             Definitions of Managed Objects for SNA Data Link Control (SDLC)
                              using SMIv2

Status of this Memo

   This document specifies an Internet standards track protocol for the
   Internet community, and requests discussion and suggestions for
   improvements. Please refer to the current edition of the "Internet
   Official Protocol Standards" (STD 1) for the standardization state
   and status of this protocol. Distribution of this memo is unlimited.

Abstract

   This specification defines an extension to the Management Information
   Base (MIB) for use with SNMP-based network management. In
   particular, it defines objects for managing the configuration,
   monitoring and control of data link controls in an SNA environment.
   This draft identifies managed objects for SNA Synchronous Data Link
   Control (SDLC) links only.

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1. The SNMPv2 Network Management Framework

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

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

      o   STD 17, RFC 1213 defines MIB-II, the core set of managed
           objects for the Internet suite of protocols.

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

      o   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.

1.1. 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 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.

2. Overview

   This memo identifies the proposed set of objects for configuring,
   monitoring, and controlling SDLC ports and link stations.

2.1. Tables Defined in the SNADLC SDLC MIB

   The SNADLC MIB is composed of two managed entities with three tables
   each. The two managed entities for SDLC are:

   o   Ports: the physical connection, and

   o   Link Stations: the logical connections on the Port.

   The three management tables are:

   o   Adminstration: objects used for configuring and controlling
        the operation of a Port or Link Station,

   o   Operational: objects that reflect the run-time state of the
        Port or Link Station, and

   o   Statistics: objects that reflect the operating metrics of the
        Port or Link Station.

   Considering the above combinations, the following are the actual
   tables found in this MIB:

   1)   Port Administration Table,

   2)   Port Operation Table,

   3)   Port Statistics Table,

   4)   Link Station Administration Table,

   5)   Link Station Operation Table,

   6)   Link Station Statistics Table.

   All variables in this MIB relate to SDLC ports and link stations
   only. Any variable relating to higher-layer entities in SNA such as
   Physical Units (PU) and Logical Units (LU) are found in the SNA NAU
   MIB [4].

2.2. Row Creation Mechanism

   Row creation mechanism for the sdlcLSAdminTable is based on the use
   of the RowStatus object. It follows the rules for the use in SNMPv1
   context proposed in the memo "Row creation with SNMPv1" [5]. Before
   accepting the destroy value for an entry, an agent has to verify the
   operational state of the corresponding entry in the sdlcLSOperTable
   entry.

2.3. Relationship to the Interfaces Group

   This memo shall conform to the recommendations of [6].

   The SDLC layer of each SDLC Port shall be modeled by a row in the
   ifTable with an ifType using the IANA assigned number for SDLC (17).
   Each SDLC port interface must comply with the following conformance
   groups in [6]:

      - ifGeneralGroup
      - ifStackGroup
      - ifPacketGroup

   An implementation may optionally comply with the ifTestGroup defined
   in that memo to execute vendor specific tests. An example of this
   would be to perform LPDA test functions.

   The SDLC port's relation with its physical, or lower-layer interface
   (i.e., RS-232, V.35, etc.) shall be modeled by a row in the
   ifStackTable with the ifStackHigherLayer pointing to the SDLC port
   ifTable instance and the ifStackLowerLayer pointing to the physical
   media-specific ifTable instance. The media-specific objects of these
   lower-layer interfaces will, of course, be described in their
   respective MIBs (i.e., [1]).

   The following table provides specific implementation guidelines for
   all the interface group objects listed in the conformance tables
   above.

Object   Use for an SDLC Port

ifIndex   Each SDLC port is represented by an ifEntry. All
                       SDLC port tables shall be indexed by ifIndex.

ifDescr   Description of the SDLC port.

ifType   The IANA value reserved for SDLC - 17.

ifMtu   Refer to [6].

ifSpeed   This object shall reflect the value of the
                       corresponding object in the ifEntry of the
                       associated lower-layer interface.

ifPhysAddress   A string denoting the physical location of the SDLC
                       port within its node. This shall have unique
                       significance within each implementing node.

ifAdminStatus   This object shall reflect the value of the
                       corresponding object in the ifEntry of the
                       associated lower-layer interface.

ifOperStatus   This object shall reflect the value of the
                       corresponding object in the ifEntry of the
                       associated lower-layer interface.

ifLastChange   Refer to [6].

ifInOctets   Refer to [6].

ifInUcastPkts   This object shall count packets received from a
                       specific SDLC poll address. Packets for the SDLC
                       broadcast address of x'FF' are not counted.

