

ZebOS-XP PIM4 SMI Reference
IP Infusion Inc.

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Wed Dec 16 12:34:01 2015

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Chapter 1

File Index

1.1 File List

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

[smi_pim4.h](#) (The API functions documented in this chapter are called by the
PIM IPv4 CLI commands) 3

Chapter 2

File Documentation

2.1 smi_pim4.h File Reference

The API functions documented in this chapter are called by the PIM IPv4 CLI commands. `#include "smi_client.h"`

```
#include "smi_pim4_msg.h"
```

Functions

- **int smi_pim4_api_vif_mode_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int8_t mode)
- **int smi_pim4_api_vif_mode_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int8_t mode)
- **int smi_pim4_api_vif_passive_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_passive_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_hello_interval_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t helloInterval)
- **int smi_pim4_api_vif_hello_interval_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_hello_holdtime_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t helloHoldtimeInterval)
- **int smi_pim4_api_vif_hello_holdtime_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_propagation_delay_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int16_t propagationDelay)
- **int smi_pim4_api_vif_propagation_delay_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_nbr_filter_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, char *neighborFilterName)

- **int smi_pim4_api_vif_nbr_filter_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, char *neighborFilterName)
- **int smi_pim4_api_vif_state_refresh_originate_interval_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int16_t stateRefreshOriginateInterval)
- **int smi_pim4_api_vif_state_refresh_originate_interval_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_dr_priority_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t designatedRouterPriority)
- **int smi_pim4_api_vif_dr_priority_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_exclude_genid_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_exclude_genid_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_bsr_border_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_bsr_border_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_unicast_bsm_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_vif_unicast_bsm_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)
- **int smi_pim4_api_router_id_set_validate** (struct smiclient_globals *azg, u_int32_t vr_id, char *vrf_name, struct pal_in4_addr router_id)
- **int smi_pim4_api_router_id_unset_validate** (struct smiclient_globals *azg, u_int32_t vr_id, char *vrf_name, bool_t router_id_provided, struct pal_in4_addr router_id)
- **int smi_pim4_api_static_rp_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr *rendezvousPointAddr, char *accessCtrlListOption, bool_t overrideFlag)
- **int smi_pim4_api_static_rp_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr *rendezvousPointAddr)
- **int smi_pim4_api_anycast_rp_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr anycastRendezvousPointAddr, struct pal_in4_addr memberRendezvousPointAddr)
- **int smi_pim4_api_anycast_rp_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr anycastRendezvousPointAddr, struct pal_in4_addr memberRendezvousPointAddr)
- **int smi_pim4_api_anycast_rp_unset_sdkapi_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *anycastRendezvousPointAddr, char *memberRendezvousPointAddr)

This function validates unconfiguration of PIM anycast RP.

- **int smi_pim4_api_join_prune_timer_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t joinPruneTime)
- **int smi_pim4_api_join_prune_timer_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

- **int smi_pim4_api_ignore_rp_set_priority_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_ignore_rp_set_priority_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_spt_switch_threshold_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *groupAccessCtrlListName)
- **int smi_pim4_api_spt_switch_threshold_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *groupAccessCtrlListName)
- **int smi_pim4_api_register_source_address_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr *sourceAddr)
- **int smi_pim4_api_register_source_interface_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)
- **int smi_pim4_api_register_source_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_register_rate_limit_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerRateLimit)
- **int smi_pim4_api_register_rate_limit_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerRateLimit)
- **int smi_pim4_api_register_rp_reachability_check_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_register_rp_reachability_check_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_rp_register_keep_alive_timer_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerKeepAliveTime)
- **int smi_pim4_api_rp_register_keep_alive_timer_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_register_suppression_time_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerSuppressTime)
- **int smi_pim4_api_register_suppression_time_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_rp_accept_register_filter_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
- **int smi_pim4_api_rp_accept_register_filter_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
- **int smi_pim4_api_rp_checksum_filter_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
- **int smi_pim4_api_rp_checksum_filter_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
- **int smi_pim4_api_bsr_interop_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
- **int smi_pim4_api_bsr_interop_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

- int **smi_pim4_api_bsr_candidate_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_bsr_candidate_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_bsr_candidate_hash_mask_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName, u_char hashMask)
- int **smi_pim4_api_bsr_candidate_priority_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName, u_char candidatePriority)
- int **smi_pim4_api_rp_candidate_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_rp_candidate_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_rp_candidate_priority_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName, s_int32_t candidatePriority)
- int **smi_pim4_api_rp_candidate_priority_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_rp_candidate_group_acl_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName, char *groupAccessCtrlListName)
- int **smi_pim4_api_rp_candidate_group_acl_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_rp_candidate_adv_interval_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName, s_int32_t candidateAdvertiseInterval)
- int **smi_pim4_api_rp_candidate_adv_interval_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *ifName)
- int **smi_pim4_api_ssm_default_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName)
- int **smi_pim4_api_ssm_default_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName)
- int **smi_pim4_api_ssm_range_set_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *accessCtrlListOption)
- int **smi_pim4_api_ssm_range_unset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, char *accessCtrlListOption)
- int **smi_pim4_api_ssm_range_custom_unset_validate** (struct smiclient_globals *azg, u_int32_t vr_id, char *vr_name, char *acl_name)
- int **smi_pim4_api_clear_tib_validate** (struct smiclient_globals *azg, u_int32_t vrId, vrf_id_t vrfId, smi_pim_api_mode_t mode, struct pal_in4_addr *sourceAddr, struct pal_in4_addr *groupAddr, s_int16_t maskLength)
- int **smi_pim4_api_clear_tib_sdkapi_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName, smi_pim_api_mode_t mode, struct pal_in4_addr *sourceAddr, struct pal_in4_addr *groupAddr, s_int16_t maskLength)
- int **smi_pim4_api_clear_bsr_rpset_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrName)

- int **smi_pim4_api_register_source_interface_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, u_int8_t registerInterface)
- int **smi_pim4_api_vif_mode_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int8_t mode, bool_t vifModeFlag)
- int **smi_pim4_api_vif_hello_holdtime_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t helloHoldTimeInterval, bool_t vifHelloHoldFlag)
- int **smi_pim4_api_vif_propagation_delay_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int16_t propagationDelay, bool_t vifPropDelayFlag)
- int **smi_pim4_api_vif_hello_interval_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t helloInterval, bool_t vifHelloIntervalFlag)
- int **smi_pim4_api_vif_nbr_filter_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, char *neighborFilterName, bool_t vifNeighborFilterFlag)
- int **smi_pim4_api_vif_state_refresh_originate_interval_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int16_t stateRefreshOriginateInterval, bool_t vifRefreshOriginateIntervalFlag)
- int **smi_pim4_api_rp_register_keep_alive_timer_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerKeepAliveTime, bool_t registerKeepAliveTimerFlag)
- int **smi_pim4_api_register_suppression_time_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerSuppressTime, bool_t registerSuppressTimeFlag)
- int **smi_pim4_api_register_rp_reachability_check_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, bool_t registerReachCheckFlag)
- int **smi_pim4_api_vif_unicast_bsm_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, bool_t vifUnicastBootstrapMechanismFlag)
- int **smi_pim4_api_join_prune_timer_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t joinPruneTime, bool_t joinPruneTimerFlag)
- int **smi_pim4_api_rp_accept_register_filter_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption, bool_t registerFilterFlag)
- int **smi_pim4_api_rp_checksum_filter_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption, bool_t checksumFilterFlag)
- int **smi_pim4_api_bsr_interop_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int8_t bootstrapRouterInteropFlag)
- int **smi_pim4_api_vif_exclude_genid_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, bool_t vifExcludeGenIdFlag)
- int **smi_pim4_api_ignore_rp_set_priority_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int8_t ignoreRendezvousPointPriorityFlag)

