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SNMP-NOTIFICATION-MIB DEFINITIONS ::= BEGIN

IMPORTS

MODULE-IDENTITY,
OBJECT-TYPE,
snmpModules
 FROM SNMPv2-SMI
RowStatus,
StorageType
 FROM SNMPv2-TC
SnmpAdminString
 FROM SNMP-FRAMEWORK-MIB
SnmpTagValue,
snmpTargetParamsName
 FROM SNMP-TARGET-MIB
MODULE-COMPLIANCE,
OBJECT-GROUP
 FROM SNMPv2-CONF;

snmpNotificationMIB **MODULE-IDENTITY**

LAST-UPDATED "9808040000Z" -- Aug 4, 1998 12:00:00 AM
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DESCRIPTION

 "This MIB module defines MIB objects which provide mechanisms to remotely configure the parameters used by an SNMP entity for the generation of notifications."

REVISION "9808040000Z" -- Aug 4, 1998 12:00:00 AM

DESCRIPTION

 "Clarifications, published as RFC2573"

REVISION "9707140000Z" -- Jul 14, 1997 12:00:00 AM
DESCRIPTION

"The initial revision, published as RFC2273."

-- 1.3.6.1.6.3.13 -- ::= { snmpModules 13 }

snmpNotifyObjects OBJECT IDENTIFIER

-- 1.3.6.1.6.3.13.1 -- ::= { snmpNotificationMIB 1 }

snmpNotifyConformance OBJECT IDENTIFIER

-- 1.3.6.1.6.3.13.3 -- ::= { snmpNotificationMIB 3 }

--
--
-- The snmpNotifyObjects group
--
--

snmpNotifyTable OBJECT-TYPE

SYNTAX SEQUENCE OF SnmpNotifyEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table is used to select management targets which should receive notifications, as well as the type of notification which should be sent to each selected management target."

-- 1.3.6.1.6.3.13.1.1 -- ::= { snmpNotifyObjects 1 }

snmpNotifyEntry OBJECT-TYPE

SYNTAX SnmpNotifyEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An entry in this table selects a set of management targets which should receive notifications, as well as the type of notification which should be sent to each selected management target."

Entries in the snmpNotifyTable are created and deleted using the snmpNotifyRowStatus object."

INDEX {

IMPLIED snmpNotifyName

}

-- 1.3.6.1.6.3.13.1.1.1 -- ::= { snmpNotifyTable 1 }

SnmpNotifyEntry ::= SEQUENCE {

snmpNotifyName SnmpAdminString,

snmpNotifyTag SnmpTagValue,

snmpNotifyType INTEGER,

snmpNotifyStorageType StorageType,

snmpNotifyRowStatus RowStatus

}

snmpNotifyName OBJECT-TYPE

SYNTAX SnmpAdminString (SIZE (1..32))

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The locally arbitrary, but unique identifier associated with this snmpNotifyEntry."

-- 1.3.6.1.6.3.13.1.1.1.1 -- ::= { snmpNotifyEntry 1 }

snmpNotifyTag OBJECT-TYPE

SYNTAX SnmpTagValue

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This object contains a single tag value which is used to select entries in the snmpTargetAddrTable. Any entry in the snmpTargetAddrTable which contains a tag value"

which is equal to the value of an instance of this object is selected. If this object contains a value of zero length, no entries are selected."

DEFVAL { "" }

-- 1.3.6.1.6.3.13.1.1.1.2 -- ::= { snmpNotifyEntry 2 }

snmpNotifyType OBJECT-TYPE

SYNTAX INTEGER {
trap(1),
inform(2) }

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"This object determines the type of notification to be generated for entries in the snmpTargetAddrTable selected by the corresponding instance of snmpNotifyTag. This value is only used when generating notifications, and is ignored when using the snmpTargetAddrTable for other purposes.

If the value of this object is trap(1), then any messages generated for selected rows will contain Unconfirmed-Class PDUs.

If the value of this object is inform(2), then any messages generated for selected rows will contain Confirmed-Class PDUs.

Note that if an SNMP entity only supports generation of Unconfirmed-Class PDUs (and not Confirmed-Class PDUs), then this object may be read-only."

