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Party MIB for Version 2 of the Simple Network Management Protocol (SNMPv2)

19 March 1995

draft-ietf-snmpv2-party-ds-01.txt

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<u>1</u>. Introduction

A management system contains: several (potentially many) nodes, each with a processing entity, termed an agent, which has access to management instrumentation; at least one management station; and, a management protocol, used to convey management information between the agents and management stations. Operations of the protocol are carried out under an administrative framework which defines authentication, authorization, access control, and privacy policies.

Management stations execute management applications which monitor and control managed elements. Managed elements are devices such as hosts, routers, terminal servers, etc., which are monitored and controlled via access to their management information.

Management information is viewed as a collection of managed objects, residing in a virtual information store, termed the Management Information Base (MIB). Collections of related objects are defined in MIB modules. These modules are written using a subset of OSI's Abstract Syntax Notation One (ASN.1) [1], termed the Structure of Management Information (SMI) [2].

The Administrative Infrastructure for SNMPv2 document [3] defines the properties associated with SNMPv2 parties, SNMPv2 contexts, and access control policies. It is the purpose of this document, the Party MIB for SNMPv2, to define managed objects which correspond to these properties.

<u>1.1</u>. A Note on Terminology

For the purpose of exposition, the original Internet-standard Network Management Framework, as described in RFCs 1155, 1157, and 1212, is termed the SNMP version 1 framework (SNMPv1). The current framework is termed the SNMP version 2 framework (SNMPv2).

<u>1.2</u>. Change Log

For the 19 March version:						+
- The	many changes	adonted by	the	SNMPv2 Working	Group	+

For the 1 November version:

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- recast <u>RFC 1447</u> into an Internet-Draft,
- fixed typos,
- added snmpUDPDomain to the IMPORTS clause,
- added descriptive text for the initial Context conventions,
- added text to the DESCRIPTIONs of partyStatus, contextStatus, acStatus, and viewStatus, specifying that columnar objects can be modified without having to set the status column to 'notInService',
- added clarifying text to the DESCRIPTIONs of contextLocal, contextLocalEntity, contextProxySrcParty, contextProxyDstParty, contextProxyContext, and contextStatus,
- removed auxiliary objects from the definition of partyMIBGroup.

Internet Draft

2. Definitions

```
SNMPv2-PARTY-MIB DEFINITIONS ::= BEGIN
IMPORTS
    MODULE-IDENTITY, OBJECT-IDENTITY, OBJECT-TYPE, snmpModules,
    UInteger32, zeroDotZero
        FROM SNMPv2-SMI
    snmpUDPDomain
        FROM SNMPv2-TM
    TEXTUAL-CONVENTION, RowStatus, TruthValue
       FROM SNMPv2-TC
    MODULE-COMPLIANCE, OBJECT-GROUP
       FROM SNMPv2-CONF;
partyMIB MODULE-IDENTITY
    LAST-UPDATED "9503190000Z"
                                                                           ORGANIZATION "IETF SNMPv2 Working Group"
    CONTACT-INFO
            н
                     Keith McCloghrie
             Postal: Cisco Systems, Inc.
                     170 West Tasman Drive
                     San Jose, CA 95134-1706
                     USA
             Phone: +1 408 526 5260
             Email: kzm@cisco.com"
    DESCRIPTION
            "The MIB module describing SNMPv2 parties."
    REVISION
                 "9104300000Z"
                                                                           +
    DESCRIPTION
                                                                           +
            "The initial revision of this MIB module was published as
                                                                           +
            RFC 1447."
                                                                           +
    ::= { snmpModules 3 }
```

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-- textual conventions

Party ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

"Denotes a SNMPv2 party identifier.

Note that agents may impose implementation limitations on the length of OIDs used to identify Parties. As such, management stations creating new parties should be aware that using an excessively long OID may result in the agent refusing to perform the set operation and instead returning the appropriate error response, e.g., noCreation."

SYNTAX OBJECT IDENTIFIER

TAddress ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

"Denotes a transport service address.

For snmpUDPDomain, a TAddress is 6 octets long, the initial 4 octets containing the IP-address in network-byte order and the last 2 containing the UDP port in network-byte order. Consult [5] for further information on snmpUDPDomain." OCTET STRING

SYNTAX OCTE

Clock ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

"A party's authentication clock - a non-negative integer which is incremented as specified/allowed by the party's Authentication Protocol.

For noAuth, a party's authentication clock is unused and its value is undefined.

```
For v2md5AuthProtocol, a party's authentication clock is a
relative clock with 1-second granularity."
SYNTAX UInteger32 (0..2147483647)
```

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Context ::= TEXTUAL-CONVENTION STATUS current DESCRIPTION "Denotes a SNMPv2 context identifier. Note that agents may impose implementation limitations on the length of OIDs used to identify Contexts. As such, management stations creating new contexts should be aware that using an excessively long OID may result in the agent refusing to perform the set operation and instead returning the appropriate error response, e.g., noCreation." SYNTAX **OBJECT IDENTIFIER** AccessPrivileges ::= TEXTUAL-CONVENTION STATUS current DESCRIPTION "A set of access privileges which specify the authorized set of management operations between two SNMPv2 entities. These privileges are specified as a sum of values, where each value specifies a SNMPv2 PDU type by which the subject party may request a permitted operation. The value for a particular PDU type is computed as 2 raised to the value of the ASN.1 context-specific tag for the appropriate SNMPv2 PDU type. The values (for the tags defined in [5]) are defined in $[\underline{3}]$ as: Get 1 1 GetNext : 2 Response 4 : Set 8 : unused : 16 GetBulk : 32 Inform : 64 SNMPv2-Trap : 128

The null set is represented by the value zero." SYNTAX INTEGER (0..255)

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```
StorageType ::= TEXTUAL-CONVENTION
    STATUS
                current
    DESCRIPTION
           "Describes the memory realization of a conceptual row. A
           row which is volatile(2) is lost upon reboot. A row which
           is either nonVolatile(3), permanent(4) or readOnly(5), is
           backed up by stable storage. A row which is permanent(4)
           can be changed but not deleted. A row which is readOnly(5)
           cannot be changed nor deleted.
           If the value of an object with this syntax is either
           permanent(4) or readOnly(5), it cannot be modified.
           Conversely, if the value is either other(1), volatile(2) or
           nonVolatile(3), it cannot be modified to be permanent(4) or
            readOnly(5).
           Every usage of this textual convention is required to
            specify the columnar objects which a permanent(4) row must
           at a minimum allow to be writable."
    SYNTAX
                INTEGER {
                    other(1),
                                    -- eh?
                    volatile(2),
                                   -- e.g., in RAM
                    nonVolatile(3), -- e.g., in NVRAM
                    permanent(4), -- e.g., partially in ROM
                    readOnly(5)
                                  -- e.g., completely in ROM
                }
```

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```
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                         Party MIB for SNMPv2
-- administrative assignments
partyAdmin OBJECT IDENTIFIER ::= { partyMIB 1 }
-- definitions of security protocols
partyProtocols OBJECT IDENTIFIER ::= { partyAdmin 1 }
noAuth
              OBJECT-IDENTITY
   STATUS
              current
   DESCRIPTION
           "The protocol without authentication."
    ::= { partyProtocols 1 }
noPriv
              OBJECT-IDENTITY
   STATUS
              current
   DESCRIPTION
           "The protocol without privacy."
    ::= { partyProtocols 2 }
-- defined in [4]
desPrivProtocol OBJECT-IDENTITY
   STATUS
              current
   DESCRIPTION
           "The DES Privacy Protocol."
    ::= { partyProtocols 3 }
-- defined in [4]
v2md5AuthProtocol OBJECT-IDENTITY
   STATUS
              current
   DESCRIPTION
           "The MD5 Authentication Protocol."
    ::= { partyProtocols 4 }
```