ifInDiscards   Refer to [6].

ifInErrors   Refer to [6]. Specific counters for these errors
                       are kept in the sdlcPortStatsTable.

ifInUnknownProtos   This counter shall return zero for SDLC ports.

ifOutOctets   Refer to [6].

ifOutUcastPkts   This object shall count packets transmitted to a
                       specific SDLC poll address (not x'FF').

ifOutDiscards   Refer to [6].

ifOutErrors   Refer to [6]. Specific counters for these errors
                       are kept in the sdlcPortStatsTable.

ifName   The textual name of the SDLC port or an octet string
                       of zero length.

ifInMulticastPkts   The value is 0 (not applicable to the SDLC layer).

ifInBroadcastPkts   This object shall count packets received on this
                       interface addressed to the SDLC broadcast address
                       (x'FF'). Only point-to-point ports supporting a
                       secondary switched station should return non-zero
                       values.

ifOutMulticastPkts   The value is 0 (not applicable to the SDLC layer).

ifOutBroadcastPkts   This object shall count packets transmitted on this
                       interface which were addressed to the SDLC broadcast

address (x'FF'). Only point-to-point ports
supporting a primary switched station should
return non-zero values.

ifHC*   Not part of the conformance group.

ifLinkUpDownTrapEnable
                   Refer to [6]. Default is disabled (2).

ifHighSpeed   Refer to [6].

ifPromiscuousMode Should return false if this interface receives only
                   packets addressed to its SDLC poll address(es).
                   However, in certain implementations, the lower-layer
                   interface shall present all frames to the SDLC port
                   regardless of the poll address. Such frames may be
                   the result of a misconfigured peer or the secondary
                   end of a multipoint connection. Such
                   implementations should return true for this
                   object.

ifConnectorPresent Set to 'false'.

ifStackHigherLayer For each SDLC port there will be an ifStackEntry
                   with this object's value referring to the ifIndex of
                   the SDLC port's ifEntry for the SDLC layer.

ifStackLowerLayer For each SDLC port there will be an ifStackEntry
                   with this object's value referring to the ifIndex of
                   the physical layer interface's ifEntry for that SDLC
                   port.

ifStackStatus   Refer to [6].

3. Definitions

SNA-SDLC-MIB DEFINITIONS ::= BEGIN

IMPORTS
     MODULE-IDENTITY, OBJECT-TYPE, NOTIFICATION-TYPE,
     Counter32, Integer32, TimeTicks
         FROM SNMPv2-SMI
     DisplayString, RowStatus, TimeInterval
         FROM SNMPv2-TC
     MODULE-COMPLIANCE, OBJECT-GROUP
         FROM SNMPv2-CONF
     mib-2, ifIndex, ifAdminStatus, ifOperStatus
         FROM RFC1213-MIB;

snaDLC MODULE-IDENTITY
         LAST-UPDATED "9411150000Z"
         ORGANIZATION "IETF SNA DLC MIB Working Group"
         CONTACT-INFO
                 "   Wayne Clark

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                           3100 Smoketree Ct.
                           Suite 1000
                           Raleigh, NC 27604
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                   E-Mail: wclark@cisco.com"

         DESCRIPTION
                 "This is the MIB module for objects used to
                  manage SDLC devices."

::= { mib-2 41 }

--
-- The following data link controls are modelled in this MIB module:
--
--   1. SDLC
--

