

ZebOS-XP MRIB6 SMI Reference
IP Infusion Inc.

Generated by Doxygen 1.6.1

Wed Dec 16 12:34:00 2015

Contents

1	Data Structure Index	1
1.1	Data Structures	1
2	File Index	3
2.1	File List	3
3	Data Structure Documentation	5
3.1	mrib6_msg_ Struct Reference	5
3.2	mrib6MrouteInfo Struct Reference	6
3.3	mrib6VifInfo Struct Reference	7
3.4	outInterface6 Struct Reference	8
3.5	pnInfoData Struct Reference	9
3.6	smiMRIB6AllIpMrouteList Struct Reference	10
3.7	smiMRIB6AllVifList Struct Reference	11
4	File Documentation	13
4.1	smi_mrib6.h File Reference	13
4.1.1	Detailed Description	15
4.1.2	Function Documentation	15
4.1.2.1	smi_mrib6_api_clear_mroute_all	15
4.1.2.2	smi_mrib6_api_clear_mroute_stats_all	16
4.1.2.3	smi_mrib6_api_multicast_routing_set	16
4.1.2.4	smi_mrib6_api_multicast_routing_unset	17
4.1.2.5	smi_mrib6_api_rt_limit_set	17
4.1.2.6	smi_mrib6_api_rt_limit_thresh_set	18
4.1.2.7	smi_mrib6_api_rt_limit_thresh_unset	18

4.1.2.8	smi_mrib6_api_vif_ttl_threshold_set	19
4.1.2.9	smi_mrib6_api_vif_ttl_threshold_set_validate . . .	19
4.1.2.10	smi_mrib6_api_vif_ttl_threshold_unset	19
4.1.2.11	smi_mrib6_api_vif_ttl_threshold_unset_validate . .	20
4.1.2.12	smi_mrib6_debug_ipv6_sdkapi	20
4.1.2.13	smi_mrib6_no_debug_ipv6_sdkapi	21
4.2	smi_mrib6_msg.h File Reference	23
4.2.1	Detailed Description	24

Chapter 1

Data Structure Index

1.1 Data Structures

Here are the data structures with brief descriptions:

mrib6_msg_	5
mrib6MrouteInfo	6
mrib6VifInfo	7
outInterface6	8
pnInfoData	9
smiMRIB6AllIpMrouteList	10
smiMRIB6AllVifList	11

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

smi_mrib6.h (Describes the Multicast Routing Information Base IPv6 (MRIBv6) command API functions)	13
smi_mrib6_msg.h (Defines data structures used by MRIB6 SMI APIs)	23

Chapter 3

Data Structure Documentation

3.1 mrrib6_msg_ Struct Reference

Data Fields

- smi_cindex_t **cindex_0**
- u_int32_t **vr_id**
- vrf_id_t **vrf_id**
- u_int32_t **rt_limit**
- u_int32_t **rt_thresh**
- char **ifname** [255]
- char **char_src** [128]
- char **char_grp** [128]
- int **mrt_filter**
- char **addr** [128]
- int **cli_mode**
- char **vrf_name** [255]
- int **debug**
- u_int32_t **ifindex**
- u_int32_t **val**
- ut_int64_t **val1**
- u_char **ttl**
- struct [smiMRIB6AllVifList](#) **mrrib6AllVifList**
- struct [smiMRIB6AllIpMrouteList](#) **mrrib6AllIpMrouteList**

The documentation for this struct was generated from the following file:

- [smi_mrrib6_msg.h](#)

3.2 mrib6MrouteInfo Struct Reference

Data Fields

- u_int32_t **mrt_entry_count**
- u_int32_t **mrt_entry_count_bytes**
- u_int32_t **rt_limit**
- u_int32_t **rt_threshold**
- u_int32_t **num_nocache_recv**
- u_int32_t **num_wrongvif_recv**
- u_int32_t **num_wholepkt_recv**
- u_int32_t **num_nocache_sent**
- u_int32_t **num_wrongvif_sent**
- u_int32_t **num_wholepkt_sent**
- u_int32_t **num_imm_stat_sent**
- u_int32_t **num_timed_stat_sent**
- u_int32_t **reg_pkt_sent**
- u_int32_t **reg_ack_recv**
- u_int32_t **reg_nack_recv**
- char **poll_timeutil** [32]
- struct list * **pnInfoList**

