NAME

snmp_usm - user-based security module for bsnmpd(1)

LIBRARY

(begemotSnmpdModulePath."usm" = /usr/lib/snmp_usm.so)

DESCRIPTION

The **snmp_usm** module implements SNMPv3 User-Based Security Model MIB as defined in RFC 3414. The module is used to manage the internal list of SNMPv3 USM active users in **bsnmpd**. The module must be loaded for **bsnmpd** to receive and process SNMPv3 USM PDUs correctly.

IMPLEMENTATION NOTES

A short description of the objects in the MIB follows.

usmStats   The subtree contains statistics for the User-based Security Model PDU processing. The statistics are reset each time the module is loaded.

usmUserSpinLock

    An advisory lock used to coordinate several Command Generator Applications when altering the SNMP USM users.

usmUserTable The table contains all SNMP USM users configured in **bsnmpd**. The table contains the following objects

    usmUserEngineID An SNMP engine's administratively-unique identifier. Must be set to the same Engine ID as **bsnmpd** so that the user will actually be allowed to communicate with the daemon. The column is used as entry key and is not accessible for GET or SET operations.

    usmUserName   The USM user name. The second entry key, again not accessible for GET or SET operations.

    usmUserSecurityName

      The column has the exact same value as the *usmUserName* column, however is accessible for GET operations.

    usmUserCloneFrom A GET on this column will return an empty OID. SET operations are currently not supported.

usmUserAuthProtocol

> The value of this column contains the OID corresponding to the authentication protocol used by the USM user. The following protocols and their OIDs are known to **snmp_usm** module
>
> NoAuthProtocol 1.3.6.1.6.3.10.1.1.1
>
> HMACMD5AuthProtocol 1.3.6.1.6.3.10.1.1.2
>
> HMACSHAAuthProtocol 1.3.6.1.6.3.10.1.1.3

usmUserAuthKeyChange, *usmUserOwnAuthKeyChange*

> These columns may be used to change the user's authentication key.

usmUserPrivProtocol   The value of this column contains the OID corresponding to the privacy protocol used by the USM user. The following protocols and their OIDs are known to **snmp_usm** module

> NoPrivProtocol 1.3.6.1.6.3.10.1.2.1
>
> DESPrivProtoco 1.3.6.1.6.3.10.1.2.2
>
> AesCfb128Protocol 1.3.6.1.6.3.10.1.2.4

usmUserPrivKeyChange, *usmUserOwnPrivKeyChange*

> These columns may be used to change the user's privacy key.

usmUserPublic   An arbitrary octet string that may be modified to confirm a SET operation on any of the columns was successful.

usmUserStorageType   This column always has either of two values. Entries created via **bsnmpd's** configuration file always have this column set to readOnly (5) and it is not possible to modify those entries. Entries created by Command Generator Applications always have this column set to volatile(2) and such entries are lost when the module is restarted. A SET operation on this column is not allowed.

usmUserStatus   This column is used to create new USM user entries or delete

existing ones from the table.

FILES

   /usr/share/snmp/defs/usm_tree.def
                The description of the MIB tree implemented by **snmp_usm**.

SEE ALSO

   bsnmpd(1), gensnmptree(1), snmpmod(3)

STANDARDS

   IETF RFC 3414

AUTHORS

   Shteryana Shopova <syrinx@FreeBSD.org>