- **int smi_pim4_api_vif_dr_priority_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t designatedRouterPriority, bool_t vifDesignatedRouterPriorityFlag)
- **int smi_pim4_api_static_rp_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption, bool_t overrideFlag, struct pal_in4_addr *rendezvousPointAddr, bool_t staticRendezvousPointFlag)
- **int smi_pim4_api_spt_switch_threshold_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *groupAccessCtrlListName, bool_t systemPostureTokenSwitchThresholdFlag)
- **int smi_pim4_api_vif_bsr_border_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, bool_t vifBootstrapRouterBorderFlag)
- **int smi_pim4_api_register_rate_limit_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerRateLimit, bool_t registerRateLimitFlag)
- **int smi_pim4_api_bsr_candidate_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, s_int32_t candidatePriority, s_int32_t hashMask, bool_t bootstrapRouterCandidateFlag)
- **int smi_pim4_api_anycast_rp_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr anycastRendezvousPointAddr, struct pal_in4_addr memberRendezvousPointAddr, bool_t anycastRendezvousPointFlag)
- **int smi_pim4_api_ssm_default_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int8_t ssmDefaultFlag)
- **int smi_pim4_api_vif_passive_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, bool_t vifPassiveFlag)
- **int smi_pim4_api_rp_candidate_group_acl_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, char *groupAccessCtrlListName, bool_t rendezvousPointCandidateGroupFlag)
- **int smi_pim4_api_rp_candidate_adv_interval_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, s_int32_t candidateAdvertiseInterval, bool_t rendezvousPointCandidateAdvertiseIntervalFlag)
- **int smi_pim4_api_ssm_range_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vr_id, char *vrfName, char *accessCtrlListOption, u_int8_t ssmRangeFlag)
- **int smi_pim4_api_rp_candidate_priority_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, s_int32_t candidatePriority, bool_t rendezvousPointCandidatePriorityFlag)
- **int smi_pim4_api_rp_candidate_set_wrap_validate** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, bool_t bootstrapRouterFlag, char *accessCtrlListOption, s_int32_t candidatePriority, s_int32_t rendezvousPointInterval, bool_t accessCtrlListFlag, bool_t rendezvousPointCandidateFlag)
- **int smi_pim4_api_vif_mode_set** (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int8_t mode)

This API configures the PIM mode on a virtual interface (VIF).

- int [smi_pim4_api_vif_mode_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int8_t mode)

This API removes the PIM mode configuration from a VIF.

- int [smi_pim4_api_vif_passive_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API configures a PIM virtual interface as passive.

- int [smi_pim4_api_vif_passive_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the configuration for a passive PIM VIF.

- int [smi_pim4_api_vif_hello_interval_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t helloInterval)

This API configures a PIM hello interval on a VIF.

- int [smi_pim4_api_vif_hello_interval_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the configuration for a PIM hello interval on a VIF and resets the hello interval to its default value.

- int [smi_pim4_api_vif_hello_holdtime_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t helloHoldtimeInterval)

This API configures a PIM hello holdtime, in seconds, for a VIF.

- int [smi_pim4_api_vif_hello_holdtime_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the configuration of the PIM hello holdtime from a VIF and resets it to its default value.

- int [smi_pim4_api_vif_propagation_delay_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int16_t propagationDelay)

This API configures the PIM propagation delay, in milliseconds, for a VIF.

- int [smi_pim4_api_vif_propagation_delay_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the PIM propagation delay from the VIF, and returns the value to its default setting.

- int [smi_pim4_api_vif_nbr_filter_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, char *neighborFilterName)

This API configures a PIM neighbor filter access-list name for a VIF.

- int [smi_pim4_api_vif_nbr_filter_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, char *neighborFilterName)

This API removes the configuration for a PIM VIF neighbor filter access-list name.

- int [smi_pim4_api_vif_state_refresh_originate_interval_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int16_t stateRefreshOriginateInterval)

This API configures the state refresh that originates the interval for PIM-DM.

- int [smi_pim4_api_vif_state_refresh_originate_interval_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the configuration of the state-refresh interval for PIM-DM.

- int [smi_pim4_api_vif_dr_priority_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName, u_int32_t designatedRouterPriority)

This API configures the priority for a PIM Designated Router (DR) on a VIF.

- int [smi_pim4_api_vif_dr_priority_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the PIM DR priority from the VIF and returns it to the default setting.

- int [smi_pim4_api_vif_exclude_genid_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API configures PIM to exclude a generated ID on the VIF.

- int [smi_pim4_api_vif_exclude_genid_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the configuration to exclude a generated ID on the VIF.

- int [smi_pim4_api_vif_bsr_border_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API configures a BSR (bootstrap router) border on the VIF.

- int [smi_pim4_api_vif_bsr_border_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes configuration of a BSR border from the VIF.

- int [smi_pim4_api_vif_unicast_bsm_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the PIM configuration to send unicast BSM messages to the VIF.

- int [smi_pim4_api_vif_unicast_bsm_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *ifName)

This API removes the PIM configuration to send unicast BSM messages to the VIF.

- int [smi_pim4_api_router_id_set](#) (struct smiclient_globals *azg, u_int32_t vr_id, char *vrf_name, struct pal_in4_addr router_id)

- int [smi_pim4_api_router_id_unset](#) (struct smiclient_globals *azg, u_int32_t vr_id, char *vrf_name, bool_t router_id_provided, struct pal_in4_addr router_id)

- int [smi_pim4_api_static_rp_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr *rendezvousPointAddr, char *accessCtrlListOption, bool_t overrideFlag, bool_t bidirFlag)

This API configures a static rendezvous point.

- int [smi_pim4_api_static_rp_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr *rendezvousPointAddr)

This API removes configuration of a static rendezvous point.

- int [smi_pim4_api_anycast_rp_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr anycastRendezvousPointAddr, struct pal_in4_addr memberRendezvousPointAddr)

This API configures an anycast rendezvous point.

- int [smi_pim4_api_anycast_rp_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr anycastRendezvousPointAddr, struct pal_in4_addr memberRendezvousPointAddr)

This API removes configuration of an anycast RP.

- int [smi_pim4_api_anycast_rp_unset_sdkapi](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *anycastRendezvousPointAddr, char *memberRendezvousPointAddr)

This API removes configuration of an anycast RP.

- int [smi_pim4_api_join_prune_timer_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int32_t joinPruneTime)

This API configures a PIM join/prune timer and set its value.

- int [smi_pim4_api_join_prune_timer_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API removes the configuration of a join/prune timer.

- int [smi_pim4_api_ignore_rp_set_priority_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API configures PIM to ignore the RP priority while performing RP selection.

- int [smi_pim4_api_ignore_rp_set_priority_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API removes the configuration for ignoring the RP priority with electing an RP.

- int [smi_pim4_api_spt_switch_threshold_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *groupAccessCtrlListName)

This API configures an SPT (system posture token) switchover threshold. The group list ACL filters groups for which SPT switchover is performed.

- int [smi_pim4_api_spt_switch_threshold_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *groupAccessCtrlListName)

This API removes the configuration of an SPT switchover threshold.

- int [smi_pim4_api_register_source_address_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr *sourceAddr)

This API configures the source address of Register messages.

- int [smi_pim4_api_register_source_interface_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)

This API sets the source address of Register messages to the address of the given interface.

- int [smi_pim4_api_register_source_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API removes configuration of a source address for Register messages.

- int [smi_pim4_api_register_rate_limit_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerRateLimit)

This API configures the maximum number of Registers to generate for an (S,G).

- int [smi_pim4_api_register_rate_limit_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API removes the configuration of a maximum number of register messages allowed for an (S,G).

- int [smi_pim4_api_register_rp_reachability_check_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API configures an RP unicast reachability check in the Register state machine.

- int [smi_pim4_api_register_rp_reachability_check_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API removes configuration of an RP unicast reachability check in the Register state machine.

- int [smi_pim4_api_rp_register_keep_alive_timer_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerKeepAliveTime)

This API configures the keepalive timer (KAT) value of (S,G) created by the RP by register messages.

- int [smi_pim4_api_rp_register_keep_alive_timer_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

*This API removes configuration of the KAT value of (S,G) created at the RP by Register messages. The KAT value is then reset to (Register Suppression Time * 3) + Register Probe Interval.*

- int [smi_pim4_api_register_suppression_time_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, u_int16_t registerSuppressTime)

This API configures the Register Suppression interval.

- int [smi_pim4_api_register_suppression_time_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
This API removes the configuration of a register suppression interval.
- int [smi_pim4_api_rp_accept_register_filter_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
This API configures an ACL to filter sources allowed to register with this RP.
- int [smi_pim4_api_rp_accept_register_filter_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
This API removes the configuration of an ACL to filter sources allowed to register with this RP.
- int [smi_pim4_api_rp_checksum_filter_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
This API configures a Cisco-style Register checksum. The filter ACL controls the groups to which the checksum calculation applies.
- int [smi_pim4_api_rp_checksum_filter_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)
This API removes configuration of a Cisco-style Register checksum.
- int [smi_pim4_api_bsr_interop_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
This API configures bootstrap router interoperability.
- int [smi_pim4_api_bsr_interop_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)
This API removes configuration of BSR interoperability.
- int [smi_pim4_api_bsr_candidate_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)
This API sets the specified router as candidate BSR using the interface name as its address.
- int [smi_pim4_api_bsr_candidate_hash_mask_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, u_char hashMask)
This API configures the hash-mask length for a candidate BSR.
- int [smi_pim4_api_bsr_candidate_priority_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, u_char candidatePriority)
This API configures the priority value for a candidate BSR.
- int [smi_pim4_api_rp_candidate_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)
This API configures an RP candidate set and sets its priority.

