1. Status of this Memo

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2. Abstract

This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in TCP/IP-based internets. In particular, it defines objects for managing the Resource Reservation Protocol (RSVP) within the interface attributes defined in the Integrated Services Model. Thus, the Integrated Services MIB is directly relevant to and cross-referenced by this MIB. Comments should be made to the RSVP Working Group, rsvp@isi.edu.

This memo does not, in its draft form, specify a standard for the Internet community.
3. The SNMPv2 Network Management Framework

The SNMPv2 Network Management Framework consists of four major components. They are:

- **RFC 1441** which defines the SMI, the mechanisms used for describing and naming objects for the purpose of management.

- **RFC 1213** defines MIB-II, the core set of managed objects for the Internet suite of protocols.

- **RFC 1445** which defines the administrative and other architectural aspects of the framework.

- **RFC 1448** which defines the protocol used for network access to managed objects.

The Framework permits new objects to be defined for the purpose of experimentation and evaluation.

3.1. Object Definitions

Managed objects are accessed via a virtual information store, termed the Management Information Base or MIB. Objects in the MIB are defined using the subset of Abstract Syntax Notation One (ASN.1) defined in the SMI. In particular, each object type is named by an OBJECT IDENTIFIER, an administratively assigned name. The object type together with an object instance serves to uniquely identify a specific instantiation of the object. For human convenience, we often use a textual string, termed the descriptor, to refer to the object type.

4. Overview

4.1. Textual Conventions

Several new data types are introduced as a textual convention in this MIB document. These textual conventions enhance the readability of the specification and can ease comparison with other specifications if appropriate. It should be noted that the introduction of these textual conventions has no effect on either the syntax nor the semantics of any managed
objects. The use of these is merely an artifact of the explanatory method used. Objects defined in terms of one of these methods are always encoded by means of the rules that define the primitive type. Hence, no changes to the SMI or the SNMP are necessary to accommodate these textual conventions which are adopted merely for the convenience of readers and writers in pursuit of the elusive goal of clear, concise, and unambiguous MIB documents.

4.2. Structure of MIB

The MIB is composed of the following sections:
- General Objects
- Session Statistics Table
- Session Sender Table
- Reservation Requests Received Table
- Reservation Requests Forwarded Table
- RSVP Interface Attributes Table
- RSVP Neighbor Table

As a general rule, it is difficult in SNMP to describe arbitrarily long of complex messages; this MIB therefore seeks to describe the Path State Database and the Reservation State Database as though each flow and filter description received in an aggregate message had been received in a separate reservation message.

Thus, if a RESV message is received for session 224.1.2.3+UDP+4455 with two filter/flow spec groups describing a sender 1.2.3.4 and another sender 1.2.7.8, these two will show in the MIB as two separate rows: one for 224.1.2.3+UDP+4455 from 1.2.3.4 and the other for 224.1.2.3+UDP+4455 from 1.2.7.8.

4.3. Semantics of Writing the Path and Reservation State Databases

The path and reservation state tables are writeable. Writing into the Path and Reservation State databases allows one to perform RSVP reservations without authenticating through RSVP mechanisms, but rather through SNMP mechanisms. State created in this way by SNMP does not time out and cannot be deleted by receiving an RSVP teardown message; it can only be deleted by SNMP. Deletion is accomplished by writing ‘destroy’ to the associated Row Status object, and this will initiate a
teardown message as if the state had timed out.

4.4. Intended use of Flow Notifications

4.4.1. The lostFlow Notification

The Lost Flow notification is an asynchronous event that signifies that a flow is no longer being observed.

4.4.2. The newFlow Notification

The newFlow Notification defined in this MIB can be used to advise a network management system of the state of a flow.
5. Definitions

RSVP-MIB DEFINITIONS ::= BEGIN

IMPORTS
  MODULE-IDENTITY, OBJECT-TYPE, Gauge32,
  NOTIFICATION-TYPE, Integer32, mib-2
  TEXTUAL-CONVENTION, TruthValue, RowStatus,
  TimeStamp, TestAndIncr, TimeInterval
  MODULE-COMPLIANCE, OBJECT-GROUP,
  NOTIFICATION-GROUP FROM SNMPv2-SMI
  Port, SessionNumber, SessionType,
  Protocol, QosService, intSrvFlowStatus,
  MessageSize, BitRate, BurstSize
  ifIndex, InterfaceIndex FROM INTEGRATED-SERVICES-MIB
  ifIndex, InterfaceIndex FROM IF-MIB;
rsvp MODULE-IDENTITY
LAST-UPDATED "9804140500Z" -- Tue Apr 14 14:15:41 PDT 1998
ORGANIZATION "IETF RSVP Working Group"
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DESCRIPTION
"The MIB module to describe the RSVP Protocol"
 ::= { mib-2 51 }

rsvpObjects OBJECT IDENTIFIER ::= { rsvp 1 } -- tables
rsvpGenObjects OBJECT IDENTIFIER ::= { rsvp 2 } -- global objects
rsvpNotificationsPrefix OBJECT IDENTIFIER ::= { rsvp 3 } -- traps
rsvpConformance OBJECT IDENTIFIER ::= { rsvp 4 } -- conformance

RsvpEncapsulation := TEXTUAL-CONVENTION
STATUS current
DESCRIPTION
"This indicates the encapsulation that an RSVP Neighbor is perceived to be using."
SYNTAX INTEGER {
  ip (1), -- IP Protocol 46
  udp (2), -- UDP Encapsulation
  both (3) -- neighbor is using both encapsulations
}
RefreshInterval ::= TEXTUAL-CONVENTION
   DISPLAY-HINT "d"
   STATUS current
   DESCRIPTION
      "The number of milliseconds that are expected to elapse between refreshes of path or reservation state. Unrefreshed Path or reservation state is removed after a small multiple of this period."
   SYNTAX   INTEGER (0..'7FFFFFFF'h)
The RSVP Session Statistics Database displays statistics relating to the number of senders and receivers in each session.

rsvpSessionNewIndex OBJECT-TYPE
SYNTAX      TestAndIncr
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
  "This object is used to assign values to rsvpSessionNumber as described in 'Textual Conventions for SNMPv2'. The network manager reads the object, and then writes the value back in the SET that creates a new instance of rsvpSessionEntry. If the SET fails with the code 'inconsistentValue', then the process must be repeated; If the SET succeeds, then the object is incremented, and the new instance is created according to the manager’s directions."
::= { rsvpGenObjects 1 }

rsvpSessionTable OBJECT-TYPE
SYNTAX      SEQUENCE OF RsvpSessionEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
  "A table of all sessions seen by a given system."
::= { rsvpObjects 1 }

rsvpSessionEntry OBJECT-TYPE
SYNTAX      RsvpSessionEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
  "A single session seen by a given system."
INDEX { rsvpSessionNumber }
::= { rsvpSessionTable 1 }
RsvpSessionEntry ::= 
   SEQUENCE {
      rsvpSessionNumber SessionNumber, 
      rsvpSessionType SessionType, 
      rsvpSessionDestAddr OCTET STRING, 
      rsvpSessionDestAddrLength INTEGER, 
      rsvpSessionProtocol Protocol, 
      rsvpSessionPort Port, 
      rsvpSessionSenders Gauge32, 
      rsvpSessionReceivers Gauge32, 
      rsvpSessionRequests Gauge32 
   }

rsvpSessionNumber OBJECT-TYPE
SYNTAX SessionNumber
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "The number of this session. This is for SNMP
   Indexing purposes only and has no relation to
   any protocol value."
::= { rsvpSessionEntry 1 }

rsvpSessionType OBJECT-TYPE
SYNTAX SessionType
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The type of session (IP4, IP6, IP6 with flow
   information, etc)."
::= { rsvpSessionEntry 2 }
rsvpSessionDestAddr OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(4..16))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The destination address used by all senders in
 this session. This object may not be changed
 when the value of the RowStatus object is 'ac-
tive'."
 ::= { rsvpSessionEntry 3 }

rsvpSessionDestAddrLength OBJECT-TYPE
SYNTAX     INTEGER(0..128)
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The CIDR prefix length of the session address,
 which is 32 for IP4 host and multicast ad-
dresses, and 128 for IP6 addresses. This ob-
ject may not be changed when the value of the
RowStatus object is 'active'."
 ::= { rsvpSessionEntry 4 }

rsvpSessionProtocol OBJECT-TYPE
SYNTAX     Protocol
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
 "The IP Protocol used by this session. This
 object may not be changed when the value of the
 RowStatus object is 'active'."
 ::= { rsvpSessionEntry 5 }
rsvpSessionPort OBJECT-TYPE
SYNTAX       Port
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION
"The UDP or TCP port number used as a destination port for all senders in this session. If the IP protocol in use, specified by rsvpSenderProtocol, is 50 (ESP) or 51 (AH), this represents a virtual destination port number. A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is 'active'."
 ::= { rsvpSessionEntry 6 }

rsvpSessionSenders OBJECT-TYPE
SYNTAX       Gauge32
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION
"The number of distinct senders currently known to be part of this session."
 ::= { rsvpSessionEntry 7 }