The documentation for this struct was generated from the following file:

- [smi_mrib6_msg.h](#)

3.3 mrrib6VifInfo Struct Reference

Data Fields

- char **modname** [20]
- char **timeutil** [27]
- char **vif_name** [16]
- unsigned int **ifindex**

The documentation for this struct was generated from the following file:

- [smi_mrrib6_msg.h](#)

3.4 outInterface6 Struct Reference

Data Fields

- char **outName** [31]
- u_char **outTtl**

The documentation for this struct was generated from the following file:

- [smi_mrib6_msg.h](#)

3.5 pnInfoData Struct Reference

Data Fields

- u_int32_t **pkts_fwd**
- u_int32_t **bytes_fwd**
- u_int32_t **wrong_if**
- char **modname** [32]
- char **stats_timeutil** [32]
- u_int32_t **_flags**
- char **uptime** [32]
- char **incoming_int** [32]
- char **outgoing_int** [32]
- struct list * **outIntList**

The documentation for this struct was generated from the following file:

- [smi_mrib6_msg.h](#)

3.6 smiMRIB6AllIpMrouteList Struct Reference

Data Fields

- int **have_more**
- int **count**
- struct list * **MsgList**

The documentation for this struct was generated from the following file:

- [smi_mrib6_msg.h](#)

3.7 smiMRIB6AllVifList Struct Reference

Data Fields

- int **have_more**
- int **count**
- struct list * **MsgList**

The documentation for this struct was generated from the following file:

- [smi_mrib6_msg.h](#)

Chapter 4

File Documentation

4.1 smi_mrrib6.h File Reference

describes the Multicast Routing Information Base IPv6 (MRIBv6) command API functions

```
#include "smi_client.h"
```

```
#include "smi_mrrib6_msg.h"
```

Functions

- int **smi_mrrib6_api_multicast_routing_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- int **smi_mrrib6_api_multicast_routing_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- int [smi_mrrib6_api_vif_ttl_threshold_set_validate](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_char timeToLive)

This function validates the setting of threshold value for IPv6 multicast routing on the router through the MRIBd process.

- int [smi_mrrib6_api_vif_ttl_threshold_unset_validate](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This function validates the unsetting of threshold value for IPv6 multicast routing on the router through the MRIBd process.

- int **smi_mrrib6_api_rt_limit_thresh_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t routerLimit, u_int32_t routerThresh)
- int **smi_mrrib6_api_rt_limit_thresh_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- int **smi_mrrib6_api_rt_limit_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t routerLimit)
- int **smi_mrrib6_api_clear_mroute_all_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

- int [smi_mrrib6_api_clear_mroute_stats_all_validate](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- int [smi_mrrib6_api_multicast_routing_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This function starts up the L3 IPv6 multicast routing on the router through the MRIBd process.

- int [smi_mrrib6_api_vif_ttl_threshold_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_char timeToLive)

This function sets the threshold value for IPv6 multicast routing on the router through the MRIBd process.

- int [smi_mrrib6_api_vif_ttl_threshold_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This function unsets the threshold value for IPv6 multicast routing on the router through the MRIBd process.

- int [smi_mrrib6_api_multicast_routing_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This function stops the L3 IPv6 multicast routing on the router through the MRIBd process.

- int [smi_mrrib6_api_rt_limit_thresh_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t routerLimit, u_int32_t routerThresh)

This function sets the threshold of the route in the multicast route entries in the MRIB/MFIB. command.

- int [smi_mrrib6_api_rt_limit_thresh_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This function resets the threshold of the multicast route entries in the MRIB/MFIB.

- int [smi_mrrib6_api_rt_limit_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t routerLimit)

This function sets the limit of the multicast route entries in the MRIB/MFIB.

- int [smi_mrrib6_api_clear_mroute_all](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This function clears the multicast entry in the MRIB/MFIB.

- int [smi_mrrib6_api_clear_mroute_stats_all](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This function clears the multicast route entries, which has the specified group value in the MRIB/MFIB.

- int [smi_mrrib6_debug_ipv6_sdkapi](#) (struct smiclient_globals *azg, int vrId, char *vrfName, int debug)

This function clears the multicast statics, which matches to the specific group entry.

- int [smi_mrib6_no_debug_ipv6_sdkapi](#) (struct smiclient_globals *azg, int vrId, char *vrfName, int debug)

Use this function to disable debugging of IPv6 multicast.