sdlc   OBJECT IDENTIFIER ::= { snaDLC 1 }

```
--
--   THE SDLC GROUP
--   ==============
--
--   The following resources are modelled in the SDLC group of this
--   MIB module:
--
--      1. PORTS
--      2. LINK STATIONS

sdlcPortGroup OBJECT IDENTIFIER ::= { sdlc 1 } -- Physical Ports
sdlcLSGroup   OBJECT IDENTIFIER ::= { sdlc 2 } -- Logical Link Stations


--
--   THE SDLC PORT GROUP
--   ===================
--
--   The following classes of information is modelled for each SDLC port:
--
--      1.   ADMINISTRATIVE ( read/write)
--      2.   OPERATIONAL    ( read-only)
--      3.   STATISTICS     ( read-only)

--   Information not found in this group is found in tables described in
--   the following RFCs:
--
--    1.   RFC1213  - MIB-II
--
--              TABLE                    INDEX
--              ==================       ===================
--       a.   ifTable                   ifIndex
--
--    2.   RFC1659  - The RS232-like MIB
--
--              TABLE                    INDEX
--              ==================       ===================
--       a.   rs232PortTable            rs232PortIndex
--       b.   rs232SyncPortTable        rs232SyncPortIndex
--       c.   rs232InSigTable           rs232InSigPortIndex,
--                                      rs232InSigName
--       d.   rs232OutSigTable          rs232OutSigPortIndex,
--                                      rs232OutSigName
--    ** e.   rs232AsyncPortTable       rs232AsyncPortIndex
--
--    ** rs232AsyncPortTable for ISO 3309.3 ( Start-Stop SDLC).
```

```
--    ************************************************************
--    *                                                          *
--    *              THE SDLC PORT ADMINISTRATIVE TABLE          *
--    *                                                          *
--    ************************************************************


sdlcPortAdminTable   OBJECT-TYPE
                     SYNTAX      SEQUENCE OF SdlcPortAdminEntry
                     MAX-ACCESS  not-accessible
                     STATUS      current
                     DESCRIPTION
                         "This table contains objects that can be
                         changed to manage an SDLC port.   Changing one
                         of these parameters may take effect in the
                         operating port immediately or may wait until
                         the interface is restarted depending on the
                         details of the implementation.

                         Most of the objects in this read-write table
                         have corresponding read-only objects in the
                         sdlcPortOperTable that return the current
                         operating value.

                         The operating values may be different from
                         these configured values if  a configured
                         parameter was changed after the interface was
                         started."
                      ::= { sdlcPortGroup 1 }

sdlcPortAdminEntry   OBJECT-TYPE
                     SYNTAX      SdlcPortAdminEntry
                     MAX-ACCESS  not-accessible
                     STATUS      current
                     DESCRIPTION
                         "A list of configured values for an SDLC port."
                     INDEX   { ifIndex }
                     ::= { sdlcPortAdminTable 1 }

SdlcPortAdminEntry  ::= SEQUENCE
{
        sdlcPortAdminName            DisplayString,
        sdlcPortAdminRole            INTEGER,
        sdlcPortAdminType            INTEGER,
        sdlcPortAdminTopology        INTEGER,
        sdlcPortAdminISTATUS         INTEGER,
        sdlcPortAdminACTIVTO         TimeInterval,
        sdlcPortAdminPAUSE           TimeInterval,
        sdlcPortAdminSERVLIM         Integer32,
```

```
        sdlcPortAdminSlowPollTimer  TimeInterval
}

sdlcPortAdminName     OBJECT-TYPE
                      SYNTAX      DisplayString (SIZE (1..10))
                      MAX-ACCESS  read-write
                      STATUS      current
                      DESCRIPTION
                          "An octet string that defines the physical port
                          to which this interface is assigned.  It has
                          implementation-specific significance. Its value
                          shall be unique within the administered
                          system.  It must contain only ASCII printable
                          characters.  Should an implementation choose to
                          accept a write operation  for this object, it
                          causes the logical port definition associated
                          with the table instance to be moved to  a
                          different physical port.  A write operation
                          shall not take effect until the port is cycled
                          inactive."
                      ::= { sdlcPortAdminEntry 1 }

sdlcPortAdminRole     OBJECT-TYPE
                      SYNTAX      INTEGER
                      {
                          primary(1),
                          secondary(2),
                          negotiable(3)
                      }
                      MAX-ACCESS  read-write
                      STATUS      current
                      DESCRIPTION
                          "This object describes the role that the link
                          station shall assume the next time a connection
                          is established.

                          Even though this is defined as a port object,
                          it is a link station attribute in the sense
                          that a role is per link station.  However, it
                          is not possible to vary link station roles on a
                          particular port.  For example, if an SDLC port
                          is configured to primary, all link stations on
                          that port must be primary."
                      ::= { sdlcPortAdminEntry 2 }

sdlcPortAdminType     OBJECT-TYPE
                      SYNTAX      INTEGER
                      {
```

```
                     leased(1),
                     switched(2)
                }
                MAX-ACCESS   read-write
                STATUS       current
                DESCRIPTION
                    "This parameter defines whether the SDLC port
                    is to connect to a leased or switched line.  A
                    write operation to this administrative  value
                    shall not take effect until the SDLC port has
                    been cycled inactive."
                DEFVAL { leased }
                ::= { sdlcPortAdminEntry 3 }

sdlcPortAdminTopology  OBJECT-TYPE
                SYNTAX       INTEGER
                {
                    pointToPoint(1),
                    multipoint(2)
                }
                MAX-ACCESS   read-write
                STATUS       current
                DESCRIPTION
                    "This parameter defines whether the SDLC port is
                    capable of operating in either a point-to-point
                    or multipoint topology.

                    sdlcPortAdminTopology == multipoint implies the
                    port can also operate in a point-to-point
                    topology.  sdlcPortAdminTopology ==
                    pointToPoint does not imply the port can
                    operate in a multipoint topology.

                    A write operation to this administrative value
                    shall not take effect until the SDLC port has
                    been cycled inactive."
                DEFVAL { pointToPoint }
                ::= { sdlcPortAdminEntry 4 }

sdlcPortAdminISTATUS  OBJECT-TYPE
                SYNTAX       INTEGER
                {
                    inactive(1),
                    active(2)
                }
                MAX-ACCESS   read-write
                STATUS       current
                DESCRIPTION
```

```
                         "This parameter controls the initial value of
                         the administrative status, ifAdminStatus, of
                         this SDLC port at port start-up.  Depending
                         on the implementation, a write operation to
                         this administrative object may not take effect
                         until the SDLC port has been cycled inactive."
                    DEFVAL { active }
                    ::= { sdlcPortAdminEntry 5 }

sdlcPortAdminACTIVTO    OBJECT-TYPE
                    SYNTAX        TimeInterval
                    MAX-ACCESS    read-write
                    STATUS        current
                    DESCRIPTION
                         "This parameter defines the period of time (in
                         1/100ths of a second) that the port will allow a
                         switched line to remain inactive before
                         disconnecting.  A switched line is considered
                         to be inactive if there are no I-Frames being
                         transferred.  A value of zero indicates no
                         timeout.  Depending on the implementation, a
                         write operation to this administered value may
                         not take effect until the port is cycled
                         inactive.

                         This object only has meaning for SDLC ports
                         where sdlcPortAdminType == switched

                         The object descriptor contains the name of an
                         NCP configuration parameter, ACTIVTO.  Please
                         note that the value of this object represents
                         1/100ths of a second while the NCP ACTIVTO is
                         represented in seconds."
                    DEFVAL { 0 }
                    ::= { sdlcPortAdminEntry 6 }

sdlcPortAdminPAUSE  OBJECT-TYPE
                    SYNTAX        TimeInterval
                    MAX-ACCESS    read-write
                    STATUS        current
                    DESCRIPTION
                         "This object defines the minimum elapsed time
                         (in 1/100ths of a second) between any two
                         traversals of the poll list for a primary SDLC
                         port.  Depending on the implementation, a write
                         operation to this administered value  may not
                         take effect until the port is cycled inactive.
```