rsvpSessionReceivers OBJECT-TYPE
SYNTAX       Gauge32
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION
"The number of reservations being requested of this system for this session."
 ::= { rsvpSessionEntry 8 }
rsvpSessionRequests OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION
"The number of reservation requests this system
is sending upstream for this session."
::= { rsvpSessionEntry 9 }

rsvpBadPackets OBJECT-TYPE
SYNTAX  Gauge32
MAX-ACCESS read-only
STATUS  current
DESCRIPTION
"This object keeps a count of the number of bad
RSVP packets received."
::= { rsvpGenObjects 2 }
The RSVP Session Sender Database contains the information displayed by senders regarding their potential contribution to session data content. It is in essence a list of the valid PATH messages that the RSVP Router or Host is receiving.

```
rsvpSenderNewIndex OBJECT-TYPE
SYNTAX     TestAndIncr
MAX-ACCESS read-write
STATUS     current
DESCRIPTION
 "This object is used to assign values to rsvpSenderNumber as described in 'Textual Conventions for SNMPv2'. The network manager reads the object, and then writes the value back in the SET that creates a new instance of rsvpSenderEntry. If the SET fails with the code 'inconsistentValue', then the process must be repeated; If the SET succeeds, then the object is incremented, and the new instance is created according to the manager’s directions."
 ::= { rsvpGenObjects 3 }

rsvpSenderTable OBJECT-TYPE
SYNTAX     SEQUENCE OF RsvpSenderEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
 "Information describing the state information displayed by senders in PATH messages."
 ::= { rsvpObjects 2 }

rsvpSenderEntry OBJECT-TYPE
SYNTAX     RsvpSenderEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
 "Information describing the state information displayed by a single sender’s PATH message."
INDEX { rsvpSessionNumber, rsvpSenderNumber }
 ::= { rsvpSenderTable 1 }
```

RsvpSenderEntry ::=
SEQUENCE {
    rsvpSenderNumber                          SessionNumber,
    rsvpSenderType                           SessionType,
    rsvpSenderDestAddr                       OCTET STRING,
    rsvpSenderAddr                           OCTET STRING,
    rsvpSenderDestAddrLength                 INTEGER,
    rsvpSenderAddrLength                     INTEGER,
    rsvpSenderProtocol                       Protocol,
    rsvpSenderDestPort                       Port,
    rsvpSenderPort                           Port,
    rsvpSenderFlowId                         INTEGER,
    rsvpSenderHopAddr                        OCTET STRING,
    rsvpSenderHopLih                         Integer32,
    rsvpSenderInterface                      InterfaceIndex,
    rsvpSenderTSpecRate                      BitRate,
    rsvpSenderTSpecPeakRate                  BitRate,
    rsvpSenderTSpecBurst                     BurstSize,
    rsvpSenderTSpecMinTU                     MessageSize,
    rsvpSenderTSpecMaxTU                     MessageSize,
    rsvpSenderInterval                       RefreshInterval,
    rsvpSenderRSVPHop                        TruthValue,
    rsvpSenderLastChange                     TimeStamp,
    rsvpSenderPolicy                         OCTET STRING,
    rsvpSenderAdspecBreak                    TruthValue,
    rsvpSenderAdspecHopCount                 INTEGER,
    rsvpSenderAdspecPathBw                   BitRate,
    rsvpSenderAdspecMinLatency               Integer32,
    rsvpSenderAdspecMtu                      INTEGER,
    rsvpSenderAdspecGuaranteedSvc            TruthValue,
    rsvpSenderAdspecGuaranteedBreak          TruthValue,
    rsvpSenderAdspecGuaranteedCtot           Integer32,
    rsvpSenderAdspecGuaranteedDtot          Integer32,
    rsvpSenderAdspecGuaranteedCsum          Integer32,
    rsvpSenderAdspecGuaranteedDsum          Integer32,
    rsvpSenderAdspecGuaranteedHopCount       INTEGER,
    rsvpSenderAdspecGuaranteedPathBw         BitRate,
    rsvpSenderAdspecGuaranteedMinLatency     Integer32,
    rsvpSenderAdspecGuaranteedMtu           INTEGER,
    rsvpSenderAdspecCtrlLoadSvc              TruthValue,
    rsvpSenderAdspecCtrlLoadBreak            TruthValue,
    rsvpSenderAdspecCtrlLoadHopCount         INTEGER,
    rsvpSenderAdspecCtrlLoadPathBw          BitRate,
    rsvpSenderAdspecCtrlLoadMinLatency      Integer32,
    rsvpSenderAdspecCtrlLoadMtu             INTEGER,
    rsvpSenderStatus                         RowStatus,
}
rsvpSenderTTL INTEGER
}

rsvpSenderNumber OBJECT-TYPE
SYNTAX SessionNumber
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The number of this sender. This is for SNMP
Indexing purposes only and has no relation to
any protocol value."
 ::= { rsvpSenderEntry 1 }

rsvpSenderType OBJECT-TYPE
SYNTAX SessionType
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The type of session (IP4, IP6, IP6 with flow
information, etc)."
 ::= { rsvpSenderEntry 2 }

rsvpSenderDestAddr OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(4..16))
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The destination address used by all senders in
this session. This object may not be changed
when the value of the RowStatus object is ‘ac-
tive’."
 ::= { rsvpSenderEntry 3 }

rsvpSenderAddr OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(4..16))
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The source address used by this sender in this
session. This object may not be changed when
the value of the RowStatus object is 'active'."
::= { rsvpSenderEntry 4 }

rsvpSenderDestAddrLength OBJECT-TYPE
SYNTAX INTEGER(0..128)
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The length of the destination address in bits.
This is the CIDR Prefix Length, which for IP4
hosts and multicast addresses is 32 bits. This
object may not be changed when the value of the
RowStatus object is 'active'."
::= { rsvpSenderEntry 5 }

rsvpSenderAddrLength OBJECT-TYPE
SYNTAX INTEGER(0..128)
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The length of the sender’s address in bits.
This is the CIDR Prefix Length, which for IP4
hosts and multicast addresses is 32 bits. This
object may not be changed when the value of the
RowStatus object is 'active'."
::= { rsvpSenderEntry 6 }
rsvpSenderProtocol OBJECT-TYPE
SYNTAX Protocol
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The IP Protocol used by this session. This object may not be changed when the value of the RowStatus object is 'active'."
 ::= { rsvpSenderEntry 7 }

rsvpSenderDestPort OBJECT-TYPE
SYNTAX Port
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The UDP or TCP port number used as a destination port for all senders in this session. If the IP protocol in use, specified by rsvpSenderProtocol, is 50 (ESP) or 51 (AH), this represents a virtual destination port number. A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is 'active'."
 ::= { rsvpSenderEntry 8 }

rsvpSenderPort OBJECT-TYPE
SYNTAX Port
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The UDP or TCP port number used as a source port for this sender in this session. If the IP protocol in use, specified by rsvpSenderProtocol is 50 (ESP) or 51 (AH), this represents a generalized port identifier (GPI). A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is 'active'."
 ::= { rsvpSenderEntry 9 }
rsvpSenderFlowId OBJECT-TYPE
SYNTAX        INTEGER (0..16777215)
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION   "The flow ID that this sender is using, if
               this is an IPv6 session."
::= { rsvpSenderEntry 10 }

rsvpSenderHopAddr OBJECT-TYPE
SYNTAX        OCTET STRING (SIZE(4..16))
MAX-ACCESS    read-create
STATUS        current
DESCRIPTION   "The address used by the previous RSVP hop
               (which may be the original sender)."
::= { rsvpSenderEntry 11 }

rsvpSenderHopLih OBJECT-TYPE
SYNTAX        Integer32
MAX-ACCESS    read-create
STATUS        current
DESCRIPTION   "The Logical Interface Handle used by the pre-
               vious RSVP hop (which may be the original
               sender)."
::= { rsvpSenderEntry 12 }

rsvpSenderInterface OBJECT-TYPE
SYNTAX        InterfaceIndex
MAX-ACCESS    read-create
STATUS        current
DESCRIPTION   "The ifIndex value of the interface on which
               this PATH message was most recently received."
::= { rsvpSenderEntry 13 }
rsvpSenderTSpecRate OBJECT-TYPE
SYNTAX BitRate
UNITS "bits per second"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The Average Bit Rate of the sender’s data stream. Within a transmission burst, the arrival rate may be as fast as rsvpSenderTSpecPeakRate (if supported by the service model); however, averaged across two or more burst intervals, the rate should not exceed rsvpSenderTSpecRate.