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```
Internet Draft
                          Party MIB for SNMPv2
                                                              March 1995
-- definitions of temporal domains
temporalDomains
               OBJECT IDENTIFIER ::= { partyAdmin 2 }
               OBJECT-IDENTITY
currentTime
    STATUS
               current
    DESCRIPTION
            "The temporal domain which refers to management information
            at the current time."
    ::= { temporalDomains 1 }
               OBJECT-IDENTITY
restartTime
    STATUS
               current
    DESCRIPTION
            "The temporal domain which refers to management information
            upon the next re-initialization of the managed device."
    ::= { temporalDomains 2 }
               OBJECT-IDENTITY
cacheTime
    STATUS
               current
    DESCRIPTION
            "The prefix for temporal domains which refer to management
            information that is cached. In particular, the temporal
            domain:
                { cacheTime N }
            and guaranteed to be at most N seconds old."
    ::= { temporalDomains 3 }
```

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```
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                        Party MIB for SNMPv2
                                                             March 1995
-- object assignments
partyMIBObjects
              OBJECT IDENTIFIER ::= { partyMIB 2 }
-- SNMPv2 party information
                                                                         I
snmpParties OBJECT IDENTIFIER ::= { partyMIBObjects 1 }
partyTable OBJECT-TYPE
   SYNTAX
               SEQUENCE OF PartyEntry
   MAX-ACCESS not-accessible
   STATUS
               current
   DESCRIPTION
           "The SNMPv2 Party database."
   ::= { snmpParties 1 }
partyEntry OBJECT-TYPE
   SYNTAX
             PartyEntry
   MAX-ACCESS not-accessible
   STATUS
             current
   DESCRIPTION
           "Locally held information about a particular SNMPv2 party."
              { IMPLIED partyIdentity }
   INDEX
    ::= { partyTable 1 }
```

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PartyEntry ::= SEQUENCE { partyIdentity Party, partyIndex INTEGER, partyTDomain OBJECT IDENTIFIER, partyTAddress TAddress, partyMaxMessageSize INTEGER, partyLocal TruthValue, **OBJECT IDENTIFIER**, partyAuthProtocol partyAuthClock Clock, partyAuthPrivate OCTET STRING, partyAuthPublic OCTET STRING, partyAuthLifetime INTEGER, partyPrivProtocol **OBJECT IDENTIFIER**, partyPrivPrivate OCTET STRING, partyPrivPublic OCTET STRING, partyCloneFrom Party, partyStorageType StorageType, partyStatus RowStatus, partyAuthChange OCTET STRING, partyPrivChange OCTET STRING } partyIdentity OBJECT-TYPE SYNTAX Party MAX-ACCESS not-accessible current STATUS DESCRIPTION "A party identifier uniquely identifying a particular SNMPv2 party. This object is prohibited from taking the value { 0 0 }."

```
::= { partyEntry 1 }
```

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```
partyIndex OBJECT-TYPE
    SYNTAX
                INTEGER (1..2147483647)
                                                                           MAX-ACCESS read-only
    STATUS
                current
    DESCRIPTION
            "An arbitrary unique value for each SNMPv2 party.
            The value for each SNMPv2 party must remain constant at
            least from one re-initialization of the entity's network
                                                                           1
            management system to the next re-initialization.
            The specific value is meaningful only within a given SNMPv2
            entity, i.e., it is not meaningful to any other SNMPv2
            entity except to uniquely identify the party within the set
                                                                           of all parties known to this agent."
                                                                           ::= { partyEntry 2 }
partyTDomain OBJECT-TYPE
    SYNTAX
                OBJECT IDENTIFIER
    MAX-ACCESS read-create
                current
    STATUS
    DESCRIPTION
            "Indicates the kind of transport service by which the party
            receives network management traffic."
                { snmpUDPDomain }
    DEFVAL
    ::= { partyEntry 3 }
partyTAddress OBJECT-TYPE
    SYNTAX
               TAddress
    MAX-ACCESS read-create
                current
    STATUS
    DESCRIPTION
            "The transport service address by which the party receives
            network management traffic, formatted according to the
            corresponding value of partyTDomain. The agent must listen
                                                                          +
            for SNMPv2 requests sent to this address. The default
                                                                           +
            assignment of a transport-layer 'port' is that specified by
                                                                           +
            the standard Transport Mapping for the kind of transport
                                                                           +
            service given by the corresponding value of partyTDomain.
                                                                          +
            For snmpUDPDomain, partyTAddress is formatted as a 4-octet
            IP Address concatenated with a 2-octet UDP port number."
    DEFVAL
                { '0000000000'H }
    ::= { partyEntry 4 }
```

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```
partyMaxMessageSize OBJECT-TYPE
    SYNTAX
                INTEGER (484..65507)
   MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The maximum length in octets of a SNMPv2 message which this
            party will accept. For parties which execute at an agent,
            the agent initializes this object to the maximum length
            supported by the agent, and does not let the object be set
            to any larger value. For parties which do not execute at
            the agent, the agent must allow the manager to set this
            object to any legal value, even if it is larger than the
            agent can generate."
    DEFVAL
                { 484 }
    ::= { partyEntry 5 }
partyLocal OBJECT-TYPE
    SYNTAX
               TruthValue
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "An indication of whether this party executes at this SNMPv2
            entity. If this object has a value of true(1), then the
            SNMPv2 entity will listen for SNMPv2 messages on the
            partyTAddress associated with this party. If this object
            has the value false(2), then the SNMPv2 entity will not
            listen for SNMPv2 messages on the partyTAddress associated
            with this party."
    DEFVAL
                { false }
    ::= { partyEntry 6 }
```

