DomU
- This e.g. could be or not the case for VMW, depends on type of product + version + requested type of client.

-h

Print help, refer to "-H" for additional information.

#### -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**.

#### -l <remote-user>

Refer to "ctys" generic options for additional information.

#### -t <plugin-type>

The type of plugin to be set to BUSY(4), this is any SINGLE plugin as applicable by "ctys -t ..." call.

#### -T <plugin-preload-typelist>

The prefetch list of plugins to be set to IDLE(2), before performing, this is any comma seperated LIST of plugins as applicable by "ctys -T ..." call.

 $\mathbf{-V}$ 

Version.

- X

Terse output format, effects "-V" when set left-of.

#### $-\mathbf{Z}$ <set-sudo-ksu>

Sets appropriate access permissions by sudoers and/or kerberos/ksu. For additional information refer to Z-OPTION.

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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 syncronuous and sequential.

## 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)

VMs ctys-KVM(7), ctys-QEMU(7), ctys-VMV(7), ctys-XEN(7), ctys-VBOX(7)

HOSTS ctys-CLI(7), ctys-PM(7), ctys-VNC(7), ctys-X11(7)

ctys executables ctys-genmconf(1)

system executables dmidecode(8)
```

## 8 AUTHOR

Written and maintained by Arno-Can Uestuensoez:

## 9 COPYRIGHT

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