Note that this is a prediction, often based on the general capability of a type of codec or particular encoding; the measured average rate may be significantly lower."
::= { rsvpSenderEntry 14 }

rsvpSenderTSpecPeakRate OBJECT-TYPE
SYNTAX BitRate
UNITS "bits per second"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The Peak Bit Rate of the sender’s data stream. Traffic arrival is not expected to exceed this rate at any time, apart from the effects of jitter in the network. If not specified in the TSpec, this returns zero or noSuchValue."
::= { rsvpSenderEntry 15 }

rsvpSenderTSpecBurst OBJECT-TYPE
SYNTAX BurstSize
UNITS "bytes"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The size of the largest burst expected from the sender at a time."
::= { rsvpSenderEntry 16 }
rsvpSenderTSpecMinTU OBJECT-TYPE
SYNTAX      MessageSize
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "The minimum message size for this flow. The
  policing algorithm will treat smaller messages
  as though they are this size."
::= { rsvpSenderEntry 17 }

rsvpSenderTSpecMaxTU OBJECT-TYPE
SYNTAX      MessageSize
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "The maximum message size for this flow. The
  admission algorithm will reject TSpecs whose
  Maximum Transmission Unit, plus the interface
  headers, exceed the interface MTU."
::= { rsvpSenderEntry 18 }

rsvpSenderInterval OBJECT-TYPE
SYNTAX      RefreshInterval
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "The interval between refresh messages as ad-
  vertised by the Previous Hop."
::= { rsvpSenderEntry 19 }

rsvpSenderRSVPHop OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "If TRUE, the node believes that the previous
  IP hop is an RSVP hop. If FALSE, the node be-
  lieves that the previous IP hop may not be an
  RSVP hop."
::= { rsvpSenderEntry 20 }
rsvpSenderLastChange OBJECT-TYPE
SYNTAX      TimeStamp
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION "The time of the last change in this PATH message; This is either the first time it was received or the time of the most recent change in parameters."
::= { rsvpSenderEntry 21 }

rsvpSenderPolicy OBJECT-TYPE
SYNTAX      OCTET STRING (SIZE(4..65536))
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION "The contents of the policy object, displayed as an uninterpreted string of octets, including the object header. In the absence of such an object, this should be of zero length."
::= { rsvpSenderEntry 22 }

rsvpSenderAdspecBreak OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION "The global break bit general characterization parameter from the ADSPEC. If TRUE, at least one non-IS hop was detected in the path. If FALSE, no non-IS hops were detected."
::= { rsvpSenderEntry 23 }
rsvpSenderAdspecHopCount OBJECT-TYPE
SYNTAX      INTEGER (0..65535)
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "The hop count general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

 the invalid bit was set
 the parameter was not present"
 ::= { rsvpSenderEntry 24 }

rsvpSenderAdspecPathBw OBJECT-TYPE
SYNTAX      BitRate
UNITS       "bits per second"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "The path bandwidth estimate general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

 the invalid bit was set
 the parameter was not present"
 ::= { rsvpSenderEntry 25 }
rsvpSenderAdspecMinLatency OBJECT-TYPE
SYNTAX      Integer32
UNITS       "microseconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "The minimum path latency general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

        the invalid bit was set
        the parameter was not present"
::= { rsvpSenderEntry 26 }

rsvpSenderAdspecMtu OBJECT-TYPE
SYNTAX      INTEGER (0..65535)
UNITS       "bytes"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "The composed Maximum Transmission Unit general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

        the invalid bit was set
        the parameter was not present"
::= { rsvpSenderEntry 27 }

rsvpSenderAdspecGuaranteedSvc OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "If TRUE, the ADSPEC contains a Guaranteed Service fragment. If FALSE, the ADSPEC does not contain a Guaranteed Service fragment."
::= { rsvpSenderEntry 28 }
rsvpSenderAdspecGuaranteedBreak OBJECT-TYPE
SYNTAX     TruthValue
MAX-ACCESS read-create
STATUS     current
DESCRIPTION
"If TRUE, the Guaranteed Service fragment has its 'break' bit set, indicating that one or more nodes along the path do not support the guaranteed service. If FALSE, and rsvpSenderAdspecGuaranteedSvc is TRUE, the 'break' bit is not set.

If rsvpSenderAdspecGuaranteedSvc is FALSE, this returns FALSE or noSuchValue."
::= { rsvpSenderEntry 29 }

rsvpSenderAdspecGuaranteedCtot OBJECT-TYPE
SYNTAX     Integer32
UNITS      "bytes"
MAX-ACCESS read-create
STATUS     current
DESCRIPTION
"If rsvpSenderAdspecGuaranteedSvc is TRUE, this is the end-to-end composed value for the guaranteed service 'C' parameter. A return of zero or noSuchValue indicates one of the following conditions:

the invalid bit was set
the parameter was not present

If rsvpSenderAdspecGuaranteedSvc is FALSE, this returns zero or noSuchValue."
::= { rsvpSenderEntry 30 }
rvpsenderAdsSpecGuaranteedDtot OBJECT-TYPE
SYNTAX Integer32
UNITS "microseconds"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rvpsenderAdsSpecGuaranteedSvc is TRUE, this is the end-to-end composed value for the guaranteed service ‘D’ parameter. A return of zero or noSuchValue indicates one of the following conditions:

the invalid bit was set
the parameter was not present

If rvpsenderAdsSpecGuaranteedSvc is FALSE, this returns zero or noSuchValue."
::= { rvpsenderEntry 31 }

rvpsenderAdsSpecGuaranteedCsum OBJECT-TYPE
SYNTAX Integer32
UNITS "bytes"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rvpsenderAdsSpecGuaranteedSvc is TRUE, this is the composed value for the guaranteed service ‘C’ parameter since the last reshaping point. A return of zero or noSuchValue indicates one of the following conditions:

the invalid bit was set
the parameter was not present

If rvpsenderAdsSpecGuaranteedSvc is FALSE, this returns zero or noSuchValue."
::= { rvpsenderEntry 32 }
rsvpSenderAdspecGuaranteedDsum OBJECT-TYPE
SYNTAX      Integer32
UNITS       "microseconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "If rsvpSenderAdspecGuaranteedSvc is TRUE, this
  is the composed value for the guaranteed ser-
  vice 'D' parameter since the last reshaping
  point. A return of zero or noSuchValue indi-
  cates one of the following conditions:

  the invalid bit was set
  the parameter was not present

  If rsvpSenderAdspecGuaranteedSvc is FALSE, this
  returns zero or noSuchValue."
::= { rsvpSenderEntry 33 }

rsvpSenderAdspecGuaranteedHopCount OBJECT-TYPE
SYNTAX      INTEGER (0..65535)
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "If rsvpSenderAdspecGuaranteedSvc is TRUE, this
  is the service-specific override of the hop
  count general characterization parameter from
  the ADSPEC. A return of zero or noSuchValue
  indicates one of the following conditions:

  the invalid bit was set
  the parameter was not present

  If rsvpSenderAdspecGuaranteedSvc is FALSE, this
  returns zero or noSuchValue."
::= { rsvpSenderEntry 34 }
rsvpSenderAdspecGuaranteedPathBw OBJECT-TYPE
SYNTAX BitRate
UNITS "bits per second"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rsvpSenderAdspecGuaranteedSvc is TRUE, this is the service-specific override of the path bandwidth estimate general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

- the invalid bit was set
- the parameter was not present

If rsvpSenderAdspecGuaranteedSvc is FALSE, this returns zero or noSuchValue."
 ::= { rsvpSenderEntry 35 }

rsvpSenderAdspecGuaranteedMinLatency OBJECT-TYPE
SYNTAX Integer32
UNITS "microseconds"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rsvpSenderAdspecGuaranteedSvc is TRUE, this is the service-specific override of the minimum path latency general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

- the invalid bit was set
- the parameter was not present

If rsvpSenderAdspecGuaranteedSvc is FALSE, this returns zero or noSuchValue."
 ::= { rsvpSenderEntry 36 }
rsvpSenderAdspecGuaranteedMtu OBJECT-TYPE
SYNTAX INTEGER (0..65535)
UNITS "bytes"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rsvpSenderAdspecGuaranteedSvc is TRUE, this is the service-specific override of the composed Maximum Transmission Unit general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

the invalid bit was set
the parameter was not present

If rsvpSenderAdspecGuaranteedSvc is FALSE, this returns zero or noSuchValue."
::= { rsvpSenderEntry 37 }

rsvpSenderAdspecCtrlLoadSvc OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If TRUE, the ADSPEC contains a Controlled Load Service fragment. If FALSE, the ADSPEC does not contain a Controlled Load Service fragment."
::= { rsvpSenderEntry 38 }
rsvpSenderAdspecCtrlLoadBreak OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If TRUE, the Controlled Load Service fragment has its 'break' bit set, indicating that one or more nodes along the path do not support the controlled load service. If FALSE, and rsvpSenderAdspecCtrlLoadSvc is TRUE, the 'break' bit is not set.