DEFVAL { trap }

-- 1.3.6.1.6.3.13.1.1.1.3 -- ::= { snmpNotifyEntry 3 }

snmpNotifyStorageType OBJECT-TYPE

SYNTAX StorageType

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The storage type for this conceptual row."

DEFVAL { nonVolatile }

-- 1.3.6.1.6.3.13.1.1.1.4 -- ::= { snmpNotifyEntry 4 }

snmpNotifyRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The status of this conceptual row.

To create a row in this table, a manager must set this object to either createAndGo(4) or createAndWait(5)."

-- 1.3.6.1.6.3.13.1.1.1.5 -- ::= { snmpNotifyEntry 5 }

snmpNotifyFilterProfileTable OBJECT-TYPE

SYNTAX SEQUENCE OF SnmpNotifyFilterProfileEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table is used to associate a notification filter profile with a particular set of target parameters."

-- 1.3.6.1.6.3.13.1.2 -- ::= { snmpNotifyObjects 2 }

snmpNotifyFilterProfileEntry OBJECT-TYPE

SYNTAX SnmpNotifyFilterProfileEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An entry in this table indicates the name of the filter profile to be used when generating notifications using the corresponding entry in the snmpTargetParamsTable.

Entries in the snmpNotifyFilterProfileTable are created and deleted using the snmpNotifyFilterProfileRowStatus object."

INDEX {

IMPLIED snmpTargetParamsName

}

-- 1.3.6.1.6.3.13.1.2.1 -- ::= { snmpNotifyFilterProfileTable 1 }

```
SnmpNotifyFilterProfileEntry ::= SEQUENCE {
    snmpNotifyFilterProfileName      SnmpAdminString,
    snmpNotifyFilterProfileStorType  StorageType,
    snmpNotifyFilterProfileRowStatus RowStatus
}
```

snmpNotifyFilterProfileName OBJECT-TYPE

SYNTAX SnmpAdminString (**SIZE** (1..32))

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The name of the filter profile to be used when generating notifications using the corresponding entry in the snmpTargetAddrTable."

-- 1.3.6.1.6.3.13.1.2.1.1 -- ::= { snmpNotifyFilterProfileEntry 1 }

snmpNotifyFilterProfileStorType OBJECT-TYPE

SYNTAX StorageType

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The storage type of this conceptual row."

DEFVAL { nonVolatile }

-- 1.3.6.1.6.3.13.1.2.1.2 -- ::= { snmpNotifyFilterProfileEntry 2 }

snmpNotifyFilterProfileRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The status of this conceptual row.

To create a row in this table, a manager must set this object to either createAndGo(4) or createAndWait(5).

Until instances of all corresponding columns are appropriately configured, the value of the corresponding instance of the snmpNotifyFilterProfileRowStatus column is 'notReady'.

In particular, a newly created row cannot be made active until the corresponding instance of snmpNotifyFilterProfileName has been set."

-- 1.3.6.1.6.3.13.1.2.1.3 -- ::= { snmpNotifyFilterProfileEntry 3 }

snmpNotifyFilterTable OBJECT-TYPE

SYNTAX SEQUENCE OF SnmpNotifyFilterEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The table of filter profiles. Filter profiles are used to determine whether particular management targets should receive particular notifications.

When a notification is generated, it must be compared with the filters associated with each management target which is configured to receive notifications, in order to determine whether it may be sent to each such management target.

A more complete discussion of notification filtering can be found in section 6. of [RFC2573]."

```
-- 1.3.6.1.6.3.13.1.3 -- ::= { snmpNotifyObjects 3 }
```

snmpNotifyFilterEntry OBJECT-TYPE

SYNTAX SnmpNotifyFilterEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An element of a filter profile.

Entries in the snmpNotifyFilterTable are created and deleted using the snmpNotifyFilterRowStatus object."