- int [smi_pim4_api_rp_candidate_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)

This API configures an RP candidate set and sets its priority.

- int [smi_pim4_api_rp_candidate_priority_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, s_int32_t candidatePriority)

This API configures the priority of an RP candidate set.

- int [smi_pim4_api_rp_candidate_priority_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)

This API removes the configuration of a priority for an RP candidate set.

- int [smi_pim4_api_rp_candidate_group_acl_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, char *groupAccessCtrlListName)

This API configures a group range using an access control list for a candidate RP set.

- int [smi_pim4_api_rp_candidate_group_acl_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)

This API removes configuration of a group range for a candidate RP set.

- int [smi_pim4_api_rp_candidate_adv_interval_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName, s_int32_t candidateAdvertiseInterval)

This API configures a candidate RP advertisement interval.

- int [smi_pim4_api_rp_candidate_adv_interval_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *ifName)

This API removes a candidate RP advertisement interval.

- int [smi_pim4_api_ssm_default_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API configures PIM SSM operation.

- int [smi_pim4_api_ssm_default_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API removes the configuration for PIM SSM operation.

- int [smi_pim4_api_ssm_range_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)

This API configures an SSM range using an access control list.

- int [smi_pim4_api_ssm_range_unset](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, char *accessCtrlListOption)

This API removes configuration of an SSM range using an ACL.

- int **smi_pim4_api_ssm_range_custom_unset** (struct smiclient_globals *azg, u_int32_t vr_id, char *vrf_name, char *acl_name)
- int **smi_pim4_api_clear_tib** (struct smiclient_globals *azg, u_int32_t vrId, vrf_id_t vrfId, smi_pim_api_mode_t mode, struct pal_in4_addr *sourceAddr, struct pal_in4_addr *groupAddr)

This API clears all TIB states and MFC cache entries.

- int **smi_pim4_api_clear_tib_sdkapi** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, smi_pim_api_mode_t mode, struct pal_in4_addr *sourceAddr, struct pal_in4_addr *groupAddr, s_int16_t maskLength)
- int **smi_pim4_api_clear_bsr_rpset** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName)

This API clears the specified router as the candidate BSR RP set.

- int **smi_pim_debug_ip** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, int debug)

Use this function to enable debugging in pim4.

- int **smi_pim_no_debug_ip** (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, int debug)

Use this function to disable debugging in pim4.

- int **smi_pim4_show_pim_if_brief** (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int **smi_pim4_show_pim_if_brief_all** (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int **smi_pim4_show_pim_if_detail** (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int **smi_pim4_show_pim_if_detail_all** (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int **smi_pim4_show_pim_dm_if_brief** (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int [smi_pim4_show_pim_dm_if_brief_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int [smi_pim4_show_pim_dm_if_detail](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int [smi_pim4_show_pim_dm_if_detail_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol.

- int [smi_pim4_show_pim_nbr_brief](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_nbr_brief_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_custom_nbr_brief](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_custom_nbr_brief_all](#) (struct smiclient_globals *azg, char *vrfName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_nbr_detail](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_nbr_detail_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_custom_nbr_detail](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_custom_nbr_detail_all](#) (struct smiclient_globals *azg, char *vrfName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_nbr_brief](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_nbr_brief_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_custom_nbr_brief](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_custom_nbr_brief_all](#) (struct smiclient_globals *azg, char *vrfName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_nbr_detail](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_nbr_detail_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_custom_nbr_detail](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_dm_custom_nbr_detail_all](#) (struct smiclient_globals *azg, char *vrfName, char *nbrIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the DM mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors.

- int [smi_pim4_show_pim_local_members](#) (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the information about local membership for PIM interfaces, for the given interface of ANY mode.

- int [smi_pim4_show_pim_local_members_all](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the information about local membership for PIM interfaces, for all interfaces of ANY mode.

- int [smi_pim4_show_pim_nexthop](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the nexthop information from NSM as used by PIM of ANY mode.

- int [smi_pim4_show_pim_dm_nexthop](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the nexthop information from NSM as used by PIM of DM mode.

- int [smi_pim4_show_pim_route_brief](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the ANY mode information in the IP PIM multicast routing table, of ANY mode.

- int [smi_pim4_show_pim_route_detail](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the ANY mode information in the IP PIM multicast routing table, of ANY mode.
- int [smi_pim4_show_pim_dm_route](#) (struct smiclient_globals *azg, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table of DM mode .
- int [smi_pim4_show_pim_route_group_brief](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table for the given matched group address only.
- int [smi_pim4_show_pim_route_group_detail](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table for the given matched source address only.
- int [smi_pim4_show_pim_route_source_brief](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *sourceIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table for the given matched source address only.
- int [smi_pim4_show_pim_route_source_detail](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *sourceIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table for the given matched source address only.
- int [smi_pim4_show_pim_route_source_group_brief](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *sourceIp, char *groupIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table for the given matched group and source combination only.
- int [smi_pim4_show_pim_route_source_group_detail](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *sourceIp, char *groupIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))
Shows the information in the IP PIM multicast routing table for the given matched group and source combination only.
- int [smi_pim4_show_pim_group_rp_mapping](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the group to rendezvous point (RP) mappings of given group address.

- int [smi_pim4_show_pim_rp_mapping](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the group to rendezvous point (RP) mappings of all group addresses, i.e all PIM route entries.

- int [smi_pim4_show_pim_group_rp_hash](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the rendezvous point (RP) to chose of given on group address.

- int [smi_pim4_show_pim_bsr_router](#) (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, struct list *pimOutList, u_int32_t(*callbackFunc)(struct list *pimOutList))

Shows the bootstrap router's information.

- int [smi_pim4_api_crp_per_grp_chk](#) (struct smiclient_globals *azg, u_int32_t vrId, vrf_id_t vrfId, char *ifName, char *groupAclName)

This API configures a group range for CRP.

2.1.1 Detailed Description

The API functions documented in this chapter are called by the PIM IPv4 CLI commands. The API provided in this file forms the basis of ZebOS pimv4 management. These APIs are used by various north bound management interfaces like CLI, SNMP and SMI

2.1.2 Function Documentation

- ### 2.1.2.1
- int [smi_pim4_api_anycast_rp_set](#) (struct smiclient_globals *azg, u_int32_t vrId, char *vrfName, struct pal_in4_addr anycastRendezvousPointAddr, struct pal_in4_addr memberRendezvousPointAddr)

This API configures an anycast rendezvous point. [smi_pim4_api_anycast_rp_set](#)

Parameters:

- ← **azg** Pointer to the SMI client global structure
- ← **vrId** Virtual router ID <0-255>
- ← **vrfName** VPN routing/forwarding instance name
- **anycastRendezvousPointAddr** Address of the anycast RP
- **memberRendezvousPointAddr** Communication IP address between the configured RPs in the RP set

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERROR
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_RP_ANYCAST_SHOULD_BE_UNICAST
 PIM_API_SET_ERR_OUT_OF_MEMORY

2.1.2.2 int smi_pim4_api_anycast_rp_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*, struct pal_in4_addr *anycastRendezvousPointAddr*, struct pal_in4_addr *memberRendezvousPointAddr*)

This API removes configuration of an anycast RP. smi_pim4_api_anycast_rp_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- *anycastRendezvousPointAddr* Address of the anycast RP
- *memberRendezvousPointAddr* Communication IP address between the configured RPs in the RP set

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERROR
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_RP_ANYCAST_SHOULD_BE_UNICAST
 PIM_API_SET_ERR_RP_ANYCAST_NO_RP

2.1.2.3 int smi_pim4_api_anycast_rp_unset_sdkapi (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*, char * *anycastRendezvousPointAddr*, char * *memberRendezvousPointAddr*)

This API removes configuration of an anycast RP. smi_pim4_api_anycast_rp_unset_sdkapi

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>

- ← *vrId* VPN routing/forwarding instance ID
- *anycastRendezvousPointAddr* Address of the anycast RP
- *memberRendezvousPointAddr* Communication IP address between the configured RPs in the RP set