If rsvpSenderAdspecCtrlLoadSvc is FALSE, this returns FALSE or noSuchValue."
::= { rsvpSenderEntry 39 }

rsvpSenderAdspecCtrlLoadHopCount OBJECT-TYPE
SYNTAX INTEGER (0..65535)
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rsvpSenderAdspecCtrlLoadSvc is TRUE, this is the service-specific override of the hop count general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

- the invalid bit was set
- the parameter was not present

If rsvpSenderAdspecCtrlLoadSvc is FALSE, this returns zero or noSuchValue."
::= { rsvpSenderEntry 40 }
rsvpSenderAdspecCtrlLoadPathBw OBJECT-TYPE
SYNTAX BitRate
UNITS "bits per second"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rsvpSenderAdspecCtrlLoadSvc is TRUE, this is the service-specific override of the path bandwidth estimate general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

the invalid bit was set
the parameter was not present

If rsvpSenderAdspecCtrlLoadSvc is FALSE, this returns zero or noSuchValue."
::= { rsvpSenderEntry 41 }

rsvpSenderAdspecCtrlLoadMinLatency OBJECT-TYPE
SYNTAX Integer32
UNITS "microseconds"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If rsvpSenderAdspecCtrlLoadSvc is TRUE, this is the service-specific override of the minimum path latency general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

the invalid bit was set
the parameter was not present

If rsvpSenderAdspecCtrlLoadSvc is FALSE, this returns zero or noSuchValue."
::= { rsvpSenderEntry 42 }
rsvpSenderAdspecCtrlLoadMtu OBJECT-TYPE
SYNTAX INTEGER (0..65535)
UNITS "bytes"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
   "If rsvpSenderAdspecCtrlLoadSvc is TRUE, this is the service-specific override of the composed Maximum Transmission Unit general characterization parameter from the ADSPEC. A return of zero or noSuchValue indicates one of the following conditions:

   the invalid bit was set
   the parameter was not present

   If rsvpSenderAdspecCtrlLoadSvc is FALSE, this returns zero or noSuchValue."
::= { rsvpSenderEntry 43 }

rsvpSenderStatus OBJECT-TYPE
SYNTAX RowStatus
MAX-ACCESS read-create
STATUS current
DESCRIPTION
   "'active' for all active PATH messages. This object may be used to install static PATH information or delete PATH information."
::= { rsvpSenderEntry 44 }

rsvpSenderTTL OBJECT-TYPE
SYNTAX INTEGER (0..255)
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The TTL value in the RSVP header that was last received."
::= { rsvpSenderEntry 45 }
rsvpSenderOutInterfaceTable OBJECT-TYPE
SYNTAX SEQUENCE OF RsvpSenderOutInterfaceEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"List of outgoing interfaces that PATH messages
use. The ifIndex is the ifIndex value of the
egress interface."
 ::= { rsvpObjects 3 }

rsvpSenderOutInterfaceEntry OBJECT-TYPE
SYNTAX RsvpSenderOutInterfaceEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"List of outgoing interfaces that a particular
PATH message has."
INDEX { rsvpSessionNumber, rsvpSenderNumber, ifIndex }
 ::= { rsvpSenderOutInterfaceTable 1 }

RsvpSenderOutInterfaceEntry ::= SEQUENCE {
                  rsvpSenderOutInterfaceStatus RowStatus
            }

rsvpSenderOutInterfaceStatus OBJECT-TYPE
SYNTAX RowStatus
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"'active' for all active PATH messages."
 ::= { rsvpSenderOutInterfaceEntry 1 }
The RSVP Reservation Requests Received Table contains the information displayed by receivers regarding their needs with respect to sessions and senders. It is in essence a list of the valid RESV messages that the RSVP Router or Host is receiving.

**rsvpResvNewIndex** OBJECT-TYPE
SYNTAX TestAndIncr
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"This object is used to assign values to rsvpResvNumber as described in 'Textual Conventions for SNMPv2'. The network manager reads the object, and then writes the value back in the SET that creates a new instance of rsvpResvEntry. If the SET fails with the code 'inconsistentValue', then the process must be repeated; If the SET succeeds, then the object is incremented, and the new instance is created according to the manager’s directions."
 ::= { rsvpGenObjects 4 }

**rsvpResvTable** OBJECT-TYPE
SYNTAX SEQUENCE OF RsvpResvEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"Information describing the state information displayed by receivers in RESV messages."
 ::= { rsvpObjects 4 }

**rsvpResvEntry** OBJECT-TYPE
SYNTAX RsvpResvEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"Information describing the state information displayed by a single receiver’s RESV message concerning a single sender."
INDEX { rsvpSessionNumber, rsvpResvNumber }
 ::= { rsvpResvTable 1 }
RsvpResvEntry ::=  
   SEQUENCE {  
      rsvpResvNumber SessionNumber,  
      rsvpResvType  SessionType,  
      rsvpResvDestAddr OCTET STRING,  
      rsvpResvSenderAddr OCTET STRING,  
      rsvpResvDestAddrLength INTEGER,  
      rsvpResvSenderAddrLength INTEGER,  
      rsvpResvProtocol Protocol,  
      rsvpResvDestPort Port,  
      rsvpResvPort Port,  
      rsvpResvHopAddr OCTET STRING,  
      rsvpResvHopLih Integer32,  
      rsvpResvInterface InterfaceIndex,  
      rsvpResvService QosService,  
      rsvpResvTSpecRate BitRate,  
      rsvpResvTSpecPeakRate BitRate,  
      rsvpResvTSpecBurst BurstSize,  
      rsvpResvTSpecMinTU MessageSize,  
      rsvpResvTSpecMaxTU MessageSize,  
      rsvpResvRSpecRate BitRate,  
      rsvpResvRSpecSlack Integer12,  
      rsvpResvInterval RefreshInterval,  
      rsvpResvScope OCTET STRING,  
      rsvpResvShared TruthValue,  
      rsvpResvExplicit TruthValue,  
      rsvpResvRSVPHop TruthValue,  
      rsvpResvLastChange TimeStamp,  
      rsvpResvPolicy OCTET STRING,  
      rsvpResvStatus RowStatus,  
      rsvpResvTTL INTEGER,  
      rsvpResvFlowID INTEGER  
   }

rsvpResvNumber OBJECT-TYPE
   SYNTAX SessionNumber
   MAX-ACCESS not-accessible
   STATUS current
   DESCRIPTION "The number of this reservation request. This is for SNMP Indexing purposes only and has no relation to any protocol value."
   ::= { rsvpResvEntry 1 }
rsvpResvType OBJECT-TYPE
SYNTAX     SessionType
MAX-ACCESS read-create
STATUS     current
DESCRIPTION
   "The type of session (IP4, IP6, IP6 with flow
   information, etc)."
 ::= { rsvpResvEntry 2 }

rsvpResvDestAddr OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(4..16))
MAX-ACCESS read-create
STATUS     current
DESCRIPTION
   "The destination address used by all senders in
   this session. This object may not be changed
   when the value of the RowStatus object is 'ac-
   tive'."
 ::= { rsvpResvEntry 3 }

rsvpResvSenderAddr OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(4..16))
MAX-ACCESS read-create
STATUS     current
DESCRIPTION
   "The source address of the sender selected by
   this reservation. The value of all zeroes in-
   dicates ‘all senders’. This object may not be
   changed when the value of the RowStatus object
   is ‘active’." 
 ::= { rsvpResvEntry 4 }
rsvpResvDestAddrLength OBJECT-TYPE
SYNTAX INTEGER(0..128)
MAX-ACCESS read-create
STATUS current
DESCRIPTION "The length of the destination address in bits. This is the CIDR Prefix Length, which for IP4 hosts and multicast addresses is 32 bits. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvEntry 5 }

rsvpResvSenderAddrLength OBJECT-TYPE
SYNTAX INTEGER(0..128)
MAX-ACCESS read-create
STATUS current
DESCRIPTION "The length of the sender’s address in bits. This is the CIDR Prefix Length, which for IP4 hosts and multicast addresses is 32 bits. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvEntry 6 }

rsvpResvProtocol OBJECT-TYPE
SYNTAX Protocol
MAX-ACCESS read-create
STATUS current
DESCRIPTION "The IP Protocol used by this session. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvEntry 7 }

rsvpResvDestPort OBJECT-TYPE
SYNTAX Port
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The UDP or TCP port number used as a destination port for all senders in this session. If the IP protocol in use, specified by rsvpResvProtocol, is 50 (ESP) or 51 (AH), this represents a virtual destination port number. A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is ‘active’.”
::= { rsvpResvEntry 8 }

rsvpResvPort OBJECT-TYPE
SYNTAX Port
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The UDP or TCP port number used as a source port for this sender in this session. If the IP protocol in use, specified by rsvpResvProtocol is 50 (ESP) or 51 (AH), this represents a generalized port identifier (GPI). A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is ‘active’.”
::= { rsvpResvEntry 9 }

rsvpResvHopAddr OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(4..16))
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The address used by the next RSVP hop (which may be the ultimate receiver).”
::= { rsvpResvEntry 10 }
rsvpResvHopLih OBJECT-TYPE
  SYNTAX      Integer32
  MAX-ACCESS  read-create
  STATUS      current
  DESCRIPTION
               "The Logical Interface Handle received from the
               previous RSVP hop (which may be the ultimate
               receiver)."
 ::= { rsvpResvEntry 11 }

rsvpResvInterface OBJECT-TYPE
  SYNTAX      InterfaceIndex
  MAX-ACCESS  read-create
  STATUS      current
  DESCRIPTION
               "The ifIndex value of the interface on which
               this RESV message was most recently received."
 ::= { rsvpResvEntry 12 }

rsvpResvService OBJECT-TYPE
  SYNTAX      QosService
  MAX-ACCESS  read-create
  STATUS      current
  DESCRIPTION
               "The QoS Service classification requested by
               the receiver."
 ::= { rsvpResvEntry 13 }
rsipvTSpecRate OBJECT-TYPE
SYNTAX   BitRate
UNITS    "bits per second"
MAX-ACCESS  read-create
STATUS current
DESCRIPTION
 "The Average Bit Rate of the sender’s data stream. Within a transmission burst, the arrival rate may be as fast as rsipvTSpecPeakRate (if supported by the service model); however, averaged across two or more burst intervals, the rate should not exceed rsipvTSpecRate.