INDEX {

snmpNotifyFilterProfileName,

IMPLIED snmpNotifyFilterSubtree

}

```
-- 1.3.6.1.6.3.13.1.3.1 -- ::= { snmpNotifyFilterTable 1 }
```

SnmpNotifyFilterEntry ::= SEQUENCE {

snmpNotifyFilterSubtree OBJECT IDENTIFIER,

snmpNotifyFilterMask OCTET STRING,

snmpNotifyFilterType INTEGER,

snmpNotifyFilterStorageType StorageType,

snmpNotifyFilterRowStatus RowStatus

}

snmpNotifyFilterSubtree OBJECT-TYPE

SYNTAX OBJECT IDENTIFIER

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The MIB subtree which, when combined with the corresponding instance of snmpNotifyFilterMask, defines a family of subtrees which are included in or excluded from the filter profile."

```
-- 1.3.6.1.6.3.13.1.3.1.1 -- ::= { snmpNotifyFilterEntry 1 }
```

snmpNotifyFilterMask OBJECT-TYPE

SYNTAX OCTET STRING (SIZE (0..16))

MAX-ACCESS read-create

STATUS current

DESCRIPTION

"The bit mask which, in combination with the corresponding instance of snmpNotifyFilterSubtree, defines a family of subtrees which are included in or excluded from the filter profile.

Each bit of this bit mask corresponds to a sub-identifier of snmpNotifyFilterSubtree, 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 matches this family of filter 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 filter subtrees if, for each sub-identifier of the value of snmpNotifyFilterSubtree, either:

the i-th bit of snmpNotifyFilterMask is 0, or

the i-th sub-identifier of X is equal to the i-th sub-identifier of the value of snmpNotifyFilterSubtree.

If the value of this bit mask is M bits long and there are more than M sub-identifiers in the corresponding instance of snmpNotifyFilterSubtree, 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 filter subtrees is the one subtree uniquely identified by the corresponding instance of snmpNotifyFilterSubtree."

```
DEFVAL      { 'H' }
-- 1.3.6.1.6.3.13.1.3.1.2 -- ::= { snmpNotifyFilterEntry 2 }

snmpNotifyFilterType OBJECT-TYPE
SYNTAX      INTEGER {
              included(1),
              excluded(2) }
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "This object indicates whether the family of filter subtrees
    defined by this entry are included in or excluded from a
    filter.  A more detailed discussion of the use of this
    object can be found in section 6. of [RFC2573]."
DEFVAL      { included }
-- 1.3.6.1.6.3.13.1.3.1.3 -- ::= { snmpNotifyFilterEntry 3 }

snmpNotifyFilterStorageType OBJECT-TYPE
SYNTAX      StorageType
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "The storage type of this conceptual row."
DEFVAL      { nonVolatile }
-- 1.3.6.1.6.3.13.1.3.1.4 -- ::= { snmpNotifyFilterEntry 4 }

snmpNotifyFilterRowStatus OBJECT-TYPE
SYNTAX      RowStatus
MAX-ACCESS  read-create
STATUS      current
DESCRIPTION
    "The status of this conceptual row.

    To create a row in this table, a manager must
    set this object to either createAndGo(4) or
    createAndWait(5)."
-- 1.3.6.1.6.3.13.1.3.1.5 -- ::= { snmpNotifyFilterEntry 5 }
--
--
-- Conformance information
--
--

snmpNotifyCompliances OBJECT IDENTIFIER
-- 1.3.6.1.6.3.13.3.1 -- ::= { snmpNotifyConformance 1 }
```

snmpNotifyGroups OBJECT IDENTIFIER

-- 1.3.6.1.6.3.13.3.2 -- ::= { snmpNotifyConformance 2 }

--
--
-- Compliance statements
--
--

snmpNotifyBasicCompliance MODULE-COMPLIANCE

STATUS current

DESCRIPTION

"The compliance statement for minimal SNMP entities which implement only SNMP Unconfirmed-Class notifications and read-create operations on only the snmpTargetAddrTable."

MODULE SNMP-TARGET-MIB

MANDATORY-GROUPS {

snmpTargetBasicGroup

}

OBJECT snmpTargetParamsMPModel

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required."

OBJECT snmpTargetParamsSecurityModel

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required."

OBJECT snmpTargetParamsSecurityName

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required."