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERROR
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_RP_ANYCAST_SHOULD_BE_UNICAST
 PIM_API_SET_ERR_RP_ANYCAST_NO_RP

2.1.2.4 int smi_pim4_api_anycast_rp_unset_sdkapi_validate (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * anycastRendezvousPointAddr, char * memberRendezvousPointAddr)

This function validates unconfiguration of PIM anycast RP. smi_pim4_api_anycast_rp_unset_sdkapi_validate

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vr_id* Virtual router id
- ← *vrf_name* VPN routing/forwarding Name
- ← *anycast_rp_addr* Anycast RP address
- ← *member_rp_addr* Member RP address

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_VR_DOESNT_EXIST
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.5 int smi_pim4_api_bsr_candidate_hash_mask_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName, u_char hashMask)

This API configures the hash-mask length for a candidate BSR. smi_pim4_api_bsr_candidate_hash_mask_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>

← *vrfId* VPN routing/forwarding instance ID
 ← *ifName* Name of the interface
in hashMask Hash mask length used to hash for RPs

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_BSR_IFNAME_IS_REQUIRED

2.1.2.6 int smi_pim4_api_bsr_candidate_priority_set (struct smiclient_globals * azg, u_int32_t vrfId, char * vrfName, char * ifName, u_char candidatePriority)

This API configures the priority value for a candidate BSR. smi_pim4_api_bsr_candidate_priority_set

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrfId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID
 ← *ifName* Name of the interface
 ← *candidatePriority* Priority value assigned to the BSR

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_BSR_IFNAME_IS_REQUIRED

2.1.2.7 int smi_pim4_api_bsr_candidate_set (struct smiclient_globals * azg, u_int32_t vrfId, char * vrfName, char * ifName)

This API sets the specified router as candidate BSR using the interface name as its address. smi_pim4_api_bsr_candidate_set

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrfId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID
 ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_BSR_IFNAME_IS_REQUIRED

**2.1.2.8 int smi_pim4_api_bsr_interop_set (struct smiclient_globals * *azg*,
 u_int32_t *vrId*, char * *vrfName*)**

This API configures bootstrap router interoperability. smi_pim4_api_bsr_interop_set

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

**2.1.2.9 int smi_pim4_api_bsr_interop_unset (struct smiclient_globals * *azg*,
 u_int32_t *vrId*, char * *vrfName*)**

This API removes configuration of BSR interoperability. smi_pim4_api_bsr_interop_unset

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

**2.1.2.10 int smi_pim4_api_clear_bsr_rpset (struct smiclient_globals * *azg*,
 u_int32_t *vrId*, char * *vrfName*)**

This API clears the specified router as the candidate BSR RP set. smi_pim4_api_clear_bsr_rpset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfName* VPN routing/forwarding instance name

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERROR

2.1.2.11 `int smi_pim4_api_clear_tib (struct smiclient_globals * azg, u_int32_t vrId, vrf_id_t vrfId, smi_pim_api_mode_t mode, struct pal_in4_addr * sourceAddr, struct pal_in4_addr * groupAddr)`

This API clears all TIB states and MFC cache entries. smi_pim4_api_clear_tib

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *mode* Mode of operation
- *sourceAddr* Source IP address
- *groupAddr* Group IP address
- *maskLength* Masklen

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERROR
 PIM_API_SET_ERR_INVALID_SOURCE_ADDRESS
 PIM_API_SET_ERR_INVALID_GROUP_ADDRESS

2.1.2.12 `int smi_pim4_api_crp_per_grp_chk (struct smiclient_globals * azg, u_int32_t vrId, vrf_id_t vrfId, char * ifName, char * groupAclName)`

This API configures a group range for CRP. smi_pim4_api_crp_per_grp_chk

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vr_id* Virtual router ID <0-255>

- ← *vrf_id* VPN routing/forwarding instance ID
- ← *ifname* Name of the interface
- ← *group_acl_name* Name of the ACL to use a the group range (Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_CHECK_ERR_CRP_IF_OR_GROUP_IN_USED

2.1.2.13 int smi_pim4_api_ignore_rp_set_priority_set (struct smiclient_globals * azg, u_int32_t vrid, char * vrfName)

This API configures PIM to ignore the RP priority while performing RP selection.
 smi_pim4_api_ignore_rp_set_priority_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrid* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.14 int smi_pim4_api_ignore_rp_set_priority_unset (struct smiclient_globals * azg, u_int32_t vrid, char * vrfName)

This API removes the configuration for ignoring the RP priority with electing an RP.
 smi_pim4_api_ignore_rp_set_priority_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrid* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.15 int smi_pim4_api_join_prune_timer_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, u_int32_t joinPruneTime)

This API configures a PIM join/prune timer and set its value. smi_pim4_api_join_prune_timer_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *joinPruneTime* Join/prune timer value, in seconds

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.16 int smi_pim4_api_join_prune_timer_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This API removes the configuration of a join/prune timer. smi_pim4_api_join_prune_timer_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *joinPruneTime* Join/prune timer value, in seconds

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.17 int smi_pim4_api_register_rate_limit_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, u_int16_t registerRateLimit)

This API configures the maximum number of Registers to generate for an (S,G). smi_pim4_api_register_rate_limit_set

Parameters:

- ← *azg* Pointer to the SMI client global structure

- ← *vrId* Virtual router ID <0-255>
- ← *vrflId* VPN routing/forwarding instance ID
- ← *registerRateLimit* Maximum number of Register messages allowed, in packets per second numeric <1-65535>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.18 int smi_pim4_api_register_rate_limit_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This API removes the configuration of a maximum number of register messages allowed for an (S,G). smi_pim4_api_register_rate_limit_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrflId* VPN routing/forwarding instance ID
- ← *registerRateLimit* Maximum number of Register messages allowed, in packets per second numeric <1-65535>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.19 int smi_pim4_api_register_rp_reachability_check_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This API configures an RP unicast reachability check in the Register state machine. smi_pim4_api_register_rp_reachability_check_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrflId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.20 int smi_pim4_api_register_rp_reachability_check_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*)

This API removes configuration of an RP unicast reachability check in the Register state machine. smi_pim4_api_register_rp_reachability_check_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.21 int smi_pim4_api_register_source_address_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*, struct pal_in4_addr * *sourceAddr*)

This API configures the source address of Register messages. smi_pim4_api_register_source_address_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *sourceAddr* IP address to use as the source address for Registers

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.22 int smi_pim4_api_register_source_interface_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*, char * *ifName*)

This API sets the source address of Register messages to the address of the given interface. smi_pim4_api_register_source_interface_set

Parameters:

- ← *azg* Pointer to the SMI client global structure

- ← *vrId* Virtual router ID <0-255>
- ← *vrflId* VPN routing/forwarding instance ID
- ← *ifName* Register source interface name

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.23 int smi_pim4_api_register_source_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This API removes configuration of a source address for Register messages. smi_pim4_api_register_source_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfName* VPN routing/forwarding instance name
- ← *sourceAddr* IP address to use as the source address for Registers
- ← *ifName* Register source interface name

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.24 int smi_pim4_api_register_suppression_time_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, u_int16_t registerSuppressTime)

This API configures the Register Suppression interval. smi_pim4_api_register_suppression_time_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrflId* VPN routing/forwarding instance ID
- ← *registerSuppressTime* Suppression timer value, in seconds numeric <1-65535>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_REGISTER_SUPPRESSION_INVALID_TIME

**2.1.2.25 int smi_pim4_api_register_suppression_time_unset (struct
 smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*)**

This API removes the configuration of a register suppression interval. smi_pim4_api_register_suppression_time_unset

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

**2.1.2.26 int smi_pim4_api_rp_accept_register_filter_set (struct
 smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*, char *
accessCtrlListOption)**

This API configures an ACL to filter sources allowed to register with this RP. smi_pim4_api_rp_accept_register_filter_set

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID
 ← *accessCtrlListOption* Access control list name (numeric <1-99> | Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.27 `int smi_pim4_api_rp_accept_register_filter_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * accessCtrlListOption)`

This API removes the configuration of an ACL to filter sources allowed to register with this RP. `smi_pim4_api_rp_accept_register_filter_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *accessCtrlListOption* Access control list name (numeric <1-99> | Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.28 `int smi_pim4_api_rp_candidate_adv_interval_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName, s_int32_t candidateAdvertiseInterval)`

This API configures a candidate RP advertisement interval. `smi_pim4_api_rp_candidate_adv_interval_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *ifName* Name of the interface
- ← *candidateAdvertiseInterval* The C-RP advertisement interval, in seconds