Note that this is a prediction, often based on the general capability of a type of codec or particular encoding; the measured average rate may be significantly lower."
::= { rsipvEntry 14 }

rsipvTSpecPeakRate OBJECT-TYPE
SYNTAX   BitRate
UNITS    "bits per second"
MAX-ACCESS  read-create
STATUS current
DESCRIPTION
 "The Peak Bit Rate of the sender’s data stream. Traffic arrival is not expected to exceed this rate at any time, apart from the effects of jitter in the network. If not specified in the TSpec, this returns zero or noSuchValue."
::= { rsipvEntry 15 }
rsvpResvTSpecBurst OBJECT-TYPE
SYNTAX  BurstSize
UNITS "bytes"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The size of the largest burst expected from
the sender at a time.

If this is less than the sender’s advertised
burst size, the receiver is asking the network
to provide flow pacing beyond what would be
provided under normal circumstances. Such pac-
ing is at the network’s option."
::= { rsvpResvEntry 16 }

rsvpResvTSpecMinTU OBJECT-TYPE
SYNTAX  MessageSize
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The minimum message size for this flow. The
policing algorithm will treat smaller messages
as though they are this size."
::= { rsvpResvEntry 17 }

rsvpResvTSpecMaxTU OBJECT-TYPE
SYNTAX  MessageSize
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The maximum message size for this flow. The
admission algorithm will reject TSpecs whose
Maximum Transmission Unit, plus the interface
headers, exceed the interface MTU."
::= { rsvpResvEntry 18 }
rsvpResvRSpecRate OBJECT-TYPE
SYNTAX      BitRate
UNITS       "bits per second"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "If the requested service is Guaranteed, as
  specified by rsvpResvService, this is the
  clearing rate that is being requested. Other-
  wise, it is zero, or the agent may return
  noSuchValue."
 ::= { rsvpResvEntry 19 }

rsvpResvRSpecSlack OBJECT-TYPE
SYNTAX      Integer32
UNITS       "microseconds"
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "If the requested service is Guaranteed, as
  specified by rsvpResvService, this is the delay
  slack. Otherwise, it is zero, or the agent may
  return noSuchValue."
 ::= { rsvpResvEntry 20 }

rsvpResvInterval OBJECT-TYPE
SYNTAX      RefreshInterval
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
  "The interval between refresh messages as ad-
  vertised by the Next Hop."
 ::= { rsvpResvEntry 21 }
rsvpResvScope OBJECT-TYPE
SYNTAX OCTET STRING (SIZE(0..65536))
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The contents of the scope object, displayed as an uninterpreted string of octets, including the object header. In the absence of such an object, this should be of zero length.

If the length is non-zero, this contains a series of IP4 or IP6 addresses."
 ::= { rsvpResvEntry 22 }

rsvpResvShared OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If TRUE, a reservation shared among senders is requested. If FALSE, a reservation specific to this sender is requested."
 ::= { rsvpResvEntry 23 }

rsvpResvExplicit OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If TRUE, individual senders are listed using Filter Specifications. If FALSE, all senders are implicitly selected. The Scope Object will contain a list of senders that need to receive this reservation request for the purpose of routing the RESV message."
 ::= { rsvpResvEntry 24 }
rsvpResvRSVPHop OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "If TRUE, the node believes that the previous
 IP hop is an RSVP hop. If FALSE, the node be-
 lieves that the previous IP hop may not be an
 RSVP hop." 
 ::= { rsvpResvEntry 25 }

rsvpResvLastChange OBJECT-TYPE
SYNTAX      TimeStamp
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
 "The time of the last change in this reserva-
 tion request; This is either the first time it
 was received or the time of the most recent
 change in parameters." 
 ::= { rsvpResvEntry 26 }

rsvpResvPolicy OBJECT-TYPE
SYNTAX      OCTET STRING (SIZE(0..65536))
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
 "The contents of the policy object, displayed
 as an uninterpreted string of octets, including
 the object header. In the absence of such an
 object, this should be of zero length." 
 ::= { rsvpResvEntry 27 }
rsvpResvStatus OBJECT-TYPE
SYNTAX RowStatus
MAX-ACCESS read-create
STATUS current
DESCRIPTION "'active' for all active RESV messages. This object may be used to install static RESV information or delete RESV information."
::= { rsvpResvEntry 28 }

rsvpResvTTL OBJECT-TYPE
SYNTAX INTEGER (0..255)
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The TTL value in the RSVP header that was last received."
::= { rsvpResvEntry 29 }

rsvpResvFlowId OBJECT-TYPE
SYNTAX INTEGER (0..16777215)
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The flow ID that this receiver is using, if this is an IPv6 session."
::= { rsvpResvEntry 30 }
The RSVP Reservation Requests Forwarded Table contains the information displayed by receivers regarding their needs with respect to sessions and senders. It is in essence a list of the valid RESV messages that the RSVP Router or Host is sending to its upstream neighbors.

rsvpResvFwdNewIndex OBJECT-TYPE
SYNTAX TestAndIncr
MAX-ACCESS read-write
STATUS current
DESCRIPTION
"This object is used to assign values to rsvpResvFwdNumber as described in 'Textual Conventions for SNMPv2'. The network manager reads the object, and then writes the value back in the SET that creates a new instance of rsvpResvFwdEntry. If the SET fails with the code 'inconsistentValue', then the process must be repeated; If the SET succeeds, then the object is incremented, and the new instance is created according to the manager’s directions.”
::= { rsvpGenObjects 5 }

rsvpResvFwdTable OBJECT-TYPE
SYNTAX SEQUENCE OF RsvpResvFwdEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"Information describing the state information displayed upstream in RESV messages.”
::= { rsvpObjects 5 }
rsvpResvFwdEntry OBJECT-TYPE
SYNTAX     RsvpResvFwdEntry
MAX-ACCESS not-accessible
STATUS     current
DESCRIPTION
    "Information describing the state information
    displayed upstream in an RESV message concern-
    ing a single sender."
INDEX ( rsvpSessionNumber, rsvpResvFwdNumber )
 ::=  { rsvpResvFwdTable 1 }
RsvpResvFwdEntry ::= SEQUENCE {
    rsvpResvFwdNumber SessionNumber,
    rsvpResvFwdType SessionType,
    rsvpResvFwdDestAddr OCTET STRING,
    rsvpResvFwdSenderAddr OCTET STRING,
    rsvpResvFwdDestAddrLength INTEGER,
    rsvpResvFwdSenderAddrLength INTEGER,
    rsvpResvFwdProtocol Protocol,
    rsvpResvFwdDestPort Port,
    rsvpResvFwdPort Port,
    rsvpResvFwdHopAddr OCTET STRING,
    rsvpResvFwdHopLih Integer32,
    rsvpResvFwdInterface InterfaceIndex,
    rsvpResvFwdService QosService,
    rsvpResvFwdTSpecRate BitRate,
    rsvpResvFwdTSpecPeakRate BitRate,
    rsvpResvFwdTSpecBurst BurstSize,
    rsvpResvFwdTSpecMinTU MessageSize,
    rsvpResvFwdTSpecMaxTU MessageSize,
    rsvpResvFwdRSpecRate BitRate,
    rsvpResvFwdRSpecSlack Integer32,
    rsvpResvFwdInterval RefreshInterval,
    rsvpResvFwdScope OCTET STRING,
    rsvpResvFwdShared TruthValue,
    rsvpResvFwdExplicit TruthValue,
    rsvpResvFwdRSVPHop TruthValue,
    rsvpResvFwdLastChange TimeStamp,
    rsvpResvFwdPolicy OCTET STRING,
    rsvpResvFwdStatus RowStatus,
    rsvpResvFwdTTL INTEGER,
    rsvpResvFwdFlowId INTEGER
}

rsvpResvFwdNumber OBJECT-TYPE
SYNTAX SessionNumber
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
"The number of this reservation request. This is for SNMP Indexing purposes only and has no relation to any protocol value."
::= { rsvpResvFwdEntry 1 }
rsrvResvFwdType OBJECT-TYPE
SYNTAX     SessionType
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The type of session (IP4, IP6, IP6 with flow
information, etc)."
::= { rsrvResvFwdEntry 2 }

rsrvResvFwdDestAddr OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(4..16))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The destination address used by all senders in
this session. This object may not be changed
when the value of the RowStatus object is ‘ac-
tive’.
"
::= { rsrvResvFwdEntry 3 }