- int **smi_mrib6_api_rt_limit_set_sdkapi** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t rtLimit)
- int **smi_show_mrib6_vif_all** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct list *vifAllList, int(*funpointer)(struct list *vifAllList), char *ifName)
- int **smi_show_mrib6_ip_mroute_all** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, int mrtFilter, struct list *ipMrouteAllList, int(*funpointer)(struct list *ipMrouteAllList))
- int **smi_show_mrib6_ip_mroute_byaddr** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, int mrtFilter, char *addr, struct list *ipMrouteAllList, int(*funpointer)(struct list *ipMrouteAllList))
- int **smi_show_mrib6_ip_mroute_info_bysgaddr** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, int mrtFilter, char *sourceAddr, char *groupAddr, struct list *ipMrouteAllList, int(*funpointer)(struct list *ipMrouteAllList))

4.1.1 Detailed Description

describes the Multicast Routing Information Base IPv6 (MRIBv6) command API functions The API provided in this file forms the basis of ZebOS mrib6 management. These APIs are used by various north bound management interfaces like CLI, SNMP and SMI

4.1.2 Function Documentation

4.1.2.1 int smi_mrib6_api_clear_mroute_all (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This function clears the multicast entry in the MRIB/MFIB. smi_mrib6_api_clear_mroute_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance Name

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
 MRIB_API_SET_ERR_WRONG_VR
 MRIB_API_SET_ERR_WRONG_VRF

4.1.2.2 `int smi_mrib6_api_clear_mroute_stats_all (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)`

This function clears the multicast route entries, which has the specified group value in the MRIB/MFIB. `smi_mrib6_api_clear_mroute_g`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance NAME
- *grp* Group IP address

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
 MRIB_API_SET_ERR_WRONG_VR
 MRIB_API_SET_ERR_WRONG_VRF
 MRIB_API_SET_ERR_INVALID_GROUP_ADDRESS

`smi_mrib6_api_clear_mroute_stats_all` This function clears the IPv6 multicast statistics from the MRIB/MFIB.

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance Name

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
 MRIB_API_SET_ERR_WRONG_VR
 MRIB_API_SET_ERR_WRONG_VRF

4.1.2.3 `int smi_mrib6_api_multicast_routing_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)`

This function starts up the L3 IPv6 multicast routing on the router through the MRIBd process. `smi_mrib6_api_multicast_routing_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance ID

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
MRIB_API_SET_ERR_WRONG_VR
MRIB_API_SET_ERR_WRONG_VRF

4.1.2.4 int smi_mrib6_api_multicast_routing_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This function stops the L3 IPv6 multicast routing on the router through the MRIBd process. smi_mrib6_api_multicast_routing_unset

Parameters:

← *azg* Pointer to the SMI client global structure
← *vrId* Virtual router ID <1-32>
← *vrfName* VPN routing/forwarding instance ID

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
MRIB_API_SET_ERR_WRONG_VR
MRIB_API_SET_ERR_WRONG_VRF

4.1.2.5 int smi_mrib6_api_rt_limit_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, u_int32_t routerLimit)

This function sets the limit of the multicast route entries in the MRIB/MFIB. smi_mrib6_api_rt_limit_set

Parameters:

← *azg* Pointer to the SMI client global structure
← *vrId* Virtual router ID <1-32>
← *vrfName* VPN routing/forwarding instance Name
← *rtLimit* Route-limit number. This is the number of multicast routes that can be added to a multicast routing table <1-2147483647>.

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
MRIB_API_SET_ERR_WRONG_VR
MRIB_API_SET_ERR_WRONG_VRF
MRIB_API_SET_ERR_RT_LIMIT_EXCEED_RTS

4.1.2.6 `int smi_mrib6_api_rt_limit_thresh_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, u_int32_t routerLimit, u_int32_t routerThresh)`

This function sets the threshold of the route in the multicast route entries in the MRIB/MFIB. command. `smi_mrib6_api_rt_limit_thresh_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance ID
- ← *rtLimit* Route-limit number. This is the number of multicast routes that can be added to a multicast routing table<1-2147483647>.
- ← *rtThresh* Threshold value at which to generate a warning message<1-2147483647>.