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.29 `int smi_pim4_api_rp_candidate_adv_interval_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName)`

This API removes a candidate RP advertisement interval. `smi_pim4_api_rp_candidate_adv_interval_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.30 `int smi_pim4_api_rp_candidate_group_acl_set (struct
 smiclient_globals * azg, u_int32_t vrId, char * vrfName, char *
 ifName, char * groupAccessCtrlListName)`

This API configures a group range using an access control list for a candidate RP set.
 smi_pim4_api_rp_candidate_group_acl_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *ifName* Name of the interface
- ← *groupAccessCtrlListName* Name of the ACL to use a the group range (Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.31 `int smi_pim4_api_rp_candidate_group_acl_unset (struct
 smiclient_globals * azg, u_int32_t vrId, char * vrfName, char *
 ifName)`

This API removes configuration of a group range for a candidate RP set. smi_pim4_
 api_rp_candidate_group_acl_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.32 int smi_pim4_api_rp_candidate_priority_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName, s_int32_t candidatePriority)

This API configures the priority of an RP candidate set. smi_pim4_api_rp_candidate_priority_set

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID
 ← *ifName* Name of the interface
 ← *candidatePriority* Priority value of the RP candidate set

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.33 int smi_pim4_api_rp_candidate_priority_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName)

This API removes the configuration of a priority for an RP candidate set. smi_pim4_api_rp_candidate_priority_unset

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *vrfId* VPN routing/forwarding instance ID
 ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.34 `int smi_pim4_api_rp_candidate_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName)`

This API configures an RP candidate set and sets its priority. `smi_pim4_api_rp_candidate_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *ifName* Name of the interface
- ← *bootStrapRouterFlag* Boolean for bsr option in CLIs

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.35 `int smi_pim4_api_rp_candidate_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * ifName)`

This API configures an RP candidate set and sets its priority. `smi_pim4_api_rp_candidate_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *ifName* Name of the interface
- ← *accessCtrlListOption* Name of the access list
- ← *candidatePriority* Priority value of the rp-candidate
- ← *rendezvousPointInterval* Interval value of the rp-candidate
- ← *accessCtrlListFlag* Access list flag for determininig is prefix/access-list

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.36 `int smi_pim4_api_rp_checksum_filter_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * accessCtrlListOption)`

This API configures a Cisco-style Register checksum. The filter ACL controls the groups to which the checksum calculation applies. `smi_pim4_api_rp_checksum_filter_set`

Parameters:

- ← **azg** Pointer to the SMI client global structure
- ← **vrId** Virtual router ID <0-255>
- ← **vrfId** VPN routing/forwarding instance ID
- ← **accessCtrlListOption** Access control list name (numeric <1-99> | numeric <1300-1999> | Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.37 `int smi_pim4_api_rp_checksum_filter_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * accessCtrlListOption)`

This API removes configuration of a Cisco-style Register checksum. `smi_pim4_api_rp_checksum_filter_unset`

Parameters:

- ← **azg** Pointer to the SMI client global structure
- ← **vrId** Virtual router ID <0-255>
- ← **vrfId** VPN routing/forwarding instance ID
- ← **accessCtrlListOption** Access control list name (numeric <1-99> | numeric <1300-1999> | Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERR_REGISTER_CHECKSUM_FILTER_INVALID_NAME

2.1.2.38 `int smi_pim4_api_rp_register_keep_alive_timer_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, u_int16_t registerKeepAliveTime)`

This API configures the keepalive timer (KAT) value of (S,G) created by the RP by register messages. `smi_pim4_api_rp_register_keep_alive_timer_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *registerKeepAliveTime* Keepalive-timer value, in seconds

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.39 int smi_pim4_api_rp_register_keep_alive_timer_unset (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName)

This API removes configuration of the KAT value of (S,G) created at the RP by Register messages. The KAT value is then reset to (Register Suppression Time * 3) + Register Probe Interval. smi_pim4_api_rp_register_keep_alive_timer_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.40 int smi_pim4_api_spt_switch_threshold_set (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, char * groupAccessCtrlListName)

This API configures an SPT (system posture token) switchover threshold. The group list ACL filters groups for which SPT switchover is performed. smi_pim4_api_spt_switch_threshold_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *groupAccessCtrlListName* Name of the ACL to use as the group range (Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.41 **int smi_pim4_api_spt_switch_threshold_unset** (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*, char * *groupAccessCtrlListName*)

This API removes the configuration of an SPT switchover threshold. smi_pim4_api_spt_switch_threshold_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *groupAccessCtrlListName* Name of the ACL to use as the group range (Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.42 **int smi_pim4_api_ssm_default_set** (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*)

This API configures PIM SSM operation. smi_pim4_api_ssm_default_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VR
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.43 **int smi_pim4_api_ssm_default_unset** (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *vrfName*)

This API removes the configuration for PIM SSM operation. smi_pim4_api_ssm_default_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

**2.1.2.44 int smi_pim4_api_ssm_range_set (struct smiclient_globals * azg,
u_int32_t vrId, char * vrfName, char * accessCtrlListOption)**

This API configures an SSM range using an access control list. smi_pim4_api_ssm_range_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *accessCtrlListOption* Access control list name (numeric <1-99> | Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

**2.1.2.45 int smi_pim4_api_ssm_range_unset (struct smiclient_globals * azg,
u_int32_t vrId, char * vrfName, char * accessCtrlListOption)**

This API removes configuration of an SSM range using an ACL. smi_pim4_api_ssm_range_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *accessCtrlListOption* Access control list name (numeric <1-99> | Word)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

2.1.2.46 `int smi_pim4_api_static_rp_set (struct smiclient_globals *
azg, u_int32_t vrId, char * vrfName, struct pal_in4_addr *
rendezvousPointAddr, char * accessCtrlListOption, bool_t overrideFlag,
bool_t bidirFlag)`

This API configures a static rendezvous point. `smi_pim4_api_static_rp_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- ← *rendezvousPoint* Addr Rendezvous point address
- ← *accessCtrlListOption* Name of ACL (access control list) to use
- ← *overrideFlag* Override flag
- ← *prefixCheckFlag* Group Prefix flag
- ← *bidir_flag* Mark the rp as bidir

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERROR

2.1.2.47 `int smi_pim4_api_static_rp_unset (struct smiclient_globals *
azg, u_int32_t vrId, char * vrfName, struct pal_in4_addr *
rendezvousPointAddr)`

This API removes configuration of a static rendezvous point. `smi_pim4_api_static_rp_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *vrfId* VPN routing/forwarding instance ID
- *rendezvousPointAddr* Rendezvous point address

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERROR
PIM_API_SET_ERR_RP_WRONG_ADDRESS

2.1.2.48 int smi_pim4_api_vif_bsr_border_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This API configures a BSR (bootstrap router) border on the VIF. smi_pim4_api_vif_bsr_border_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF

2.1.2.49 int smi_pim4_api_vif_bsr_border_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This API removes configuration of a BSR border from the VIF. smi_pim4_api_vif_bsr_border_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF

2.1.2.50 int smi_pim4_api_vif_dr_priority_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*, u_int32_t *designatedRouterPriority*)

This API configures the priority for a PIM Designated Router (DR) on a VIF. smi_pim4_api_vif_dr_priority_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

← *designatedPriority* The priority of the Designated Router value numeric <0-4294967294>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.51 int smi_pim4_api_vif_dr_priority_unset (struct smiclient_globals * azg, u_int32_t vrId, char * ifName)

This API removes the PIM DR priority from the VIF and returns it to the default setting.
 smi_pim4_api_vif_dr_priority_unset

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *ifName* Name of the interface
 ← *designatedRouterPriority* The priority of the Designated Router value numeric <0-4294967294>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_VIF_NOT_EXIST

2.1.2.52 int smi_pim4_api_vif_exclude_genid_set (struct smiclient_globals * azg, u_int32_t vrId, char * ifName)

This API configures PIM to exclude a generated ID on the VIF. smi_pim4_api_vif_exclude_genid_set

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual router ID <0-255>
 ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.53 `int smi_pim4_api_vif_exclude_genid_unset (struct smiclient_globals *
azg, u_int32_t vrid, char * ifName)`

This API removes the configuration to exclude a generated ID on the VIF. smi_pim4_api_vif_exclude_genid_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrid* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERR_VIF_NOT_EXIST

2.1.2.54 `int smi_pim4_api_vif_hello_holdtime_set (struct smiclient_globals *
azg, u_int32_t vrid, char * ifName, u_int32_t helloHoldtimeInterval)`