rsrvResvFwdSenderAddr OBJECT-TYPE
SYNTAX     OCTET STRING (SIZE(4..16))
MAX-ACCESS read-only
STATUS     current
DESCRIPTION
"The source address of the sender selected by
this reservation. The value of all zeroes in-
dicates ‘all senders’. This object may not be
changed when the value of the RowStatus object
is ‘active’.
"
::= { rsrvResvFwdEntry 4 }
rsvpResvFwdDestAddrLength OBJECT-TYPE
SYNTAX      INTEGER(0..128)
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The length of the destination address in bits. This is the CIDR Prefix Length, which for IP4 hosts and multicast addresses is 32 bits. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvFwdEntry 5 }

rsvpResvFwdSenderAddrLength OBJECT-TYPE
SYNTAX      INTEGER(0..128)
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The length of the sender’s address in bits. This is the CIDR Prefix Length, which for IP4 hosts and multicast addresses is 32 bits. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvFwdEntry 6 }

rsvpResvFwdProtocol OBJECT-TYPE
SYNTAX      Protocol
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The IP Protocol used by a session. For secure sessions, this indicates IP Security. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvFwdEntry 7 }
rsvpResvFwdDestPort OBJECT-TYPE
SYNTAX       Port
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION  "The UDP or TCP port number used as a destination port for all senders in this session. If the IP protocol in use, specified by rsvpResvFwdProtocol, is 50 (ESP) or 51 (AH), this represents a virtual destination port number. A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvFwdEntry 8 }

rsvpResvFwdPort OBJECT-TYPE
SYNTAX       Port
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION  "The UDP or TCP port number used as a source port for this sender in this session. If the IP protocol in use, specified by rsvpResvFwdProtocol is 50 (ESP) or 51 (AH), this represents a generalized port identifier (GPI). A value of zero indicates that the IP protocol in use does not have ports. This object may not be changed when the value of the RowStatus object is 'active'."
::= { rsvpResvFwdEntry 9 }

rsvpResvFwdHopAddr OBJECT-TYPE
SYNTAX       OCTET STRING (SIZE(4..16))
MAX-ACCESS   read-only
STATUS       current
DESCRIPTION  "The address of the (previous) RSVP that will receive this message."
::= { rsvpResvFwdEntry 10 }

rsrvResvFwdHopLih OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The Logical Interface Handle sent to the (pre-
   vious) RSVP that will receive this message."
::= { rsrvResvFwdEntry 11 }

rsrvResvFwdInterface OBJECT-TYPE
SYNTAX InterfaceIndex
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The ifIndex value of the interface on which
   this RESV message was most recently sent."
::= { rsrvResvFwdEntry 12 }

rsrvResvFwdService OBJECT-TYPE
SYNTAX QosService
MAX-ACCESS read-only
STATUS current
DESCRIPTION
   "The QoS Service classification requested."
::= { rsrvResvFwdEntry 13 }
rsvpResvFwdTSpecRate OBJECT-TYPE
SYNTAX      BitRate
UNITS       "bits per second"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
 "The Average Bit Rate of the sender's data stream. Within a transmission burst, the arrival rate may be as fast as rsvpResvFwdTSpecPeakRate (if supported by the service model); however, averaged across two or more burst intervals, the rate should not exceed rsvpResvFwdTSpecRate.

Note that this is a prediction, often based on the general capability of a type of codec or particular encoding; the measured average rate may be significantly lower."
::= { rsvpResvFwdEntry 14 }

rsvpResvFwdTSpecPeakRate OBJECT-TYPE
SYNTAX      BitRate
UNITS       "bits per second"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
 "The Peak Bit Rate of the sender's data stream. Traffic arrival is not expected to exceed this rate at any time, apart from the effects of jitter in the network. If not specified in the TSpec, this returns zero or noSuchValue."
::= { rsvpResvFwdEntry 15 }
rsvpResvFwdTSpecBurst OBJECT-TYPE
SYNTAX BurstSize
UNITS "bytes"
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The size of the largest burst expected from
the sender at a time.

If this is less than the sender’s advertised
burst size, the receiver is asking the network
to provide flow pacing beyond what would be
provided under normal circumstances. Such pac-
ing is at the network’s option."
::= { rsvpResvFwdEntry 16 }

rsvpResvFwdTSpecMinTU OBJECT-TYPE
SYNTAX MessageSize
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The minimum message size for this flow. The
policing algorithm will treat smaller messages
as though they are this size."
::= { rsvpResvFwdEntry 17 }

rsvpResvFwdTSpecMaxTU OBJECT-TYPE
SYNTAX MessageSize
MAX-ACCESS read-only
STATUS current
DESCRIPTION
"The maximum message size for this flow. The
admission algorithm will reject TSpecs whose
Maximum Transmission Unit, plus the interface
headers, exceed the interface MTU."
::= { rsvpResvFwdEntry 18 }
rsppvResvFwdRSpecRate OBJECT-TYPE
SYNTAX      BitRate
UNITS       "bytes per second"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"If the requested service is Guaranteed, as specified by rsvpResvService, this is the clearing rate that is being requested. Otherwise, it is zero, or the agent may return noSuchValue."
::= { rsvpResvFwdEntry 19 }

rsppvResvFwdRSpecSlack OBJECT-TYPE
SYNTAX      Integer32
UNITS       "microseconds"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"If the requested service is Guaranteed, as specified by rsvpResvService, this is the delay slack. Otherwise, it is zero, or the agent may return noSuchValue."
::= { rsvpResvFwdEntry 20 }

rsppvResvFwdInterval OBJECT-TYPE
SYNTAX      RefreshInterval
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
"The interval between refresh messages advertised to the Previous Hop."
::= { rsvpResvFwdEntry 21 }
rsvpResvFwdScope OBJECT-TYPE
SYNTAX      OCTET STRING (SIZE(0..65536))
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "The contents of the scope object, displayed as an uninterpreted string of octets, including the object header. In the absence of such an object, this should be of zero length."
::= { rsvpResvFwdEntry 22 }

rsvpResvFwdShared OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "If TRUE, a reservation shared among senders is requested. If FALSE, a reservation specific to this sender is requested."
::= { rsvpResvFwdEntry 23 }

rsvpResvFwdExplicit OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION  "If TRUE, individual senders are listed using Filter Specifications. If FALSE, all senders are implicitly selected. The Scope Object will contain a list of senders that need to receive this reservation request for the purpose of routing the RESV message."
::= { rsvpResvFwdEntry 24 }
rsvpResvFwdRSVPHop OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
  "If TRUE, the node believes that the next IP hop is an RSVP hop. If FALSE, the node believes that the next IP hop may not be an RSVP hop."
::= { rsvpResvFwdEntry 25 }

rsvpResvFwdLastChange OBJECT-TYPE
SYNTAX      TimeStamp
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
  "The time of the last change in this request; This is either the first time it was sent or the time of the most recent change in parameters."
::= { rsvpResvFwdEntry 26 }

rsvpResvFwdPolicy OBJECT-TYPE
SYNTAX      OCTET STRING (SIZE(0..65536))
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
  "The contents of the policy object, displayed as an uninterpreted string of octets, including the object header. In the absence of such an object, this should be of zero length."
::= { rsvpResvFwdEntry 27 }

rsvpResvFwdStatus OBJECT-TYPE
SYNTAX      RowStatus
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
  "'active' for all active RESV messages. This object may be used to delete RESV information."
::= { rsvpResvFwdEntry 28 }

rsvpResvFwdTTL OBJECT-TYPE
  SYNTAX        INTEGER (0..255)
  MAX-ACCESS   read-only
  STATUS       current
  DESCRIPTION  
    "The TTL value in the RSVP header that was last received."
  ::= { rsvpResvFwdEntry 29 }

rsvpResvFwdFlowId OBJECT-TYPE
  SYNTAX        INTEGER (0..16777215)
  MAX-ACCESS   read-only
  STATUS       current
  DESCRIPTION  
    "The flow ID that this receiver is using, if this is an IPv6 session."
  ::= { rsvpResvFwdEntry 30 }
The RSVP Interface Attributes Database contains the RSVP-specific information for an interface. Information that is shared with other reservation procedures such as ST-II is in the Integrated Interface Attributes Database.

rsvpIfTable OBJECT-TYPE
SYNTAX      SEQUENCE OF RsvpIfEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "The RSVP-specific attributes of the system’s interfaces."
::= { rsvpObjects 6 }

rsvpIfEntry OBJECT-TYPE
SYNTAX      RsvpIfEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
   "The RSVP-specific attributes of the a given interface."
INDEX { ifIndex }
::= { rsvpIfTable 1 }