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
 MRIB_API_SET_ERR_WRONG_VR
 MRIB_API_SET_ERR_WRONG_VRF
 MRIB_API_SET_ERR_RT_THRESH_EXCEED_RT_LIMIT
 MRIB_API_SET_ERR_RT_LIMIT_EXCEED_RTS

4.1.2.7 `int smi_mrib6_api_rt_limit_thresh_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)`

This function resets the threshold of the multicast route entries in the MRIB/MFIB. `smi_mrib6_api_rt_limit_thresh_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance Name

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
 MRIB_API_SET_ERR_WRONG_VR
 MRIB_API_SET_ERR_WRONG_VRF

4.1.2.8 int smi_mrib6_api_vif_ttl_threshold_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*, u_char *timeToLive*)

This function sets the threshold value for IPv6 multicast routing on the router through the MRIBd process. smi_mrib6_api_vif_ttl_threshold_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *ifName* Interface Name
- ← *timeToLive* TTL threshold value

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
MRIB_API_SET_ERR_WRONG_VR
MRIB_API_SET_ERR_WRONG_VRF

4.1.2.9 int smi_mrib6_api_vif_ttl_threshold_set_validate (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*, u_char *timeToLive*)

This function validates the setting of threshold value for IPv6 multicast routing on the router through the MRIBd process. smi_mrib6_api_vif_ttl_threshold_set_validate

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *ifName* Interface Name
- ← *timeToLive* TTL threshold value

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes
MRIB_API_SET_ERR_WRONG_VR
MRIB_API_SET_ERR_WRONG_VRF

4.1.2.10 int smi_mrib6_api_vif_ttl_threshold_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This function unsets the threshold value for IPv6 multicast routing on the router through the MRIBd process. smi_mrib6_api_vif_ttl_threshold_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *ifName* Interface Name

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes

MRIB_API_SET_ERR_WRONG_VR

MRIB_API_SET_ERR_WRONG_VRF

4.1.2.11 int smi_mrib6_api_vif_ttl_threshold_unset_validate (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This function validates the unsetting of threshold value for IPv6 multicast routing on the router through the MRIBd process. smi_mrib6_api_vif_ttl_threshold_unset_validate

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *ifName* Interface Name

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes

MRIB_API_SET_ERR_WRONG_VR

MRIB_API_SET_ERR_WRONG_VRF

4.1.2.12 int smi_mrib6_debug_ipv6_sdkapi (struct smiclient_globals * *azg*, int *vrId*, char * *vrfName*, int *debug*)

This function clears the multicast statics, which matches to the specific group entry. smi_mrib6_api_clear_mroute_stats_g

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <1-32>
- ← *vrfName* VPN routing/forwarding instance Name
- *group* Group IP address

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes

- MRIB_API_SET_ERR_WRONG_VR
- MRIB_API_SET_ERR_WRONG_VRF
- MRIB_API_SET_ERR_INVALID_GROUP_ADDRESS

`smi_mrib6_debug_ipv6_sdkapi` Use this function to specify the set of debug options for the IPv6 multicast

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router id
- ← *vrfName* VRF NAME. Pass Null in case of default VRF
- ← *debug* Pass debug flag as following:
 - SMI_MRIB6_DEBUG_ALL - Enable all IPv6 multicast debugging
 - SMI_MRIB6_DEBUG_EVENT - Enable debugging of multicast events
 - SMI_MRIB6_DEBUG_VIF - Enable debugging of multicast interface
 - SMI_MRIB6_DEBUG_MRT - Enable debugging of multicast route
 - SMI_MRIB6_DEBUG_STATS - Enable debugging of multicast statistics
 - SMI_MRIB6_DEBUG_FIB_MSG - Enable debugging of multicast FIB messages
 - SMI_MRIB6_DEBUG_REGISTER_MSG - Enable debugging of multicast PIM Register messages
 - SMI_MRIB6_DEBUG_NSM_MSG - Enable debugging of multicast NSM messages
 - SMI_MRIB6_DEBUG_MRIB_MSG - Enable debugging of multicast MRIB messages
 - SMI_MRIB6_DEBUG_MTRACE - Enable debugging of multicast traceroute
 - SMI_MRIB6_DEBUG_MTRACE_DETAIL - Enable detailed debugging of multicast traceroute messages