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```
partyAuthProtocol OBJECT-TYPE
    SYNTAX
                OBJECT IDENTIFIER
   MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The authentication protocol by which all messages generated
            by the party are authenticated as to origin and integrity.
            The value noAuth signifies that messages generated by the
            party are not authenticated.
            An instance of this object is created concurrently with the
            creation of any other object instance for the same party
            (i.e., as part of the processing of the set operation which
            creates the first object instance in the same conceptual
            row). Once created, the value of an instance of this object
                                                                          can not be changed."
                { v2md5AuthProtocol }
    DEFVAL
    ::= { partyEntry 7 }
partyAuthClock OBJECT-TYPE
    SYNTAX
                Clock
   MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The authentication clock which represents the local notion
            of the current time specific to the party. This value must
            not be decremented unless the party's private authentication
            key is changed simultaneously."
    DEFVAL
                { 0 }
    ::= { partyEntry 8 }
```

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partyAuthPrivate OBJECT-TYPE SYNTAX OCTET STRING -- for v2md5AuthProtocol: (SIZE (16)) MAX-ACCESS read-create current STATUS DESCRIPTION "An encoding of the party's private authentication key which may be needed to support the authentication protocol. Although the value of this variable may be altered by a management operation (e.g., a SNMPv2 Set-Request), its value can never be retrieved by a management operation: when read, the value of this variable is the zero length OCTET STRING. The private authentication key is NOT directly represented by the value of this variable, but rather it is represented according to an encoding. This encoding is the bitwise exclusive-OR of the old key with the new key, i.e., of the old private authentication key (prior to the alteration) with the new private authentication key (after the alteration). Thus, when processing a received protocol Set operation, the new private authentication key is obtained from the value of this variable as the result of a bitwise exclusive-OR of the variable's value and the old private authentication key. In calculating the exclusive-OR, if the old key is shorter than the new key, zero-valued padding is appended to the old key. If no value for the old key exists, a zero-length OCTET STRING is used in the calculation." { ''H } DEFVAL -- the empty string ::= { partyEntry 9 }

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```
partyAuthPublic OBJECT-TYPE
    SYNTAX
                OCTET STRING
                -- for v2md5AuthProtocol: (SIZE (0..16))
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "A publically-readable value for the party.
            Depending on the party's authentication protocol, this value
            may be needed to support the party's authentication
            protocol. Alternatively, it may be used by a manager during
            the procedure for altering secret information about a party.
            (For example, by altering the value of an instance of this
            object in the same SNMPv2 Set-Request used to update an
            instance of partyAuthPrivate, a subsequent Get-Request can
            determine if the Set-Request was successful in the event
            that no response to the Set-Request is received, see [4].)
            The length of the value is dependent on the party's
            authentication protocol. If not used by the authentication
            protocol, it is recommended that agents support values of
            any length up to and including the length of the
            corresponding partyAuthPrivate object."
                { ''H }
                             -- the empty string
    DEFVAL
    ::= { partyEntry 10 }
partyAuthLifetime OBJECT-TYPE
    SYNTAX
                INTEGER (0..2147483647)
    UNITS
                "seconds"
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The lifetime (in units of seconds) which represents an
            administrative upper bound on acceptable delivery delay for
            protocol messages generated by the party.
            An instance of this object is created concurrently with the
            creation of any other object instance for the same party
            (i.e., as part of the processing of the set operation which
            creates the first object instance in the same conceptual
            row). Once created, the value of an instance of this object
            can not be changed."
    DEFVAL
                { 300 }
    ::= { partyEntry 11 }
```

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```
partyPrivProtocol OBJECT-TYPE
   SYNTAX
               OBJECT IDENTIFIER
   MAX-ACCESS read-create
               current
   STATUS
   DESCRIPTION
            "The privacy protocol by which all protocol messages
            received by the party are protected from disclosure. The
           value noPriv signifies that messages received by the party
           are not protected.
           An instance of this object is created concurrently with the
           creation of any other object instance for the same party
            (i.e., as part of the processing of the set operation which
           creates the first object instance in the same conceptual
            row). Once created, the value of an instance of this object
                                                                        can not be changed."
    DEFVAL
               { noPriv }
    ::= { partyEntry 12 }
```

partyPrivPrivate OBJECT-TYPE SYNTAX OCTET STRING -- for desPrivProtocol: (SIZE (16)) MAX-ACCESS read-create current STATUS DESCRIPTION "An encoding of the party's private encryption key which may be needed to support the privacy protocol. Although the value of this variable may be altered by a management operation (e.g., a SNMPv2 Set-Request), its value can never be retrieved by a management operation: when read, the value of this variable is the zero length OCTET STRING. The private encryption key is NOT directly represented by the value of this variable, but rather it is represented according to an encoding. This encoding is the bitwise exclusive-OR of the old key with the new key, i.e., of the old private encryption key (prior to the alteration) with the new private encryption key (after the alteration). Thus, when processing a received protocol Set operation, the new private encryption key is obtained from the value of this variable as the result of a bitwise exclusive-OR of the variable's value and the old private encryption key. In calculating the exclusive-OR, if the old key is shorter than the new key, zero-valued padding is appended to the old key. If no value for the old key exists, a zero-length OCTET

STRING is used in the calculation."
DEFVAL { ''H } -- the empty string

::= { partyEntry 13 }

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partyPrivPublic OBJECT-TYPE SYNTAX OCTET STRING -- for desPrivProtocol: (SIZE (0..16)) MAX-ACCESS read-create STATUS current DESCRIPTION "A publically-readable value for the party. Depending on the party's privacy protocol, this value may be needed to support the party's privacy protocol. Alternatively, it may be used by a manager as a part of its procedure for altering secret information about a party. (For example, by altering the value of an instance of this

object in the same SNMPv2 Set-Request used to update an instance of partyPrivPrivate, a subsequent Get-Request can determine if the Set-Request was successful in the event that no response to the Set-Request is received, see [4].)

The length of the value is dependent on the party's privacy protocol. If not used by the privacy protocol, it is recommended that agents support values of any length up to and including the length of the corresponding partyPrivPrivate object."

DEFVAL { ''H } -- the empty string ::= { partyEntry 14 }

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partyCloneFrom OBJECT-TYPE SYNTAX Party MAX-ACCESS read-create current STATUS DESCRIPTION "The identity of a party to clone authentication and privacy parameters from. When read, the value { 0 0 } is returned. This value must be written exactly once, when the associated instance of partyStatus either does not exist or has the value `notReady'. When written, the value identifies a party, the cloning party, whose status column has the value `active'. The cloning party is used in two ways. One, if instances of the following objects do not exist for the party being created, then they are created with values identical to those of the corresponding objects for the cloning party: partyAuthProtocol partyAuthPublic partyAuthLifetime partyPrivProtocol partyPrivPublic Two, instances of the following objects are updated using the corresponding values of the cloning party: partyAuthPrivate partyPrivPrivate (e.g., the value of the cloning party's instance of the partyAuthPrivate object is XOR'd with the value of the partyAuthPrivate instances of the party being created.)" ::= { partyEntry 15 }

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```
partyStorageType OBJECT-TYPE
    SYNTAX
                StorageType
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The storage type for this conceptual row in the partyTable.
            Conceptual rows having the value 'permanent' must allow
            write-access at a minimum to: partyTDomain and partyTAddress
            for all parties; partyAuthClock, partyAuthPrivate and
            partyAuthPublic for parties employing authentication; and
                                                                           1
            partyPrivPrivate and partyPrivPublic for parties employing
            privacy.
            Note that any party which employs authentication or privacy
            must allow its clock and secrets to be updated and thus
            cannot be 'readOnly'."
    DEFVAL
                { nonVolatile }
    ::= { partyEntry 16 }
partyStatus OBJECT-TYPE
    SYNTAX
                RowStatus
    MAX-ACCESS read-create
                current
    STATUS
    DESCRIPTION
            "The status of this conceptual row in the partyTable.
            A party is not qualified for activation until instances of
            all columns of its partyEntry row have an appropriate value.
            In particular, one or more management set operations are
            required to configure the party:
              a value must be written to the party's partyCloneFrom
              object, and
              if the value of the party's partyAuthProtocol object is
              not noAuth,
              then the corresponding instance of partyAuthPrivate must
              contain a secret of the appropriate length. Further, at
              least one management protocol set operation updating the
              value of the party's partyAuthPrivate object must be
              successfully processed before the partyAuthPrivate column
              is considered appropriately configured, and
              if the value of party's partyPrivProtocol object is not
```