RsvpIfEntry ::= 
  SEQUENCE {
    rsvpIfUdpNbrs                       Gauge32,
    rsvpIfIpNbrs                        Gauge32,
    rsvpIfNbrs                          Gauge32,
    rsvpIfEnabled                       TruthValue,
    rsvpIfUdpRequired                   TruthValue,
    rsvpIfRefreshBlockadeMultiple       INTEGER,
    rsvpIfRefreshMultiple               INTEGER,
    rsvpIfTTL                           INTEGER,
    rsvpIfRefreshInterval               TimeInterval,
    rsvpIfRouteDelay                    TimeInterval,
    rsvpIfStatus                        RowStatus
  }
rsvpIfUdpNbrs OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of neighbors perceived to be using only the RSVP UDP Encapsulation."
::= { rsvpIfEntry 1 }

rsvpIfIpNbrs OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of neighbors perceived to be using only the RSVP IP Encapsulation."
::= { rsvpIfEntry 2 }

rsvpIfNbrs OBJECT-TYPE
SYNTAX Gauge32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The number of neighbors currently perceived; this will exceed rsvpIfIpNbrs + rsvpIfUdpNbrs by the number of neighbors using both encapsulations."
::= { rsvpIfEntry 3 }

rsvpIfRefreshBlockadeMultiple OBJECT-TYPE
SYNTAX INTEGER (1..65536)
MAX-ACCESS read-create
STATUS current
DESCRIPTION "The value of the RSVP value 'Kb', Which is the minimum number of refresh intervals that blockade state will last once entered."
DEFVAL { 4 }
::= { rsvpIfEntry 4 }
rsvpIfRefreshMultiple OBJECT-TYPE
SYNTAX INTEGER (1..65536)
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The value of the RSVP value ‘K’, which is the
number of refresh intervals which must elapse
(minimum) before a PATH or RESV message which
is not being refreshed will be aged out."
DEFVAL { 3 }
 ::= { rsvpIfEntry 5 }

rsvpIfTTL OBJECT-TYPE
SYNTAX INTEGER (0..255)
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The value of SEND_TTL used on this interface
for messages this node originates. If set to
zero, the node determines the TTL via other
means."
DEFVAL { 0 } -- which is to say, no override
 ::= { rsvpIfEntry 6 }

rsvpIfRefreshInterval OBJECT-TYPE
SYNTAX TimeInterval
UNITS "milliseconds"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The value of the RSVP value ‘R’, which is the
minimum period between refresh transmissions of
a given PATH or RESV message on an interface."
DEFVAL { 3000 } -- 30 seconds
 ::= { rsvpIfEntry 7 }
rsnvIfRouteDelay OBJECT-TYPE
SYNTAX TimeInterval
UNITS "hundredths of a second"
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"The approximate period from the time a route is changed to the time a resulting message appears on the interface."
DEFVAL { 200 } -- 2 seconds
::= { rsvpIfEntry 8 }

rsnvIfEnabled OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If TRUE, RSVP is enabled on this Interface. If FALSE, RSVP is not enabled on this interface."
::= { rsvpIfEntry 9 }

rsnvIfUdpRequired OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION
"If TRUE, manual configuration forces the use of UDP encapsulation on the interface. If FALSE, UDP encapsulation is only used if rsvpIfUdpNbrs is not zero."
::= { rsvpIfEntry 10 }
rsvpIfStatus OBJECT-TYPE
SYNTAX         RowStatus
MAX-ACCESS     read-create
STATUS         current
DESCRIPTION    "'active' on interfaces that are configured for RSVP."
::= { rsvpIfEntry 11 }
The RSVP Neighbor Database lists the neighbors the RSVP process currently is receiving messages from.

rsvpNbrTable OBJECT-TYPE
SYNTAX      SEQUENCE OF RsvpNbrEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION  "Information describing the Neighbors of an RSVP system."
::= { rsvpObjects 7 }

rsvpNbrEntry OBJECT-TYPE
SYNTAX      RsvpNbrEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION  "Information describing a single RSVP Neighbor."
INDEX { ifIndex, rsvpNbrAddress }
::= { rsvpNbrTable 1 }

RsvpNbrEntry ::= SEQUENCE {
    rsvpNbrAddress OCTET STRING,
    rsvpNbrProtocol RsvpEncapsulation,
    rsvpNbrStatus RowStatus
}

rsvpNbrAddress OBJECT-TYPE
SYNTAX      OCTET STRING (SIZE(4..16))
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION  "The IP4 or IP6 Address used by this neighbor. This object may not be changed when the value of the RowStatus object is ‘active’."
::= { rsvpNbrEntry 1 }
rsvpNbrProtocol OBJECT-TYPE
  SYNTAX   RsvpEncapsulation
  MAX-ACCESS read-create
  STATUS   current
  DESCRIPTION
    "The encapsulation being used by this neighbor."
 ::= { rsvpNbrEntry 2 }

rsvpNbrStatus OBJECT-TYPE
  SYNTAX   RowStatus
  MAX-ACCESS read-create
  STATUS   current
  DESCRIPTION
    "'active' for all neighbors. This object may be used to configure neighbors. In the presence of configured neighbors, the implementation may (but is not required to) limit the set of valid neighbors to those configured."
 ::= { rsvpNbrEntry 3 }
Notifications used to signal events

rsvpNotifications OBJECT IDENTIFIER ::= { rsvpNotificationsPrefix 0 }

newFlow NOTIFICATION-TYPE
OBJECTS {
    intSrvFlowStatus, rsvpSessionDestAddr,
    rsvpResvFwdStatus, rsvpResvStatus, rsvpSenderStatus
}
STATUS current
DESCRIPTION
"The newFlow trap indicates that the originating system has installed a new
flow in its classifier, or (when reservation authorization is in view) is prepared
to install such a flow in the classifier and is requesting authorization.
The objects included with the Notification may be used to read further
information using the Integrated Services and RSVP MIBs. Authorization or
non-authorization may be enacted by a write to the variable intSrvFlowStatus."
 ::= { rsvpNotifications 1 }

lostFlow NOTIFICATION-TYPE
OBJECTS {
    intSrvFlowStatus, rsvpSessionDestAddr,
    rsvpResvFwdStatus, rsvpResvStatus, rsvpSenderStatus
}
STATUS current
DESCRIPTION
"The lostFlow trap indicates that the originating system has removed a flow
from its classifier."
 ::= { rsvpNotifications 2 }
-- conformance information

rsvpGroups OBJECT IDENTIFIER ::= { rsvpConformance 1 }
rsvpCompliances OBJECT IDENTIFIER ::= { rsvpConformance 2 }

-- compliance statements
rsvpCompliance MODULE-COMPLIANCE
STATUS current
DESCRIPTION
"The compliance statement. Note that the implementation of this module requires implementation of the Integrated Services MIB as well."

MODULE -- this module
MANDATORY-GROUPS {
    rsvpSessionGroup, rsvpSenderGroup, rsvpResvGroup, rsvpIfGroup, rsvpNbrGroup,
    rsvpGenObjectsGroup, rsvpSenderOutInterfaceGroup
}

GROUP rsvpResvFwdGroup
DESCRIPTION
"The Reservation Requests table is appropriate in implementations that store upstream reservation messages, but not appropriate in implementations which calculate them on each transmission."

GROUP rsvpNotificationGroup
DESCRIPTION
"The notifications in this module may be used to advise a network management station of changes in flow status, and are required when this use is in view."

OBJECT rsvpSessionRequests
MIN-ACCESS not-accessible
DESCRIPTION
"This object is optional."

OBJECT rsvpSenderType
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderDestAddr
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."
OBJECT       rsvpSenderAddr
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderDestAddrLength
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderAddrLength
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderProtocol
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderDestPort
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderPort
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderHopAddr
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be 
read-only."

OBJECT       rsvpSenderHopLih
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderInterface
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderTSpecRate
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderTSpecPeakRate
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderTSpecBurst
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderTSpecMinTU
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderTSpecMaxTU
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpSenderInterval
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."
OBJECT       rsvpSenderRSVPHop
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderPolicy
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderAdspecBreak
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderAdspecHopCount
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderAdspecPathBw
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderAdspecMinLatency
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderAdspecMtu
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT       rsvpSenderAdspecGuaranteedSvc
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedBreak
MIN-ACCESS not-accessible
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedCtot
MIN-ACCESS not-accessible
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedDtot
MIN-ACCESS not-accessible
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedCsum
MIN-ACCESS not-accessible
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedDsum
MIN-ACCESS read-only
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedHopCount
MIN-ACCESS not-accessible
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedPathBw
MIN-ACCESS not-accessible
DESCRIPTION  "This may be not-accessible if the system does not support Guaranteed Service."
OBJECT       rsvpSenderAdspecGuaranteedMinLatency
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Guaranteed Service."

OBJECT       rsvpSenderAdspecGuaranteedMtu
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Guaranteed Service."

OBJECT       rsvpSenderAdspecCtrlLoadSvc
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Controlled Load."

OBJECT       rsvpSenderAdspecCtrlLoadBreak
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Controlled Load."

OBJECT       rsvpSenderAdspecCtrlLoadHopCount
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Controlled Load."

OBJECT       rsvpSenderAdspecCtrlLoadPathBw
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Controlled Load."

OBJECT       rsvpSenderAdspecCtrlLoadMinLatency
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not
support Controlled Load."

OBJECT       rsvpSenderAdspecCtrlLoadMtu
MIN-ACCESS not-accessible
DESCRIPTION
"This may be not-accessible if the system does not support Controlled Load."

