OTP mibs application

version 1.0

Typeset in LaTeX from SGML source using the DOCBUILDER 3.3.2 Document System.

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Chapter 1

otp_mibs User's Guide

The *otp_mibs* application provides a SNMP management information base for Erlang/OTP nodes.

1.1 Introduction

1.1.1 Purpose

The purpose of the otp_mibs application is to provide an SNMP management information base for Erlang/OTP nodes without making the core Erlang/OTP dependent on SNMP, as Erlang/OTP has many uses and not everybody wants to use SNMP.

1.1.2 Pre-requisites

It is assumed that the reader is familiar with the Erlang programming language, concepts of OTP and has a basic knowledge of SNMP.

1.2 Mibs

1.2.1 Structure

The OTP mibs are stored in the “<erlang-installation>/lib/otp_mibs/mibs/” directory. They are defined in SNMPv2 SMI syntax. An SNMPv1 version of the mib is delivered in the mibs/v1 directory. The compiled MIB is located under priv/mibs, and the generated .hrl file under the include directory. To compile a MIB that IMPORTS a MIB in the otp_mibs application, give the option {il, [“otp_mibs/priv/mibs”]} to the MIB compiler.

1.2.2 OTP-MIB

The OTP-MIB represents information about Erlang/OTP nodes such as node name, number of running processes, virtual machine version etc. If the MIB should be used in a system, it should be loaded into an snmp agent by using the API functions otp_mib:load/1. For details see: “otp_mibs/mibs/OTP-MIB.mib”

1.2.3 OTP-REG

The OTP-REG module defines the unique OTP subtree of object identifiers under the Ericsson subtree. Under the OTP subtree several object identifiers are defined. This module is typically included by OTP applications defining their own mibs, or ASN.1 modules in general, that require unique object identifiers under the otp subtree. For further details see "otp_mibs/mibs/OTP-REG.mib".

1.2.4 OTP-TC

The OTP-TC mib provides the textual convention datatype OwnerString. That datatype is for instance used by mibs in the eva application to designate ownership of log entries. For more information see: "otp_mibs/mibs/OTP-TC.mib"

1.3 otp_mibs Release Notes

This document describes the changes made to the otp_mibs application.

1.3.1 otp_mibs 1.0.3

Improvements and New Features

- The otp_mibs module has been cleaned up to improve the maintainability. It should have no effect on the functionality of the otp_mib application.
  Own Id: OTP-4982

1.3.2 otp_mibs 1.0.2

Fixed Bugs and Malfunctions

- Incorrect app-file (missing mandatory 'registered').
  Own Id: OTP-4823 Aux Id: Seq8145, OTP-4801

1.3.3 otp_mibs 1.0.1

Fixed Bugs and Malfunctions

- Missing app- and appup-files in ebin-dir.
  Own Id: OTP-4801 Aux Id: Seq8145

1.3.4 otp_mibs 1.0

New application

- The OTP mibs that where included in the SASL application have been moved to this new application otp_mibs. The OTP mibs had no real connection to SASL and it is desirable that the core of Erlang/OTP is not dependent on SNMP.
  Own Id: OTP-4686

otp_mibs Reference Manual

Short Summaries

- Erlang Module **otp_mib** [page 4] – Handles the OTP-MIB

otp_mib

The following functions are exported:

- `load(Agent) -> ok | {error, Reason}`
  [page 4] Load the OTP-MIB.
- `unload(Agent) -> ok | {error, Reason}`
  [page 4] Unload the OTP-MIB.

otp_mib

Erlang Module

The snmp application should be used to start an snmp agent then the API functions below can be used to load/unload the OTP-MIB into/from the agent. The instrumentation of the OTP-MIB uses mnesia, hence mnesia must be started prior to loading the OTP-MIB.

Exports

`load(Agent) -> ok | {error, Reason}`

Types:

- Agent - pid() | atom()
- Reason - term()

Load the OTP-MIB.

`unload(Agent) -> ok | {error, Reason}`

Types:

- Agent - pid() | atom()
- Reason - term()

Unload the OTP-MIB.

See Also

snmp(3)

Index of Modules and Functions

Modules are typed in *this way*.
Functions are typed in `this way`.