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noPriv, T then the corresponding instance of partyPrivPrivate must contain a secret of the appropriate length. Further, at least one management protocol set operation updating the value of the party's partyPrivPrivate object must be successfully processed 1 before the partyPrivPrivate column is considered appropriately configured. Until instances of all corresponding columns are appropriately configured, the value of the corresponding instance of the partyStatus column is `notReady'. For those columnar objects which permit write-access (after their initial creation), their value in an existing conceptual row can be changed irrespective of the value of partyStatus for that row." ::= { partyEntry 17 } partyAuthChange OBJECT-TYPE + SYNTAX OCTET STRING -- typically (SIZE (0..32)) + MAX-ACCESS read-create + STATUS current + DESCRIPTION + "A manager-generated, partially-random value which, when + modified, causes the corresponding instance of + partyAuthPrivate to be modified via a one-way function. + The value of an instance of this object is the concatenation + of two components: a 'random' component and a 'delta' + component. The lengths of the random and delta components + are given by the corresponding value of partyAuthProtocol; + for authentication protocols requiring partyAuthPrivate to + be a fixed length, the length of both the random and delta + components is that fixed length; for authentication + protocols allowing the length of partyAuthPrivate to be + variable up to a particular maximum length, the length of + the random component is that maximum length and the length + of the delta component is any length less than or equal to + the maximum length. For example, v2md5AuthProtocol requires + a fixed length of 16 octets, and for the purposes of this + definition, noAuth and rfc1157noAuth allow a variable length + up to a maximum of 16 octets. Other authentication + protocols may define other sizes, as deemed appropriate. +

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When an instance of this object is modified to have a new + value by the management protocol, the agent generates a new + value of the corresponding instance of partyAuthPrivate as + follows: + - the existing value of the corresponding instance of + partyAuthPrivate is extended if necessary with zero-value + padding to be the same length as the random component; + - the new value of the random component is appended to the + (possibly extended) value of the corresponding instance of + partyAuthPrivate, and the result is subjected to the MD5 + hash algorithm to produce a digest value; + - this digest value, truncated if necessary to be the same + length as the new value of the delta component, is XOR-ed + with the new value of the delta component to produce the + new value of the corresponding instance of + partyAuthPrivate. + i.e., +keyIntermediate = md5(keyold XOR randomComponent) + keynew = deltaComponent XOR keyIntermediate + The value of this object whenever it is retrieved by the + management protocol is always the zero-length string." + DEFVAL { ''H } -- the empty string + ::= { partyEntry 18 } + partyPrivChange OBJECT-TYPE + SYNTAX OCTET STRING -- typically (SIZE (0..32)) + MAX-ACCESS read-create + STATUS current + DESCRIPTION + "A manager-generated, partially-random value which, when + modified, causes the corresponding instance of + partyPrivPrivate to be modified via a one-way function. + The value of an instance of this object is the concatenation + of two components: a 'random' component and a 'delta' + component. The lengths of the random and delta components + are given by the corresponding value of partyPrivProtocol; + for privacy protocols requiring partyPrivPrivate to be a + fixed length, the length of both the random and delta + components is that fixed length; for privacy protocols + allowing the length of partyPrivPrivate to be variable up to +

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a particular maximum length, the length of the random + component is that maximum length and the length of the delta + component is any length less than or equal to the maximum + length. For example, desPrivProtocol requires a fixed + length of 16 octets, and for the purposes of this + definition, noPriv allows a variable length up to a maximum + of 16 octets. Other privacy protocols may define other + sizes, as deemed appropriate. + When an instance of this object is modified to have a new + value by the management protocol, the agent generates a new + value of the corresponding instance of partyPrivPrivate as +follows: + - the existing value of the corresponding instance of + partyPrivPrivate is extended if necessary with zero-value + padding to be the same length as the random component; + - the new value of the random component is appended to the + (possibly extended) value of the corresponding instance of + partyPrivPrivate, and the result is subjected to the MD5 + hash algorithm to produce a digest value; + - this digest value, truncated if necessary to be the same + length as the new value of the delta component, is XOR-ed + with the new value of the delta component to produce the + new value of the corresponding instance of + partyPrivPrivate. + i.e., + keyIntermediate = md5(keyold XOR randomComponent) + keynew = deltaComponent XOR keyIntermediate + The value of this object whenever it is retrieved by the + management protocol is always the zero-length string." + DEFVAL { ''H } -- the empty string + ::= { partyEntry 19 } + partySecretSpinLock OBJECT-TYPE + TestAndIncr SYNTAX + MAX-ACCESS read-write + current STATUS + DESCRIPTION + "An advisory lock used to allow several cooperating SNMPv2 + entities, all acting in a manager role, to coordinate their +