                    The object descriptor contains the name of an
                    NCP configuration parameter, PAUSE. Please
                    note that the value of this object represents
                    1/100ths of a second while the NCP PAUSE is
                    represented in 1/10ths of a second.

                    This object only has meaning for SDLC ports
                    where sdlcPortAdminRole == primary "
               DEFVAL { 200 }
               ::= { sdlcPortAdminEntry 7 }

sdlcPortAdminSERVLIM OBJECT-TYPE
               SYNTAX   Integer32
               MAX-ACCESS   read-write
               STATUS   current
               DESCRIPTION
                    "This object defines the number of times the
                    active poll list will be traversed before
                    polling a station on the slow poll list for a
                    primary, multipoint SDLC port. Depending on
                    the implementation, a write operation to this
                    administered value may not take effect until
                    the port is cycled inactive.

                    This object only has meaning for SDLC ports
                    where
                        sdlcPortAdminRole == primary
                    and
                        sdlcPortAdminTopology == multipoint "
               DEFVAL { 20 }
               ::= { sdlcPortAdminEntry 8 }

sdlcPortAdminSlowPollTimer OBJECT-TYPE
               SYNTAX   TimeInterval
               MAX-ACCESS   read-write
               STATUS   current
               DESCRIPTION
                    "This object describes the elapsed time (in
                    1/100ths of a second) between polls for failed
                    secondary link station addresses. Depending
                    on the implementation, a write operation to
                    this administered value may not take effect
                    until the port is cycled inactive.