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes

- MRIB_API_SET_ERR_WRONG_VR
- MRIB_API_SET_ERR_WRONG_VRF
- MRIB_API_SET_ERROR

4.1.2.13 `int smi_mrib6_no_debug_ipv6_sdkapi (struct smiclient_globals * azg, int vrId, char * vrfName, int debug)`

Use this function to disable debugging of IPv6 multicast. `smi_mrib6_no_debug_ipv6_sdkapi`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router id
- ← *vrfName* VRF NAME. Pass Null in case of default VRF
- ← *debug* Pass debug flag as following:
 - SMI_MRIB6_DEBUG_ALL - Enable all IPv6 multicast debugging
 - SMI_MRIB6_DEBUG_EVENT - Enable debugging of multicast events
 - SMI_MRIB6_DEBUG_VIF - Enable debugging of multicast interface
 - SMI_MRIB6_DEBUG_MRT - Enable debugging of multicast route
 - SMI_MRIB6_DEBUG_STATS - Enable debugging of multicast statistics
 - SMI_MRIB6_DEBUG_FIB_MSG - Enable debugging of multicast FIB messages
 - SMI_MRIB6_DEBUG_REGISTER_MSG - Enable debugging of multicast PIM Register messages
 - SMI_MRIB6_DEBUG_NSM_MSG - Enable debugging of multicast NSM messages
 - SMI_MRIB6_DEBUG_MRIB_MSG - Enable debugging of multicast MRIB messages
 - SMI_MRIB6_DEBUG_MTRACE - Enable debugging of multicast traceroute
 - SMI_MRIB6_DEBUG_MTRACE_DETAIL - Enable detailed debugging of multicast traceroute messages

Returns:

MRIB_API_SET_SUCCESS on success, otherwise one of the following error codes MRIB_API_SET_ERR_WRONG_VR
MRIB_API_SET_ERR_WRONG_VRF
MRIB_API_SET_ERROR

4.2 smi_mrib6_msg.h File Reference

Defines data structures used by MRIB6 SMI APIs. #include "pal.h"

```
#include "message.h"
#include "thread.h"
#include "network.h"
#include "log.h"
#include "tlv.h"
#include "syslog.h"
#include <sys/types.h>
#include "pal_types.h"
#include "pal_socket.h"
#include "prefix.h"
```

Data Structures

- struct [smiMRIB6AllVifList](#)
- struct [smiMRIB6AllIpMrouteList](#)
- struct [mrib6_msg](#)
- struct [mrib6VifInfo](#)
- struct [mrib6MrouteInfo](#)
- struct [pnInfoData](#)
- struct [outInterface6](#)

Defines

- #define **SMI_MRIB6_DEBUG_ALL** 0
- #define **SMI_MRIB6_DEBUG_EVENT** 1
- #define **SMI_MRIB6_DEBUG_VIF** 2
- #define **SMI_MRIB6_DEBUG_MRT** 3
- #define **SMI_MRIB6_DEBUG_STATS** 4
- #define **SMI_MRIB6_DEBUG_FIB_MSG** 5
- #define **SMI_MRIB6_DEBUG_REGISTER_MSG** 6
- #define **SMI_MRIB6_DEBUG_NSM_MSG** 7
- #define **SMI_MRIB6_DEBUG_MRIB_MSG** 8
- #define **SMI_MRIB6_DEBUG_MTRACE** 9
- #define **SMI_MRIB6_DEBUG_MTRACE_DETAIL** 10
- #define **SMI_MRIB6_CTYPE_VR_ID** 0
- #define **SMI_MRIB6_CTYPE_VRF_ID** 1
- #define **SMI_MRIB6_CTYPE_RT_LIMIT** 2
- #define **SMI_MRIB6_CTYPE_RT_THRESH** 3
- #define **SMI_MRIB6_CTYPE_GRP** 4