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```
use of facilities to alter secrets in the Party Table."
                                                                     +
::= { snmpParties 2 }
                                                                     +
```

Agent Identifier	
agentID OBJECT-TYPE SYNTAX OCTET STRING (SIZE (12)) MAX-ACCESS read-write STATUS current DESCRIPTION "The agent's administratively-unique identifier. The initial value for this object may be configured via an operator console entry or via an algorithmic function. In the later case, the following guidelines are recommended:	+ + + + + + + + + + + + + + + + + + + +
 The first four octets should be set to the binary equivalent of the agent's SNMP network management private enterprise number as assigned by the Internet Assigned Numbers Authority (IANA). For example, if Acme Networks has been assigned { enterprises 696 }, the first four octets would be assigned '000002b8'H. 	+ + + +
2) The remaining eight octets are the cookie whose contents are determined via one or more enterprise- specific methods. Such methods must be designed so as to maximize the possibility that the value of this object will be unique in the agent's administrative domain. For example, the cookie may be the IP address of the agent, or the MAC address of one of the interfaces, with each address suitably padded with random octets. If multiple methods are defined, then it is recommended that the cookie be further divided into one octet that indicates the method being used and seven octets which are a function of the method.	+ + + + + + + + + + + + + + + + + + +
<pre>If set by a management operation, the value must be persistent across re-initializations of the entity's network management system." ::= { snmpParties 3 }</pre>	+ + +

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```
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                          Party MIB for SNMPv2
                                                              March 1995
-- SNMPv2 contexts
snmpContexts OBJECT IDENTIFIER ::= { partyMIBObjects 2 }
contextTable OBJECT-TYPE
    SYNTAX
                SEQUENCE OF ContextEntry
   MAX-ACCESS not-accessible
    STATUS
                current
    DESCRIPTION
            "The SNMPv2 Context database."
    ::= { snmpContexts 1 }
contextEntry OBJECT-TYPE
    SYNTAX
               ContextEntry
   MAX-ACCESS not-accessible
    STATUS
               current
    DESCRIPTION
            "Locally held information about a particular SNMPv2
            context."
               { IMPLIED contextIdentity }
    INDEX
    ::= { contextTable 1 }
ContextEntry ::=
    SEQUENCE {
        contextIdentity
                                Context,
        contextIndex
                                INTEGER,
        contextLocalEntity
                                OCTET STRING,
        contextLocalTime
                                OBJECT IDENTIFIER,
        contextProxyDstParty
                                Party,
        contextProxySrcParty
                                Party,
        contextProxyContext
                                OBJECT IDENTIFIER,
        contextStorageType
                                StorageType,
        contextStatus
                                RowStatus,
       contextType
                                INTEGER
```

+

}

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```
contextIdentity OBJECT-TYPE
   SYNTAX
               Context
   MAX-ACCESS not-accessible
               current
   STATUS
    DESCRIPTION
           "A context identifier uniquely identifying a particular
           SNMPv2 context. This object is prohibited from taking the
                                                                         value { 0 x } for any value of x."
                                                                         ::= { contextEntry 1 }
contextIndex OBJECT-TYPE
   SYNTAX
               INTEGER (1..2147483647)
                                                                         MAX-ACCESS read-only
   STATUS
               current
   DESCRIPTION
           "An arbitrary unique value for each SNMPv2 context.
           The value for each SNMPv2 context must remain constant at
           least from one re-initialization of the entity's network
           management system to the next re-initialization.
           The specific value is meaningful only within a given SNMPv2
           entity, i.e., it is not meaningful to any other SNMPv2
           entity except to uniquely identify the context within the
                                                                         set of all contexts known to this agent."
    ::= { contextEntry 2 }
-- ::= { contextEntry 3 }
                                this OID is obsolete
-- ::= { contextEntry 4 }
                              this OID is obsolete
```

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```
contextLocalEntity OBJECT-TYPE
    SYNTAX
                OCTET STRING
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "If the value of the corresponding instance of the
            contextType is local(1), then the value of an instance of
            this object uniquely identifies the local entity (e.g., a
            logical device managed by the same agent)
            whose management information is in the SNMPv2 context's MIB
            view. The empty string indicates that the MIB view contains
            the SNMPv2 entity's own local management information;
            otherwise, a non-empty string indicates that the MIB view
            contains management information of some other local entity,
            e.g., 'Repeater1'.
            If the value of the corresponding instance of the
            contextType is remote(2), then the value of an instance of
            this object identifies an entity which is local to the
            SNMPv2 entity which realizes this SNMPv2 context, and whose
            management information is in the SNMPv2 context's MIB view.
            If the value of the corresponding instance of the
            contextType is proxy(3), then the value of an instance of
            this object is ignored and can take any value at the agent's
            discretion, e.g., the zero-length string."
    DEFVAL
                { ''H }
                           -- the empty string
    ::= { contextEntry 5 }
contextLocalTime OBJECT-TYPE
                OBJECT IDENTIFIER
    SYNTAX
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "If the value of the corresponding instance of the
            contextType is local(1) or remote(2),
            then the value of an instance of this object identifies the
            temporal context of the management information in the MIB
            view.
            If the value of the corresponding instance of the
            contextType is proxy(3), then the value of an instance of
            this object is ignored and can take any value at the agent's
            discretion, e.g., { 0 0 }."
    DEFVAL
                { currentTime }
```

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```
::= { contextEntry 6 }
contextProxyDstParty OBJECT-TYPE
    SYNTAX
                Party
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "If the corresponding instance of contextType has the value
            proxy(3), and if requests referencing this context are to be
            forwarded, then the value of an instance of this object
            identifies the proxy destination party to be used in such
            forwarded requests. Otherwise, the value of an instance of
            this object is ignored and can take any value at the agent's
            discretion, e.g., { 0 0 }."
    DEFVAL
                { zeroDotZero }
                                                                          +
    ::= { contextEntry 7 }
contextProxySrcParty OBJECT-TYPE
    SYNTAX
                Party
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "If the corresponding instance of contextType has the value
            proxy(3), and if requests referencing this context are to be
            forwarded, then the value of an instance of this object
            identifies the proxy source party to be used in such
            forwarded requests. Otherwise, the value of an instance of
            this object is ignored and can take any value at the agent's
                                                                          discretion, e.g., { 0 0 }.
                                                                           1
            Interpretation of an instance of this object depends upon
            the transport domain of the proxy destination party (i.e.,
            upon the value of partyTDomain for the party identified by
            the corresponding instance of contextProxyDstParty)."
                                                                          DEFVAL
                { zeroDotZero }
                                                                          +
    ::= { contextEntry 8 }
```

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```
contextProxyContext OBJECT-TYPE
    SYNTAX
                OBJECT IDENTIFIER
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "If the corresponding instance of contextType has the value
            proxy(3), and if requests referencing this context are to be |
            forwarded, then the value of an instance of this object
            identifies the context to be used in such forwarded
            requests. Otherwise, the value of an instance of this
            object is ignored and can take any value at the agent's
            discretion, e.g., \{00\}.
            Interpretation of an instance of this object depends upon
            the value of the transport domain associated with the SNMPv2
            party used as the proxy destination for this proxy context."
                                                                          { zeroDotZero }
    DEFVAL
                                                                          +
    ::= { contextEntry 9 }
contextStorageType OBJECT-TYPE
    SYNTAX
                StorageType
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The storage type for this conceptual row in the
            contextTable. Conceptual rows having the value 'permanent'
            need not allow write-access to any columnar objects in the
            row, unless they are proxy contexts in which case they must
            allow at a minimum write-access to: contextProxyDstParty,
                                                                          1
            contextProxySrcParty and contextProxyContext."
                                                                          DEFVAL
                { nonVolatile }
    ::= { contextEntry 10 }
```

