

NAME

Tnm – Tcl extensions for network management applications.

DESCRIPTION

The Tnm Tcl extensions has been written to simplify the development of network management applications. The primary goal of the Tnm extension is to provide a string-based API to access network protocols and services relevant for network management applications. Some of the Tcl commands provided by the Tnm extension are useful for more general networked applications as well.

A string-based API simplifies the development of site specific management solutions because higher-level interfaces encapsulate the complexity of some of the protocols supported by the Tnm extension. The use of the Tcl language allows to integrate this extension with the Tk toolkit. Management applications can thus be prototyped in a cost-effective and platform independent way.

COMMAND OVERVIEW

Below is a short overview over the Tcl commands provided the Tnm extension. There are separate man pages for each command listed below which describes the command and its options in more detail.

dns Query the Domain Name System of the Internet.

http Send and process HTTP requests.

icmp Send ICMP messages to hosts on the Internet.

ined Access and manipulate tkined objects.

job Invoke Tcl procedures at regular intervals.

mib Load and query SNMP MIB definitions.

netdb Access the local network databases.

ntp Retrieve control variables from NTP peers.

snmp Send SNMP messages to devices on the Internet.

sunrpc Call and probe selected Sun RPC services.

syslog Write messages to the system logger.

udp Send and receive UDP datagrams.

ENVIRONMENT VARIABLES

TNM_LIBRARY Path to the Tnm library directory.

TNM_NTPING Path and name of ntping executable.

TNM_STRAPS Path and name of straps executable.

TNM_RCFILE Path and name of the initialization file.

TCL VARIABLES

The Tnm extension defines the following global Tcl variables:

tnm(library) The path to the scotty library directory. This variable is initialized to the compiled in default. You can overwrite this default by setting the **TNM_LIBRARY** environment variable.

tnm(version) The version number of the Tnm extension.

tnm(arch)	A string that identifies the architecture and operating system. Note, this will only work with Tcl version 7.5 and higher.
tnm(host)	The name of the local host executing the Tcl process.
tnm(user)	The name of the user running the Tcl process.
tnm(mibs)	This variable contains a list of SNMP MIB files that are loaded automatically if not preceded by a mib load command.
tnm(mibs:core)	This variable contains a list of core SNMP MIB files that are loaded even if the first mib command is a load command.

FILES

<code>~/scottyrc</code>	Personal initialization file. May be overwritten by the <code>TNM_RCFILE</code> environment variable.
<code>\$tnm(library)/site/init.tcl</code>	Site initialization file. Use this file to customize Tnm to your site specific needs.
<code>\$tnm(library)/library/init.tcl</code>	Tnm initialization file. Do not edit.
<code>\$tnm(library)/mibs</code>	Archive of MIB and GDMO files.

AVAILABILITY

The **Tnm** Tcl extension is freely available in source form via anonymous FTP. The source distribution is available from:

`ftp://ftp.ibr.cs.tu-bs.de/pub/local/tkined/`

The Tnm extension is contained in the `scotty.tar.gz` file which is a link to the latest public-ally available version of this software. Additional information about the Tnm extension is available on the World Wide Web. The URL to the home-page of the scotty package is:

`http://www.cs.utwente.nl/~schoenw/scotty/`

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SEE ALSO

scotty(1), Tcl(n)

AUTHORS

The Tnm extension includes work contributed by students at the Technical University of Braunschweig. The names of individuals who provided major contributions are listed on the man pages for every command. The current version also includes many improvements and bug fixes contributed by the user community. Please read the README file contained in the sources for a more complete list of individuals.

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