This API configures a PIM hello holdtime, in seconds, for a VIF. smi_pim4_api_vif_hello_holdtime_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrid* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *helloHoldTimeInterval* Hello-holdtime interval in milliseconds <1000-65535001>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERR_VIF_HELLO_HOLDTIME_LESS

2.1.2.55 `int smi_pim4_api_vif_hello_holdtime_unset (struct smiclient_globals *
azg, u_int32_t vrid, char * ifName)`

This API removes the configuration of the PIM hello holdtime from a VIF and resets it to its default value. smi_pim4_api_vif_hello_holdtime_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure

← *vrId* Virtual router ID <0-255>

← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes

PIM_API_SET_ERR_WRONG_VALUE

PIM_API_SET_ERR_WRONG_VRF

PIM_API_SET_ERR_VIF_NOT_EXIST

2.1.2.56 int smi_pim4_api_vif_hello_interval_set (struct smiclient_globals * azg, u_int32_t vrId, char * ifName, u_int32_t helloInterval)

This API configures a PIM hello interval on a VIF. smi_pim4_api_vif_hello_interval_set

Parameters:

← *azg* Pointer to the SMI client global structure

← *vrId* Virtual router ID <0-255>

← *ifName* Name of the interface

← *helloInterval* Hello intervals in milliseconds <1-65535>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes

PIM_API_SET_ERR_WRONG_VALUE

PIM_API_SET_ERR_WRONG_VRF

PIM_API_SET_ERR_VIF_HELLO_HOLDTIME_EXCEED

2.1.2.57 int smi_pim4_api_vif_hello_interval_unset (struct smiclient_globals * azg, u_int32_t vrId, char * ifName)

This API removes the configuration for a PIM hello interval on a VIF and resets the hello interval to its default value. smi_pim4_api_vif_hello_interval_unset

Parameters:

← *azg* Pointer to the SMI client global structure

← *vrId* Virtual router ID <0-255>

← *ifName* Name of the interface

← *helloInterval* Value of hello interval

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes

PIM_API_SET_ERR_WRONG_VALUE

```
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERR_COMMAND_NOT_CONFIGURED
PIM_API_SET_ERR_NO_MATCH_FOR_CONFIGURED_VALUE
PIM_API_SET_ERR_VIF_NOT_EXIST
```

2.1.2.58 int smi_pim4_api_vif_mode_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*, u_int8_t *mode*)

This API configures the PIM mode on a virtual interface (VIF). smi_pim4_api_vif_mode_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vr_Id* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *mode* PIM mode <0-4> enum(PIM_API_MODE_INVALID | PIM_API_MODE_DENSE | PIM_API_MODE_SPARSE | PIM_API_MODE_ANY | PIM_API_MODE_MAX)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERROR

2.1.2.59 int smi_pim4_api_vif_mode_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*, u_int8_t *mode*)

This API removes the PIM mode configuration from a VIF. smi_pim4_api_vif_mode_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *mode* PIM mode <0-4> enum(PIM_API_MODE_INVALID | PIM_API_MODE_DENSE | PIM_API_MODE_SPARSE | PIM_API_MODE_ANY | PIM_API_MODE_MAX)

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF

```
PIM_API_SET_ERR_VIF_NOT_EXIST
PIM_API_SET_ERR_MODE_MIS_MATCH
PIM_API_SET_ERROR
```

2.1.2.60 `int smi_pim4_api_vif_nbr_filter_set (struct smiclient_globals * azg, u_int32_t vrId, char * ifName, char * neighborFilterName)`

This API configures a PIM neighbor filter access-list name for a VIF. `smi_pim4_api_vif_nbr_filter_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *neighborFilterName* Name of the neighbor filter

Returns:

```
PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF
```

2.1.2.61 `int smi_pim4_api_vif_nbr_filter_unset (struct smiclient_globals * azg, u_int32_t vrId, char * ifName, char * neighborFilterName)`

This API removes the configuration for a PIM VIF neighbor filter access-list name. `smi_pim4_api_vif_nbr_filter_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *neighborFilterName* Name of the neighbor filter (Word)

Returns:

```
PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERR_VIF_NOT_EXIST
PIM_API_SET_ERROR
```

2.1.2.62 `int smi_pim4_api_vif_passive_set (struct smiclient_globals * azg, u_int32_t vrId, char * ifName)`

This API configures a PIM virtual interface as passive. `smi_pim4_api_vif_passive_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_VIF_SOCKET_LEAVE_ERROR
 PIM_API_SET_ERROR

2.1.2.63 `int smi_pim4_api_vif_passive_unset (struct smiclient_globals * azg, u_int32_t vrId, char * ifName)`

This API removes the configuration for a passive PIM VIF. `smi_pim4_api_vif_passive_unset`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_VIF_SOCKET_LEAVE_ERROR
 PIM_API_SET_ERROR

2.1.2.64 `int smi_pim4_api_vif_propagation_delay_set (struct smiclient_globals * azg, u_int32_t vrId, char * ifName, u_int16_t propagationDelay)`

This API configures the PIM propagation delay, in milliseconds, for a VIF. `smi_pim4_api_vif_propagation_delay_set`

Parameters:

- ← *azg* Pointer to the SMI client global structure

- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *propagationDelay* Propagation delay in miliseconds numeric <1000-5000>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.65 int smi_pim4_api_vif_propagation_delay_unset (struct smiclient_globals * azg, u_int32_t vrId, char * ifName)

This API removes the PIM propagation delay from the VIF, and returns the value to its default setting. smi_pim4_api_vif_propagation_delay_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_VIF_NOT_EXIST

2.1.2.66 int smi_pim4_api_vif_state_refresh_originate_interval_set (struct smiclient_globals * azg, u_int32_t vrId, char * ifName, u_int16_t stateRefreshOriginateInterval)

This API configures the state refresh that originates the interval for PIM-DM. smi_pim4_api_vif_state_refresh_originate_interval_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface
- ← *stateRefreshOriginateInterval* State refresh original interval in seconds <1-100>

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF

2.1.2.67 int smi_pim4_api_vif_state_refresh_originate_interval_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This API removes the configuration of the state-refresh interval for PIM-DM. smi_pim4_api_vif_state_refresh_originate_interval_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF
PIM_API_SET_ERR_VIF_NOT_EXIST

2.1.2.68 int smi_pim4_api_vif_unicast_bsm_set (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This API removes the PIM configuration to send unicast BSM messages to the VIF. smi_pim4_api_vif_unicast_bsm_set

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>
- ← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VALUE
PIM_API_SET_ERR_WRONG_VRF

2.1.2.69 int smi_pim4_api_vif_unicast_bsm_unset (struct smiclient_globals * *azg*, u_int32_t *vrId*, char * *ifName*)

This API removes the PIM configuration to send unicast BSM messages to the VIF. smi_pim4_api_vif_unicast_bsm_unset

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual router ID <0-255>

← *ifName* Name of the interface

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
 PIM_API_SET_ERR_WRONG_VALUE
 PIM_API_SET_ERR_WRONG_VRF
 PIM_API_SET_ERR_VIF_NOT_EXIST

2.1.2.70 `int smi_pim4_show_pim_bsr_router (struct smiclient_globals *
 azg, u_int32_t inVrId, char * vrfName, struct list * pimOutList,
 u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the bootstrap router's information. smi_pim4_show_pim_bsr_router

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *vrId* Virtual Router ID <0-255>
 ← *[Optional]vrfName* VRF name
 → *pimOutList* Pointer to linked list of structure pim4RpHashEntry
 ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.71 `int smi_pim4_show_pim_custom_nbr_brief (struct smiclient_globals
 * azg, char * vrfName, char * ifName, char * nbrIp, struct list *
 pimOutList, u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_custom_nbr_brief