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contextStatus OBJECT-TYPE SYNTAX RowStatus MAX-ACCESS read-create STATUS current DESCRIPTION "The status of this conceptual row in the contextTable. A context is not qualified for activation until instances of all corresponding columns have consistent values. For those columnar objects which permit write-access, their value in an existing conceptual row can be changed irrespective of the value of contextStatus for that row." ::= { contextEntry 11 } contextType OBJECT-TYPE + INTEGER { local(1), remote(2), proxy(3) } SYNTAX + MAX-ACCESS read-create + STATUS current + DESCRIPTION + "The type of context. + local(1) - this conceptual row refers to a SNMPv2 context + containing MIB views of a locally accessible entity; + the value of the corresponding instances of the + contextLocalEntity and contextLocalTime objects provide + further information on the local entity and its + temporal domain. + remote(2) - this conceptual row refers to a SNMPv2 context + which is realized by a remote SNMPv2 entity. + proxy(3) - this conceptual row refers to a SNMPv2 proxy + context; the values of the corresponding instances of + the contextProxyDstParty, contextProxySrcParty, and + contextProxyContext objects provide further information + on the proxied context and the parties used to access + it." + DEFVAL { local } + ::= { contextEntry 12 } +

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```
Internet Draft
                                                              March 1995
                         Party MIB for SNMPv2
-- SNMPv2 access privileges
                                                                          T
              OBJECT IDENTIFIER ::= { partyMIBObjects 3 }
snmpAccess
-- ::= { snmpAccess 1 } this OID is obsolete
                                                                          +
acTable OBJECT-TYPE
               SEQUENCE OF ACEntry
   SYNTAX
   MAX-ACCESS not-accessible
    STATUS
               current
   DESCRIPTION
            "The access privileges database."
    ::= { snmpAccess 2 }
acEntry OBJECT-TYPE
   SYNTAX
               AcEntry
   MAX-ACCESS not-accessible
    STATUS
               current
    DESCRIPTION
            "Each conceptual row in this table represents an individual
            access policy, called an ACL (for historical reasons).
           An ACL specifies the access privileges authorized for
            communication from one SNMPv2 party to another concerning
            information contained in a particular SNMPv2 context.
           For each conceptual row in this table which is retained
            across a re-initialization of the entity's network
           management system, the combination of the partyIdentity
           values of the referenced parties and the contextIdentity
           value of the referenced context must be the same after the
            re-initialization as it was before the re-initialization,
           even if the values of acTarget, acSubject and acContext
           vary."
               { acTarget, acSubject, acContext }
    INDEX
    ::= { acTable 1 }
```

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1

```
AcEntry ::=
    SEQUENCE {
        acTarget
                          INTEGER,
        acSubject
                          INTEGER,
        acContext
                          INTEGER,
        acPrivileges
                          AccessPrivileges,
        acReadViewIndex
                          INTEGER,
        acWriteViewIndex INTEGER,
        acStorageType
                          StorageType,
        acStatus
                          RowStatus
    }
acTarget
                OBJECT-TYPE
                INTEGER (1..2147483647)
    SYNTAX
    MAX-ACCESS not-accessible
    STATUS
                current
    DESCRIPTION
            "The value of partyIndex for one of the SNMPv2 parties
            between which communication is authorized concerning
            information contained in a particular SNMPv2 context. In
            particular, for retrieval or set operations, this object
            identifies the destination party; for notification
            operations, this object identifies the source party."
    ::= { acEntry 1 }
acSubject
                OBJECT-TYPE
    SYNTAX
                INTEGER (1..2147483647)
    MAX-ACCESS not-accessible
    STATUS
                current
    DESCRIPTION
            "The value of partyIndex for one of the SNMPv2 parties
            between which communication is authorized concerning
            information contained in a particular SNMPv2 context. In
            particular, for retrieval or set operations, this object
            identifies the source party; for notification operations,
            this object identifies the destination party."
    ::= { acEntry 2 }
```

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```
acContext OBJECT-TYPE
                                                                       SYNTAX INTEGER (1..2147483647)
                                                                       MAX-ACCESS not-accessible
              current
   STATUS
   DESCRIPTION
           "The value of this instance identifies the SNMPv2 context
                                                                       associated with a particular set of access privileges,
                                                                       and has the same value as the instance of the contextIndex
           object for that SNMPv2 context."
   ::= { acEntry 3 }
```

acPrivileges OBJECT-TYPE SYNTAX AccessPrivileges MAX-ACCESS read-create STATUS current DESCRIPTION "The access privileges authorized for communication between a particular local SNMPv2 party and a particular remote SNMPv2 party concerning information contained in a particular SNMPv2 context." DEFVAL { 35 } -- Get, Get-Next & Get-Bulk ::= { acEntry 4 } acReadViewIndex OBJECT-TYPE INTEGER (0..2147483647) SYNTAX MAX-ACCESS read-create + STATUS current + DESCRIPTION + "If, for the SNMPv2 context identified by the corresponding + instance of acContext, the value of contextType is local(1), + then the value of an instance of this object identifies the + MIB view of the SNMPv2 context to which this conceptual row + authorizes read access. The identified MIB view is that for + which viewIndex has the same value as the instance of this + object; if the value is zero or there are no active view + subtrees for that value, then the identified MIB view is the + empty set of view subtrees. (Note that read access includes + access via retrieval requests as well as transmission of + information via notification requests.) + Otherwise, this object is ignored and can take any value at + the agent's discretion, e.g., zero." + DEFVAL { 0 } I ::= { acEntry 5 }

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```
acWriteViewIndex OBJECT-TYPE
    SYNTAX
                INTEGER (0..2147483647)
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "If, for the SNMPv2 context identified by the corresponding
            instance of acContext, the value of contextType is local(1),
            then the value of an instance of this object identifies the
            MIB view of the SNMPv2 context to which this conceptual row
            authorizes write access. The identified MIB view is that
            for which viewIndex has the same value as the instance of
            this object; if the value is zero or there are no active
            view subtrees for that value, then the identified MIB view
            is the empty set of view subtrees.
            Otherwise, this object is ignored and can take any value at
            the agent's discretion, e.g., zero."
    DEFVAL
                {0}
    ::= { acEntry 6 }
acStorageType OBJECT-TYPE
    SYNTAX
                StorageType
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The storage type for this conceptual row in the acTable.
            Conceptual rows having the value 'permanent' need not allow
            write-access to any columnar objects in the row."
                { nonVolatile }
    DEFVAL
    ::= { acEntry 7 }
acStatus OBJECT-TYPE
    SYNTAX
                RowStatus
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The status of this conceptual row in the acTable.
            For those columnar objects which permit write-access, their
            value in an existing conceptual row can be changed
            irrespective of the value of acStatus for that row.
            A conceptual row in this table is not qualified for
            activation until the context and both parties it references
            are active. Further, a conceptual row in this table is
```

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immediately made notInService whenever the status of the context or either party it references is made notInService, Finally, a conceptual row in this table is immediately destroyed whenever the context or either party it references | is destroyed."

::= { acEntry 8 }

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March 1995