OBJECT snmpTargetParamsSecurityLevel

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required."

OBJECT snmpTargetParamsStorageType

SYNTAX INTEGER {
readOnly(5) }

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required. Support of the values other(1), volatile(2), nonVolatile(3), and permanent(4) is not required."

OBJECT snmpTargetParamsRowStatus

SYNTAX INTEGER {
active(1) }

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access to the snmpTargetParamsTable is not required. Support of the values notInService(2), notReady(3), createAndGo(4), createAndWait(5), and destroy(6) is not required."

MODULE

MANDATORY-GROUPS {

snmpNotifyGroup

}

OBJECT snmpNotifyTag

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required."

OBJECT snmpNotifyType

SYNTAX INTEGER {
trap(1) }

MIN-ACCESS read-only

DESCRIPTION

"Create/delete/modify access is not required. Support of the value notify(2) is not required."

OBJECT snmpNotifyStorageType

```

SYNTAX      INTEGER {
              readOnly(5) }
MIN-ACCESS  read-only
DESCRIPTION
    "Create/delete/modify access is not required.
    Support of the values other(1), volatile(2),
    nonVolatile(3), and permanent(4) is not required."
OBJECT      snmpNotifyRowStatus
SYNTAX      INTEGER {
              active(1) }
MIN-ACCESS  read-only
DESCRIPTION
    "Create/delete/modify access to the
    snmpNotifyTable is not required.
    Support of the values notInService(2), notReady(3),
    createAndGo(4), createAndWait(5), and destroy(6) is
    not required."
-- 1.3.6.1.6.3.13.3.1.1 -- ::= { snmpNotifyCompliances 1 }

snmpNotifyBasicFiltersCompliance MODULE-COMPLIANCE
STATUS      current
DESCRIPTION
    "The compliance statement for SNMP entities which implement
    SNMP Unconfirmed-Class notifications with filtering, and
    read-create operations on all related tables."
MODULE SNMP-TARGET-MIB
MANDATORY-GROUPS {
    snmpTargetBasicGroup
}
MODULE
MANDATORY-GROUPS {
    snmpNotifyGroup,
    snmpNotifyFilterGroup
}
-- 1.3.6.1.6.3.13.3.1.2 -- ::= { snmpNotifyCompliances 2 }

snmpNotifyFullCompliance MODULE-COMPLIANCE
STATUS      current
DESCRIPTION
    "The compliance statement for SNMP entities which either
    implement only SNMP Confirmed-Class notifications, or both
    SNMP Unconfirmed-Class and Confirmed-Class notifications,
    plus filtering and read-create operations on all related
    tables."
MODULE SNMP-TARGET-MIB
MANDATORY-GROUPS {
    snmpTargetBasicGroup,
    snmpTargetResponseGroup
}
MODULE
MANDATORY-GROUPS {
    snmpNotifyGroup,
    snmpNotifyFilterGroup
}
-- 1.3.6.1.6.3.13.3.1.3 -- ::= { snmpNotifyCompliances 3 }

snmpNotifyGroup OBJECT-GROUP
OBJECTS {
    snmpNotifyTag,
    snmpNotifyType,
    snmpNotifyStorageType,
    snmpNotifyRowStatus
}
STATUS      current
DESCRIPTION
    "A collection of objects for selecting which management
    targets are used for generating notifications, and the
    type of notification to be generated for each selected
    management target."

```



```

-- 1.3.6.1.6.3.13.3.2.1 -- ::= { snmpNotifyGroups 1 }

snmpNotifyFilterGroup OBJECT-GROUP
    OBJECTS {
        snmpNotifyFilterProfileName,
        snmpNotifyFilterProfileStorType,
        snmpNotifyFilterProfileRowStatus,
        snmpNotifyFilterMask,
        snmpNotifyFilterType,
        snmpNotifyFilterStorageType,
        snmpNotifyFilterRowStatus
    }
    STATUS current
    DESCRIPTION
        "A collection of objects providing remote configuration
        of notification filters."
-- 1.3.6.1.6.3.13.3.2.2 -- ::= { snmpNotifyGroups 2 }

END
--
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