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *[Optional]vrfName* VRF name {NAME|all|default}
 ← *ifName* Interface name
 ← *nbrIp* Neighbor address in A.B.C.D format.
 → *pimOutList* Pointer to linked list of structure pim4NbrEntryBrief
 ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.72 `int smi_pim4_show_pim_custom_nbr_brief_all (struct smiclient_globals * azg, char * vrfName, char * nbrIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_custom_nbr_brief_all`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryBrief`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.73 `int smi_pim4_show_pim_custom_nbr_detail (struct smiclient_globals * azg, char * vrfName, char * ifName, char * nbrIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_custom_nbr_detail`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.74 `int smi_pim4_show_pim_custom_nbr_detail_all (struct smiclient_globals * azg, char * vrfName, char * nbrIp, struct list * pimOutList, u_int32_t (*)(struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_custom_nbr_detail_all`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.75 `int smi_pim4_show_pim_dm_custom_nbr_brief (struct smiclient_globals * azg, char * vrfName, char * ifName, char * nbrIp, struct list * pimOutList, u_int32_t (*)(struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_dm_custom_nbr_brief`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryBrief`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.76 `int smi_pim4_show_pim_dm_custom_nbr_brief_all (struct smiclient_globals * azg, char * vrfName, char * nbrIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_dm_custom_nbr_brief_all`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryBrief`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.77 `int smi_pim4_show_pim_dm_custom_nbr_detail (struct smiclient_globals * azg, char * vrfName, char * ifName, char * nbrIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for the given interface and given neighbor, which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_dm_custom_nbr_detail`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.78 `int smi_pim4_show_pim_dm_custom_nbr_detail_all (struct smiclient_globals * azg, char * vrfName, char * nbrIp, struct list * pimOutList, u_int32_t (*)(struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for the given neighbor, on all interfaces which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_dm_custom_nbr_detail_all`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- ← *nbrIp* Neighbor address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.79 `int smi_pim4_show_pim_dm_if_brief (struct smiclient_globals * azg, char * vrfName, char * ifName, struct list * pimOutList, u_int32_t (*)(struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol. `smi_pim4_show_pim_dm_if_brief`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure `pim4DmIfEntryBrief`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.80 `int smi_pim4_show_pim_dm_if_brief_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t (*)(struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol. `smi_pim4_show_pim_dm_if_brief_all`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4DmIfEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.81 `int smi_pim4_show_pim_dm_if_detail (struct smiclient_globals * azg, char * vrfName, char * ifName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol. smi_pim4_show_pim_dm_if_detail

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4DmIfEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.82 `int smi_pim4_show_pim_dm_if_detail_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the DM mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol. smi_pim4_show_pim_dm_if_detail_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4IDmfEntryDetail

← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.83 `int smi_pim4_show_pim_dm_nbr_brief (struct smiclient_globals * azg, char * vrfName, char * ifName, struct list * pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_dm_nbr_brief

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *[Optional]vrfName* VRF name {NAME|all|default}
 ← *ifName* Interface name
 → *pimOutList* Pointer to linked list of structure pim4NbrEntryBrief
 ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.84 `int smi_pim4_show_pim_dm_nbr_brief_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_dm_nbr_brief_all

Parameters:

← *azg* Pointer to the SMI client global structure
 ← *[Optional]vrfName* VRF name {NAME|all|default}
 ← *ifName* Interface name
 → *pimOutList* Pointer to linked list of structure pim4NbrEntryBrief
 ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.85 `int smi_pim4_show_pim_dm_nbr_detail (struct smiclient_globals * azg, char * vrfName, char * ifName, struct list * pimOutList, u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_dm_nbr_detail`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.86 `int smi_pim4_show_pim_dm_nbr_detail_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the DM mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors. `smi_pim4_show_pim_dm_nbr_detail_all`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure `pim4NbrEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.87 `int smi_pim4_show_pim_dm_nexthop (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the nexthop information from NSM as used by PIM of DM mode. `smi_pim4_show_pim_dm_nexthop`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4NexthopEntry
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.88 `int smi_pim4_show_pim_dm_route (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table of DM mode . smi_pim4_show_pim_dm_route

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4RouteEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.89 `int smi_pim4_show_pim_group_rp_hash (struct smiclient_globals * azg, u_int32_t inVrId, char * vrfName, char * groupIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the rendezvous point (RP) to chose of given on group address. smi_pim4_show_pim_group_rp_hash

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- ← *groupIp* Group address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure pim4RpHashEntry
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.90 `int smi_pim4_show_pim_group_rp_mapping (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t*)(struct list *pimOutList) callbackFunc)`

Shows the group to rendezvous point (RP) mappings of given group address. smi_pim4_show_pim_group_rp_mapping

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *groupIp* Group address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure pim4GroupRpMapping
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.91 `int smi_pim4_show_pim_if_brief (struct smiclient_globals *azg, char *vrfName, char *ifName, struct list *pimOutList, u_int32_t*)(struct list *pimOutList) callbackFunc)`

Shows the ANY mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol. smi_pim4_show_pim_if_brief

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4IfEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.92 `int smi_pim4_show_pim_if_brief_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol. smi_pim4_show_pim_if_brief_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4IfEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.93 `int smi_pim4_show_pim_if_detail (struct smiclient_globals * azg, char * vrfName, char * ifName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Interface Table for the given interface, which contains one row per IP version for each interface of the router which is running PIM protocol. smi_pim4_show_pim_if_detail

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4IfEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.94 `int smi_pim4_show_pim_if_detail_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Interface Table for all interfaces, which contains one row per IP version for each interface of the router which is running PIM protocol. smi_pim4_show_pim_if_detail_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4IfEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.95 `int smi_pim4_show_pim_local_members (struct smiclient_globals
* azg, char * vrfName, char * ifName, struct list * pimOutList,
u_int32_t*)(struct list *pimOutList) callbackFunc)`

Shows the information about local membership for PIM interfaces, for the given interface of ANY mode. smi_pim4_show_pim_local_members

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name.
- *pimOutList* Pointer to linked list of structure pim4LocalMembersEntry
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.96 `int smi_pim4_show_pim_local_members_all (struct smiclient_globals
* azg, char * vrfName, struct list * pimOutList, u_int32_t*)(struct list
*pimOutList) callbackFunc)`

Shows the information about local membership for PIM interfaces, for all interfaces of ANY mode. smi_pim4_show_pim_local_members_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4LocalMembersEntry
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.97 `int smi_pim4_show_pim_nbr_brief (struct smiclient_globals *
azg, char * vrfName, char * ifName, struct list * pimOutList,
u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_nbr_brief

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4NbrEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.98 `int smi_pim4_show_pim_nbr_brief_all (struct smiclient_globals *
azg, char * vrfName, struct list * pimOutList, u_int32_t(*)(struct list
*pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_nbr_brief_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4NbrEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.99 `int smi_pim4_show_pim_nbr_detail (struct smiclient_globals *
azg, char * vrfName, char * ifName, struct list * pimOutList,
u_int32_t(*)(struct list *pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for the given interface, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_nbr_detail

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4NbrEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.100 `int smi_pim4_show_pim_nbr_detail_all (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the ANY mode PIM Neighbor Table for all interfaces, which contains one row for each of the router's PIM neighbors. smi_pim4_show_pim_nbr_detail_all

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *ifName* Interface name
- *pimOutList* Pointer to linked list of structure pim4NbrEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.101 `int smi_pim4_show_pim_nexthop (struct smiclient_globals * azg, char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the nexthop information from NSM as used by PIM of ANY mode. smi_pim4_show_pim_nexthop

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4NexthopEntry
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.102 `int smi_pim4_show_pim_route_brief (struct smiclient_globals * azg,
 char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list
 * pimOutList) callbackFunc)`

Shows the ANY mode information in the IP PIM multicast routing table, of ANY mode. `smi_pim4_show_pim_route_brief`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure `pim4RouteEntryBrief`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.103 `int smi_pim4_show_pim_route_detail (struct smiclient_globals * azg,
 char * vrfName, struct list * pimOutList, u_int32_t(*) (struct list
 * pimOutList) callbackFunc)`

Shows the ANY mode information in the IP PIM multicast routing table, of ANY mode. `smi_pim4_show_pim_route_detail`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← [*Optional*]*vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure `pim4RouteEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
 RESULT_ERROR

2.1.2.104 `int smi_pim4_show_pim_route_group_brief (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table for the given matched group address only. smi_pim4_show_pim_route_group_brief

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *groupIp* Group address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure pim4RouteEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.105 `int smi_pim4_show_pim_route_group_detail (struct smiclient_globals *azg, u_int32_t inVrId, char *vrfName, char *groupIp, struct list *pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table for the given matched source address only. smi_pim4_show_pim_route_group_detail

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *groupIp* Group address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure pim4RouteEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.106 `int smi_pim4_show_pim_route_source_brief (struct smiclient_globals * azg, u_int32_t inVrId, char * vrfName, char * sourceIp, struct list * pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table for the given matched source address only. smi_pim4_show_pim_route_source_brief