```
-- MIB views
                                                                           Τ
snmpViews
               OBJECT IDENTIFIER ::= { partyMIBObjects 4 }
viewNextIndex OBJECT-TYPE
                                                                           +
    SYNTAX
                INTEGER (0..2147483647)
                                                                           +
    MAX-ACCESS read-only
                                                                           +
    STATUS
                current
                                                                           +
    DESCRIPTION
                                                                           +
            "The next unassigned value of viewIndex. The value 0
                                                                           +
            indicates that no unassigned values are available.
                                                                           +
            Reading a non-zero value causes the assignment of the
                                                                           +
            retrieved value for use as the viewIndex of a future MIB
                                                                           +
            view, and thus causes the value of this object to change.
                                                                           +
            The algorithm for changing nextViewIndex is implementation-
                                                                           +
            dependent, and the agent may use a subset of values within
                                                                           +
            1..2147483647, but the agent must guarantee that the value
                                                                           +
            held by this object is not assigned to any in-use value of
                                                                           +
            viewIndex, e.q., is not pointed to by any other MIB object.
                                                                           +
            A management station creates a new MIB view using this
                                                                           +
            algorithm: first, issue a management protocol retrieval
                                                                           +
            operation to obtain the value of viewNextIndex - this value
                                                                           +
            is used as the viewIndex of the new MIB view; and, second,
                                                                           +
            issue a management protocol set operation to create an
                                                                           +
            instance of the viewStatus object setting its value to
                                                                           +
            `createAndGo' or `createAndWait' (as specified in the
                                                                           +
            description of the RowStatus textual convention)."
                                                                           +
    ::= { snmpViews 2 }
                                                                           +
viewTable OBJECT-TYPE
    SYNTAX
                SEQUENCE OF ViewEntry
    MAX-ACCESS not-accessible
    STATUS
                current
    DESCRIPTION
            "Locally held information about the subtrees of MIB views
            known to this SNMPv2 entity. Note that a MIB view which has
                                                                           no subtrees defined for it has no entries in this table.
                                                                           Т
            Each SNMPv2 context which is locally accessible has zero or
            more MIB views. Each MIB view is defined by two collections
                                                                           of view subtrees: the included view subtrees, and the
                                                                           Τ
            excluded view subtrees.
```

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Every such subtree, both included and excluded, is defined in this table.

To determine if a particular object instance is in a particular MIB view, compare the object instance's OBJECT IDENTIFIER with each of the MIB view's active entries in this table. If none match, then the object instance is not in the MIB view. If one or more match, then the object instance is included in, or excluded from, the MIB view according to the value of viewType in the entry whose value of viewSubtree has the most sub-identifiers. If multiple entries match and have the same number of sub-identifiers, then the lexicographically greatest instance of viewType determines the inclusion or exclusion.

An object instance's OBJECT IDENTIFIER X matches an active entry in this table when the number of sub-identifiers in X is at least as many as in the value of viewSubtree for the entry, and each subidentifier in the value of viewSubtree matches its corresponding sub-identifier in X. Two sub-identifiers match either if the corresponding bit of viewMask is zero (the 'wild card' value), or if they are equal.

Due to this 'wild card' capability, we introduce the term, a 'family' of view subtrees, to refer to the set of subtrees defined by a particular combination of values of viewSubtree and viewMask. In the case where no 'wild card' is defined in viewMask, the family of view subtrees reduces to a single view subtree."

::= { snmpViews 1 }

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```
viewEntry OBJECT-TYPE
    SYNTAX
                ViewEntry
    MAX-ACCESS not-accessible
                current
    STATUS
    DESCRIPTION
            "Information on a particular family of view subtrees
            included in or excluded from a particular SNMPv2 context's
            MIB view.
            Implementations must not restrict the number of families of
            view subtrees for a given MIB view, except as dictated by
            resource constraints on the overall number of entries in the
            viewTable."
               { viewIndex, IMPLIED viewSubtree }
    INDEX
    ::= { viewTable 1 }
ViewEntry ::=
    SEQUENCE {
        viewIndex
                         INTEGER,
        viewSubtree
                         OBJECT IDENTIFIER,
        viewMask
                         OCTET STRING,
        viewType
                         INTEGER,
        viewStorageType StorageType,
                         RowStatus
        viewStatus
    }
viewIndex OBJECT-TYPE
               INTEGER (1..2147483647)
    SYNTAX
    MAX-ACCESS not-accessible
    STATUS
                current
    DESCRIPTION
            "An arbitrary unique value for each MIB view.
            The value for each MIB view must remain constant at least
            from one re-initialization of the entity's network
            management system to the next re-initialization.
            The specific value is meaningful only within a given SNMPv2
            entity, i.e., it is not meaningful to any other SNMPv2
            entity except to uniquely identify the view within the set
            of all views known to this agent."
    ::= { viewEntry 1 }
```

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viewSubtree OBJECT-TYPE SYNTAX OBJECT IDENTIFIER MAX-ACCESS not-accessible STATUS current DESCRIPTION "A MIB subtree." ::= { viewEntry 2 } viewMask OBJECT-TYPE SYNTAX OCTET STRING (SIZE (0..16)) MAX-ACCESS read-create current STATUS DESCRIPTION "The bit mask which, in combination with the corresponding instance of viewSubtree, defines a family of view subtrees. Each bit of this bit mask corresponds to a sub-identifier of viewSubtree, with the most significant bit of the i-th octet of this octet string value (extended if necessary, see below) corresponding to the (8*i - 7)-th sub-identifier, and the least significant bit of the i-th octet of this octet string corresponding to the (8*i)-th sub-identifier, where i is in the range 1 through 16. Each bit of this bit mask specifies whether or not the corresponding sub-identifiers must match when determining if an OBJECT IDENTIFIER is in this family of view subtrees; a '1' indicates that an exact match must occur; a '0' indicates 'wild card', i.e., any sub-identifier value matches. Thus, the OBJECT IDENTIFIER X of an object instance is contained in a family of view subtrees if the following criteria are met: for each sub-identifier of the value of viewSubtree, either: the i-th bit of viewMask is 0, or the i-th sub-identifier of X is equal to the i-th sub-identifier of the value of viewSubtree. If the value of this bit mask is M bits long and there are more than M sub-identifiers in the corresponding instance of