OBJECT           rsvpSenderStatus
MIN-ACCESS       read-only
DESCRIPTION      "read-create access is not required. This may be read-only."

OBJECT           rsvpSenderFlowId
MIN-ACCESS       not-accessible
DESCRIPTION      "This object is needed only in a system that implements IPv6."

OBJECT           rsvpResvType
MIN-ACCESS       read-only
DESCRIPTION      "read-create access is not required. This may be read-only."

OBJECT           rsvpResvDestAddr
MIN-ACCESS       read-only
DESCRIPTION      "read-create access is not required. This may be read-only."

OBJECT           rsvpResvSenderAddr
MIN-ACCESS       read-only
DESCRIPTION      "read-create access is not required. This may be read-only."

OBJECT           rsvpResvDestAddrLength
MIN-ACCESS       read-only
DESCRIPTION      "read-create access is not required. This may be read-only."

OBJECT           rsvpResvSenderAddrLength
MIN-ACCESS       read-only
DESCRIPTION      "read-create access is not required. This may be read-only."
OBJECT       rsvpResvProtocol
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvDestPort
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvPort
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvHopAddr
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvHopLih
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvInterface
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvService
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
read-only."

OBJECT       rsvpResvTSpecRate
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvTSpecPeakRate
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvTSpecBurst
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvTSpecMinTU
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvTSpecMaxTU
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvRSpecRate
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvRSpecSlack
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT rsvpResvInterval
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."
OBJECT   rsvpResvScope
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT   rsvpResvShared
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT   rsvpResvExplicit
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT   rsvpResvRSVPHop
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT   rsvpResvPolicy
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT   rsvpResvStatus
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be read-only."

OBJECT   rsvpResvFlowId
MIN-ACCESS not-accessible
DESCRIPTION
"This object is needed only in a system that imple-
ments IPv6."

OBJECT   rsvpResvFwdStatus
MIN-ACCESS read-only
DESCRIPTION
"read-create access is not required. This may be
OBJECT       rsvpResvFwdFlowId
MIN-ACCESS not-accessible
DESCRIPTION
  "This object is needed only in a system that imple-
  ments IPv6."
::= { rsvpCompliances 1 }

rsvpSessionGroup OBJECT-GROUP
OBJECTS {
  rsvpSessionType, rsvpSessionDestAddr,
  rsvpSessionDestAddrLength, rsvpSessionProtocol,
  rsvpSessionPort, rsvpSessionSenders, rsvpSessionReceivers,
  rsvpSessionRequests, rsvpSessionNewIndex
}
STATUS  current
DESCRIPTION
  "These objects are required for RSVP Systems."
::= { rsvpGroups 1 }
rsvpSenderGroup OBJECT-GROUP
OBJECTS {
  rsvpSenderType, rsvpSenderDestAddr, rsvpSenderAddr,
  rsvpSenderDestAddrLength, rsvpSenderAddrLength,
  rsvpSenderProtocol, rsvpSenderDestPort, rsvpSenderPort,
  rsvpSenderFlowId, rsvpSenderTTL,
  rsvpSenderHopAddr, rsvpSenderHopLih, rsvpSenderInterface,
  rsvpSenderTSpecRate, rsvpSenderTSpecPeakRate,
  rsvpSenderTSpecBurst, rsvpSenderTSpecMinTU,
  rsvpSenderTSpecMaxTU, rsvpSenderInterval, rsvpSenderLastChange,
  rsvpSenderStatus, rsvpSenderRSVPHop, rsvpSenderPolicy,
  rsvpSenderAdspecBreak, rsvpSenderAdspecHopCount,
  rsvpSenderAdspecPathBw, rsvpSenderAdspecMinLatency,
  rsvpSenderAdspecMtu, rsvpSenderAdspecGuaranteedSvc,
  rsvpSenderAdspecGuaranteedBreak,
  rsvpSenderAdspecGuaranteedCtot, rsvpSenderAdspecGuaranteedDtot,
  rsvpSenderAdspecGuaranteedCsum, rsvpSenderAdspecGuaranteedDsum,
  rsvpSenderAdspecGuaranteedHopCount,
  rsvpSenderAdspecGuaranteedPathBw,
  rsvpSenderAdspecGuaranteedMinLatency,
  rsvpSenderAdspecGuaranteedMtu, rsvpSenderAdspecCtrlLoadSvc,
  rsvpSenderAdspecCtrlLoadBreak,
  rsvpSenderAdspecCtrlLoadHopCount,
  rsvpSenderAdspecCtrlLoadPathBw,
  rsvpSenderAdspecCtrlLoadMinLatency,
  rsvpSenderAdspecCtrlLoadMtu, rsvpSenderNewIndex
}
STATUS current
DESCRIPTION
"These objects are required for RSVP Systems."
::= { rsvpGroups 2 }
rsipvResvGroup OBJECT-GROUP
OBJECTS {
    rsipvResvType, rsipvResvDestAddr, rsipvResvSenderAddr,
    rsipvResvDestAddrLength, rsipvResvSenderAddrLength,
    rsipvResvProtocol, rsipvResvDestPort, rsipvResvPort,
    rsipvResvHopAddr, rsipvResvHopLih, rsipvResvInterface,
    rsipvResvService, rsipvResvTSpecRate, rsipvResvTSpecBurst,
    rsipvResvTSpecPeakRate, rsipvResvTSpecMinTU, rsipvResvTSpecMaxTU,
    rsipvResvRSpecRate, rsipvResvRSpecSlack, rsipvResvInterval,
    rsipvResvScope, rsipvResvShared, rsipvResvExplicit,
    rsipvResvRSVPHop, rsipvResvLastChange, rsipvResvPolicy,
    rsipvResvStatus, rsipvResvNewIndex, rsipvResvTTL, rsipvResvFlowId
}
STATUS current
DESCRIPTION
    "These objects are required for RSVP Systems."
::= { rsipvGroups 3 }

rsipvResvFwdGroup OBJECT-GROUP
OBJECTS {
    rsipvResvFwdType, rsipvResvFwdDestAddr, rsipvResvFwdSenderAddr,
    rsipvResvFwdDestAddrLength, rsipvResvFwdSenderAddrLength,
    rsipvResvFwdProtocol, rsipvResvFwdDestPort, rsipvResvFwdPort,
    rsipvResvFwdHopAddr, rsipvResvFwdHopLih, rsipvResvFwdInterface,
    rsipvResvFwdNewIndex, rsipvResvFwdService,
    rsipvResvFwdTSpecPeakRate, rsipvResvFwdTSpecMinTU,
    rsipvResvFwdTSpecMaxTU, rsipvResvFwdTSpecRate,
    rsipvResvFwdTSpecBurst, rsipvResvFwdRSpecRate,
    rsipvResvFwdRSpecSlack, rsipvResvFwdInterval, rsipvResvFwdScope,
    rsipvResvFwdShared, rsipvResvFwdExplicit, rsipvResvFwdRSVPHop,
    rsipvResvFwdLastChange, rsipvResvFwdPolicy, rsipvResvFwdStatus,
    rsipvResvFwdTTL, rsipvResvFwdFlowId
}
STATUS current
DESCRIPTION
    "These objects are optional, used for some RSVP Systems."
::= { rsipvGroups 4 }
rsvpIfGroup OBJECT-GROUP
  OBJECTS {
    rsvpIfUdpNbrs, rsvpIfIpNbrs, rsvpIfNbrs, rssvpIfEnabled,
    rsvpIfUdpRequired, rssvpIfRefreshBlockadeMultiple,
    rssvpIfRefreshMultiple, rssvpIfRefreshInterval, rssvpIfTTL,
    rssvpIfRouteDelay, rssvpIfStatus
  }
  STATUS current
  DESCRIPTION
    "These objects are required for RSVP Systems."
  ::= { rsvpGroups 5 }

rsvpNbrGroup OBJECT-GROUP
  OBJECTS {
    rssvpNbrProtocol, rssvpNbrStatus
  }
  STATUS current
  DESCRIPTION
    "These objects are required for RSVP Systems."
  ::= { rsvpGroups 6 }

rssvpGenObjectsGroup OBJECT-GROUP
  OBJECTS {
    rssvpBadPackets
  }
  STATUS current
  DESCRIPTION
    "This objects are required for RSVP Systems."
  ::= { rsvpGroups 7 }

rssvpSenderOutInterfaceGroup OBJECT-GROUP
  OBJECTS {
    rssvpSenderOutInterfaceStatus
  }
  STATUS current
  DESCRIPTION
    "These objects are required for RSVP Systems."
  ::= { rsvpGroups 8 }
rsvpNotificationGroup NOTIFICATION-GROUP
   NOTIFICATIONS ( newFlow, lostFlow )
   STATUS  current
   DESCRIPTION
      "This notification is required for Systems sup-
      porting the RSVP Policy Module using an SNMP
      interface to the Policy Manager."
   ::= { rsvpGroups 9 }

END
6. Security Issues

The use of an SNMP SET results in an RSVP or Integrated Services reservation under rules that are different compared to if the reservation was negotiated using RSVP. However, no other security considerations exist other than those imposed by SNMP itself.

7. Authors’ Addresses

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9. References


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