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *sourceIp* Source address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure pim4RouteEntryBrief
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.107 `int smi_pim4_show_pim_route_source_detail (struct smiclient_globals * azg, u_int32_t inVrId, char * vrfName, char * sourceIp, struct list * pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table for the given matched source address only. smi_pim4_show_pim_route_source_detail

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *sourceIp* Source address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure pim4RouteEntryDetail
- ← *callbackFunc* Callback func pointer

Returns:

0 on success, otherwise one of the following error codes
RESULT_ERROR

2.1.2.108 `int smi_pim4_show_pim_route_source_group_brief (struct smiclient_globals * azg, u_int32_t inVrId, char * vrfName, char * sourceIp, char * groupIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table for the given matched group and source combination only. `smi_pim4_show_pim_route_source_group_brief`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *sourceIp* Source address in A.B.C.D format.
- ← *groupIp* Group address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4RouteEntryBrief`
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.109 `int smi_pim4_show_pim_route_source_group_detail (struct smiclient_globals * azg, u_int32_t inVrId, char * vrfName, char * sourceIp, char * groupIp, struct list * pimOutList, u_int32_t(*) (struct list * pimOutList) callbackFunc)`

Shows the information in the IP PIM multicast routing table for the given matched group and source combination only. `smi_pim4_show_pim_route_source_group_detail`

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- ← *sourceIp* Source address in A.B.C.D format.
- ← *groupIp* Group address in A.B.C.D format.
- *pimOutList* Pointer to linked list of structure `pim4RouteEntryDetail`
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.110 `int smi_pim4_show_pim_rp_mapping (struct smiclient_globals * azg, u_int32_t inVrId, char * vrfName, struct list * pimOutList, u_int32_t (*)(struct list *pimOutList) callbackFunc)`

Shows the group to rendezvous point (RP) mappings of all group addresses, i.e all PIM route entries. smi_pim4_show_pim_rp_mapping

Parameters:

- ← *azg* Pointer to the SMI client global structure
- ← *vrId* Virtual Router ID <0-255>
- ← *[Optional]vrfName* VRF name {NAME|all|default}
- *pimOutList* Pointer to linked list of structure pim4GroupRpMapping
- ← *callbackFunc* Callback func pointer

Returns:

- 0 on success, otherwise one of the following error codes
- RESULT_ERROR

2.1.2.111 `int smi_pim_debug_ip (struct smiclient_globals * azg, u_int32_t vrId, char * vrfName, int debug)`

Use this function to enable debugging in pim4. smi_pim_debug_ip

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_PIM4_DEBUG_ALL - All PIM events
 - SMI_PIM4_DEBUG_NSM - All NSM events
 - SMI_PIM4_DEBUG_STATE - Debugging of PIM state
 - SMI_PIM4_DEBUG_EVENTS - Debugging of PIM event
 - SMI_PIM4_DEBUG_PACKET - Debugging of all PIM packets
 - SMI_PIM4_DEBUG_PACKET_IN - Debugging of incoming PIM packets
 - SMI_PIM4_DEBUG_PACKET_OUT - Debugging of outgoing PIM packets
 - SMI_PIM4_DEBUG_NEXTHOP - Debugging of Reverse Path Forwarding nexthop cache handing
 - SMI_PIM4_DEBUG_MFC - Debugging for MFC updates
 - SMI_PIM4_DEBUG_MIB - Debugging of MIB entries
 - SMI_PIM4_DEBUG_MTRACE - Debugging of MTRACE messages
 - SMI_PIM4_DEBUG_TIMER - Debugging of timers
 - SMI_PIM4_DEBUG_TIMER_HELLO - Debugging of the hello timers

SMI_PIM4_DEBUG_TIMER_HELLO_HT - Debugging of hello timers

SMI_PIM4_DEBUG_TIMER_HELLO_NLT - Debugging of neighbor-liveliness hello timer

SMI_PIM4_DEBUG_TIMER_HELLO_THT - Debugging of triggered hello timer

SMI_PIM4_DEBUG_TIMER_JOINPRUNE - Debugging of all join/prune timers

SMI_PIM4_DEBUG_TIMER_JOINPRUNE_JT - Debugging of the join/prune timers

SMI_PIM4_DEBUG_TIMER_JOINPRUNE_ET - Debugging of the join/prune expiration timer

SMI_PIM4_DEBUG_TIMER_JOINPRUNE_PPT - Debugging of the join/prune pending set

SMI_PIM4_DEBUG_TIMER_JOINPRUNE_KAT - Debugging of the join/prune keepalive timer

SMI_PIM4_DEBUG_TIMER_JOINPRUNE_OT - Debugging of the join/prune upstream override timer

SMI_PIM4_DEBUG_TIMER_ASSERT - Debugging of all assert timers

SMI_PIM4_DEBUG_TIMER_ASSERT_AT - Debugging of PIM assert timer

SMI_PIM4_DEBUG_TIMER_REGISTER - Debugging of the Register timers

SMI_PIM4_DEBUG_TIMER_REGISTER_RST - Debugging of the Register stop timer

SMI_PIM4_DEBUG_TIMER_BSR - Debugging of the Bootstrap Router timers

SMI_PIM4_DEBUG_TIMER_BSR_BST - Debugging of the BSR timer

SMI_PIM4_DEBUG_TIMER_BSR_CRP - Debugging of the BSR candidate-RP timer

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes

PIM_API_SET_ERR_WRONG_VR

PIM_API_SET_ERR_WRONG_VRF

2.1.2.112 int smi_pim_no_debug_ip (struct smiclient_globals * azg, u_int32_t vrid, char * vrfName, int debug)

Use this function to disable debugging in pim4. smi_pim_no_debug_ip

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_PIM4_DEBUG_ALL - All PIM events
- SMI_PIM4_DEBUG_NSM - All NSM events
- SMI_PIM4_DEBUG_STATE - Debugging of PIM state
- SMI_PIM4_DEBUG_EVENTS - Debugging of PIM event
- SMI_PIM4_DEBUG_PACKET - Debugging of all PIM packets
- SMI_PIM4_DEBUG_PACKET_IN - Debugging of incoming PIM packets
- SMI_PIM4_DEBUG_PACKET_OUT - Debugging of outgoing PIM packets
- SMI_PIM4_DEBUG_NEXTHOP - Debugging of Reverse Path Forwarding nexthop cache handing
- SMI_PIM4_DEBUG_MFC - Debugging for MFC updates
- SMI_PIM4_DEBUG_MIB - Debugging of MIB entries
- SMI_PIM4_DEBUG_MTRACE - Debugging of MTRACE messages
- SMI_PIM4_DEBUG_TIMER - Debugging of timers
- SMI_PIM4_DEBUG_TIMER_HELLO - Debugging of the hello timers
- SMI_PIM4_DEBUG_TIMER_HELLO_HT - Debugging of hello timers
- SMI_PIM4_DEBUG_TIMER_HELLO_NLT - Debugging of neighbor_liveliness hello timer
- SMI_PIM4_DEBUG_TIMER_HELLO_THT - Debugging of triggered hello timer
- SMI_PIM4_DEBUG_TIMER_JOINPRUNE - Debugging of all join/prune timers
- SMI_PIM4_DEBUG_TIMER_JOINPRUNE_JT - Debugging of the join/prune timers
- SMI_PIM4_DEBUG_TIMER_JOINPRUNE_ET - Debugging of the join/prune expiration timer
- SMI_PIM4_DEBUG_TIMER_JOINPRUNE_PPT - Debugging of the join/prune pending set
- SMI_PIM4_DEBUG_TIMER_JOINPRUNE_KAT - Debugging of the join/prune keepalive timer
- SMI_PIM4_DEBUG_TIMER_JOINPRUNE_OT - Debugging of the join/prune upstream override timer
- SMI_PIM4_DEBUG_TIMER_ASSERT - Debugging of all assert timers
- SMI_PIM4_DEBUG_TIMER_ASSERT_AT - Debugging of PIM assert timer
- SMI_PIM4_DEBUG_TIMER_REGISTER - Debugging of the Register timers
- SMI_PIM4_DEBUG_TIMER_REGISTER_RST - Debugging of the Register stop timer
- SMI_PIM4_DEBUG_TIMER_BSR - Debugging of the Bootstrap Router timers
- SMI_PIM4_DEBUG_TIMER_BSR_BST - Debugging of the BSR timer
- SMI_PIM4_DEBUG_TIMER_BSR_CRP - Debugging of the BSR candidate-RP timer

Returns:

PIM_API_SET_SUCCESS on success, otherwise one of the following error codes
PIM_API_SET_ERR_WRONG_VR
PIM_API_SET_ERR_WRONG_VRF

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