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Party MIB for SNMPv2

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```
viewSubtree, then the bit mask is extended with 1's to be
            the required length.
            Note that when the value of this object is the zero-length
            string, this extension rule results in a mask of all-1's
            being used (i.e., no 'wild card'), and the family of view
            subtrees is the one view subtree uniquely identified by the
            corresponding instance of viewSubtree."
    DEFVAL
                { ''H }
    ::= { viewEntry 3 }
viewType OBJECT-TYPE
    SYNTAX
                INTEGER {
                    included(1),
                    excluded(2)
                }
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The status of a particular family of view subtrees within
            the particular SNMPv2 context's MIB view. The value
            'included(1)' indicates that the corresponding instances of
            viewSubtree and viewMask define a family of view subtrees
            included in the MIB view. The value 'excluded(2)'
            indicates that the corresponding instances of viewSubtree
            and viewMask define a family of view subtrees excluded from
            the MIB view."
    DEFVAL
                { included }
    ::= { viewEntry 4 }
viewStorageType OBJECT-TYPE
    SYNTAX
                StorageType
    MAX-ACCESS read-create
    STATUS
                current
    DESCRIPTION
            "The storage type for this conceptual row in the viewTable.
            Conceptual rows having the value 'permanent' need not allow
            write-access to any columnar objects in the row."
    DEFVAL
                { nonVolatile }
    ::= { viewEntry 5 }
```

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viewStatus OBJECT-TYPE SYNTAX RowStatus MAX-ACCESS read-create STATUS current DESCRIPTION "The status of this conceptual row in the viewTable. For those columnar objects which permit write-access, their value in an existing conceptual row can be changed irrespective of the value of viewStatus for that row."

::= { viewEntry 6 }

```
Internet Draft
                          Party MIB for SNMPv2
                                                              March 1995
-- conformance information
partyMIBConformance
               OBJECT IDENTIFIER ::= { partyMIB 3 }
partyMIBCompliances
               OBJECT IDENTIFIER ::= { partyMIBConformance 1 }
partyMIBGroups
               OBJECT IDENTIFIER ::= { partyMIBConformance 2 }
-- compliance statements
unSecurableCompliance MODULE-COMPLIANCE
    STATUS current
    DESCRIPTION
            "The compliance statement for SNMPv2 entities which
            implement the Party MIB, but do not support any
            authentication or privacy protocols (i.e., only the noAuth
            and noPriv protocols are supported)."
   MODULE -- this module
        MANDATORY-GROUPS { partyMIBGroup }
    ::= { partyMIBCompliances 1 }
partyNoPrivacyCompliance MODULE-COMPLIANCE
    STATUS current
    DESCRIPTION
            "The compliance statement for SNMPv2 entities which
            implement the Party MIB, and support an authentication
            protocol, but do not support any privacy protocols (i.e.,
            only the noAuth, v2md5AuthProtocol, and noPriv protocols are
            supported)."
    MODULE -- this module
        MANDATORY-GROUPS { partyMIBGroup }
    ::= { partyMIBCompliances 2 }
```

+

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```
partyPrivacyCompliance MODULE-COMPLIANCE
    STATUS current
    DESCRIPTION
            "The compliance statement for SNMPv2 entities which
            implement the Party MIB, support an authentication protocol,
            and support a privacy protocol ONLY for the purpose of
            accessing security parameters.
            For all acTable entries authorizing a local and/or remote
                                                                          SNMPv2 party
            whose privacy protocol is desPrivProtocol, to be used in
            accessing a SNMPv2 context, the MIB view for that SNMPv2
            context shall include only those objects subordinate to
            partyMIBObjects, or a subset thereof, e.g.,
                 viewSubtree = { partyMIBObjects }
                           = ''H
                 viewMask
                 viewType
                             = { included }
            Any attempt to configure an entry in the partyTable, the
            contextTable, the acTable or the viewTable such that
                                                                          a party using the desPrivProtocol would be authorized for
            use in accessing objects outside of the partyMIBObjects
            subtree shall result in the appropriate error response
            (e.g., wrongValue or inconsistentValue)."
    MODULE -- this module
        MANDATORY-GROUPS { partyMIBGroup }
    ::= { partyMIBCompliances 3 }
fullPrivacyCompliance MODULE-COMPLIANCE
    STATUS current
    DESCRIPTION
            "The compliance statement for SNMPv2 entities which
            implement the Party MIB, support an authentication protocol,
            and support a privacy protocol without restrictions on its
            use."
    MODULE -- this module
        MANDATORY-GROUPS { partyMIBGroup }
    ::= { partyMIBCompliances 4 }
```

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```
-- units of conformance
```

partyMIBGroup OBJECTS {	partyIndex, partyTDomain, partyTAddress, partyMaxMessageSize, partyLocal, partyAuthProtocol, partyAuthClock, partyAuthPrivate, partyAuthPublic, partyAuthLifetime, partyPrivProtocol, partyPrivPrivate, partyPrivPublic, partyStorageType, partyStatus,	
	partyCloneFrom, partyAuthChange, partyPrivChange, partySecretSpinLock,	
	agentID,	İ
	<pre>contextIndex, contextType, contextLocalEntity, contextLocalTime, contextStorageType,</pre>	Ι
	contextStatus, acPrivileges, acStorageType, acStatus,	I
	acReadViewIndex, acWriteViewIndex,	i
	viewNextIndex,	i
	viewMask, viewType, viewStorageType, viewStatus	
	urrent	
DESCRIPTI	ON The collection of objects allowing the description and	
	onfiguration of SNMPv2 parties.	
i	ote that objects which support proxy contexts are not ncluded in this conformance group." tyMIBGroups 1 }	
	Group OBJECT-GROUP	+
OBJECTS {	<pre>contextProxySrcParty, contextProxyDstParty, contextProxyContext }</pre>	++
STATUS C	urrent	+
DESCRIPTI		+
	The collection of objects needed for the support of proxy	+
	NMPv2 contexts."	+
::= { par	tyMIBGroups 2 }	+

+

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3. Acknowledgments

The authors wish to acknowledge the contributions of the SNMPv2 Working Group in general. In particular, the following individuals

Dave Arneson (Cabletron), Uri Blumenthal (IBM), Doug Book (Chipcom), Maria Greene (Ascom Timeplex), Deirdre Kostik (Bellcore), Dave Harrington (Cabletron), Jeff Johnson (Cisco Systems), Brian O'Keefe (Hewlett Packard), Dave Perkins (Bay Networks), Randy Presuhn (Peer Networks), Shawn Routhier (Epilogue), Bob Stewart (Cisco Systems), Kaj Tesink (Bellcore).

deserve special thanks for their contributions.

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Internet Draft

5. Security Considerations

Security issues are not discussed in this memo.

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