- `#define SMI_MRIB6_CTYPE_SRC 5`
- `#define SMI_MRIB6_CTYPE_CLI_MODE 6`
- `#define SMI_MRIB6_CTYPE_IFNAME 7`
- `#define SMI_MRIB6_CTYPE_MRT_FILTER 8`
- `#define SMI_MRIB6_CTYPE_ADDR 9`
- `#define SMI_MRIB6_CTYPE_SRC_ADDR 10`
- `#define SMI_MRIB6_CTYPE_GRP_ADDR 11`
- `#define SMI_MRIB6_CTYPE_MRIB6ALLVIFLIST 12`
- `#define SMI_MRIB6_CTYPE_MRIB6ALLIPMROUTELIST 13`
- `#define SMI_MRIB6_CTYPE_VRF_NAME 14`
- `#define SMI_MRIB6_CTYPE_DEBUG 15`
- `#define SMI_MRIB6_CTYPE_IFINDEX 16`
- `#define SMI_MRIB6_CTYPE_VAL 17`
- `#define SMI_MRIB6_CTYPE_VAL1 18`
- `#define SMI_MRIB6_CTYPE_TTL 19`
- `#define SMI_MRIB6_CTYPE_EXTENDED_1 31`
- `#define MRIB_MRT_FLAG_STAT_IMM MRIB_MSG_MRT_STAT_ - IMMEDIATE`
- `#define MRIB_MRT_FLAG_STAT_TIMED MRIB_MSG_MRT_STAT_ - TIMED`
- `#define SH_IP_MRT_ALL 0`
- `#define SH_IP_MRT_DENSE 1`
- `#define SH_IP_MRT_SPARSE 2`

Typedefs

- typedef struct [mrrib6_msg](#) `mrrib6_msg`

Functions

- int `smi_parse_mrrib6` (u_char **pnt, u_int16_t *size, struct smi_msg_header *header, void *arg, SMI_CALLBACK callback)
- int `smi_encode_mrrib6` (u_char **pnt, u_int16_t *size, [mrrib6_msg](#) *msg)
- int `smi_decode_mrrib6` (u_char **pnt, u_int16_t *size, [mrrib6_msg](#) *msg)

4.2.1 Detailed Description

Defines data structures used by MRIB6 SMI APIs.

Index

mrib6_msg_, [5](#)
mrib6MrouteInfo, [6](#)
mrib6VifInfo, [7](#)

outInterface6, [8](#)

pnInfoData, [9](#)

smi_mrib6.h, [13](#)
 smi_mrib6_api_clear_mroute_all,
 [15](#)
 smi_mrib6_api_clear_mroute_-
 stats_all, [15](#)
 smi_mrib6_api_multicast_routing_-
 set, [16](#)
 smi_mrib6_api_multicast_routing_-
 unset, [17](#)
 smi_mrib6_api_rt_limit_set, [17](#)
 smi_mrib6_api_rt_limit_thresh_set,
 [17](#)
 smi_mrib6_api_rt_limit_thresh_-
 unset, [18](#)
 smi_mrib6_api_vif_ttl_threshold_-
 set, [18](#)
 smi_mrib6_api_vif_ttl_threshold_-
 set_validate, [19](#)
 smi_mrib6_api_vif_ttl_threshold_-
 unset, [19](#)
 smi_mrib6_api_vif_ttl_threshold_-
 unset_validate, [20](#)
 smi_mrib6_debug_ipv6_sdkapi, [20](#)
 smi_mrib6_no_debug_ipv6_sdkapi,
 [21](#)

smi_mrib6_api_clear_mroute_all
 smi_mrib6.h, [15](#)
smi_mrib6_api_clear_mroute_stats_all
 smi_mrib6.h, [15](#)
smi_mrib6_api_multicast_routing_set
 smi_mrib6.h, [16](#)
smi_mrib6_api_multicast_routing_unset
 smi_mrib6.h, [17](#)

smi_mrib6_api_rt_limit_set
 smi_mrib6.h, [17](#)
smi_mrib6_api_rt_limit_thresh_set
 smi_mrib6.h, [17](#)
smi_mrib6_api_rt_limit_thresh_unset
 smi_mrib6.h, [18](#)
smi_mrib6_api_vif_ttl_threshold_set
 smi_mrib6.h, [18](#)
smi_mrib6_api_vif_ttl_threshold_set_-
 validate
 smi_mrib6.h, [19](#)
smi_mrib6_api_vif_ttl_threshold_unset
 smi_mrib6.h, [19](#)
smi_mrib6_api_vif_ttl_threshold_unset_-
 validate
 smi_mrib6.h, [20](#)
smi_mrib6_debug_ipv6_sdkapi
 smi_mrib6.h, [20](#)
smi_mrib6_msg.h, [23](#)
smi_mrib6_no_debug_ipv6_sdkapi
 smi_mrib6.h, [21](#)
smiMRIB6AllIpMrouteList, [10](#)
smiMRIB6AllVifList, [11](#)