                    This object only has meaning for SDLC ports
                    where
                        sdlcPortAdminRole == primary
                    and

```
                              sdlcPortAdminTopology == multipoint "
                     DEFVAL { 2000 }
                     ::= { sdlcPortAdminEntry 9 }

  --  ************************************************************
  --  *                                                          *
  --  *                THE SDLC PORT OPERATIONAL TABLE           *
  --  *                                                          *
  --  ************************************************************

  sdlcPortOperTable      OBJECT-TYPE
                     SYNTAX      SEQUENCE OF SdlcPortOperEntry
                     MAX-ACCESS  not-accessible
                     STATUS      current
                     DESCRIPTION
                         "This table contains current SDLC port
                         parameters.  Many of these objects have
                         corresponding objects inthe sdlcPortAdminTable."
                     ::= { sdlcPortGroup 2 }

  sdlcPortOperEntry      OBJECT-TYPE
                     SYNTAX      SdlcPortOperEntry
                     MAX-ACCESS  not-accessible
                     STATUS      current
                     DESCRIPTION
                         "Currently set parameters for a specific SDLC
                         port."
                     INDEX   { ifIndex }
                     ::= { sdlcPortOperTable 1 }

  SdlcPortOperEntry    ::= SEQUENCE
  {
          sdlcPortOperName                 DisplayString,
          sdlcPortOperRole                 INTEGER,
          sdlcPortOperType                 INTEGER,
          sdlcPortOperTopology             INTEGER,
          sdlcPortOperISTATUS              INTEGER,
          sdlcPortOperACTIVTO              TimeInterval,
          sdlcPortOperPAUSE                TimeInterval,
          sdlcPortOperSlowPollMethod       INTEGER,
          sdlcPortOperSERVLIM              Integer32,
          sdlcPortOperSlowPollTimer        TimeInterval,
          sdlcPortOperLastModifyTime       TimeTicks,
          sdlcPortOperLastFailTime         TimeTicks,
          sdlcPortOperLastFailCause        INTEGER
  }

  sdlcPortOperName    OBJECT-TYPE
```

```
                       SYNTAX      DisplayString (SIZE (1..8))
                       MAX-ACCESS  read-only
                       STATUS      current
                       DESCRIPTION
                           "An octet string that describes the physical
                           port to which this interface is currently
                           attached.  It has  implementation-specific
                           significance."
                       ::= { sdlcPortOperEntry 1 }

sdlcPortOperRole       OBJECT-TYPE
                       SYNTAX      INTEGER
                       {
                           primary(1),
                           secondary(2),
                           undefined(3)
                       }
                       MAX-ACCESS  read-only
                       STATUS      current
                       DESCRIPTION
                           "This object describes the role that the link
                           station has assumed on this connection.

                           Even though this is defined as a port object,
                           it is a link station attribute in the sense
                           that a role is per link station.  However, it
                           is not possible to vary link station roles on a
                           particular port.  For example, if an SDLC port
                           is configured to primary, all link stations on
                           that port must be primary.

                           The value of sdlcPortOperRole is undefined(3)
                           whenever the link station role has not yet been
                           established by the mode setting command."
                       ::= { sdlcPortOperEntry 2 }

sdlcPortOperType       OBJECT-TYPE
                       SYNTAX      INTEGER
                       {
                            leased(1),
                            switched(2)
                       }
                       MAX-ACCESS  read-only
                       STATUS      current
                       DESCRIPTION
                           "This parameter defines whether the SDLC port
                           is currently operating as though connected to a
                           leased or switched line."
```

```
                        ::= { sdlcPortOperEntry 3 }

sdlcPortOperTopology  OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                         pointToPoint(1),
                         multipoint(2)
                    }
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This parameter defines whether the SDLC port is
                        currently operating in a point-to-point or
                        multipoint topology."
                    ::= { sdlcPortOperEntry 4 }

sdlcPortOperISTATUS OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                         inactive(1),
                         active(2)
                    }
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This parameter describes the initial value of
                        the administrative status, ifAdminStatus, of
                        this SDLC port at last port start-up."
                    ::= { sdlcPortOperEntry 5 }


sdlcPortOperACTIVTO OBJECT-TYPE
                    SYNTAX      TimeInterval
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This parameter defines the period of time (in
                        100ths of a second) that the port will allow a
                        switched line to remain inactive before
                        disconnecting.  A switched line is considered
                        to be inactive if there are no I-Frames being
                        transferred.

                        The object descriptor contains the name of an
                        NCP configuration parameter, ACTIVTO.  Please
                        note that the value of this object represents
                        1/100ths of a second while the NCP ACTIVTO is
                        represented in seconds.
```

```
                                A value of zero indicates no timeout."
                            ::= { sdlcPortOperEntry 6 }

sdlcPortOperPAUSE      OBJECT-TYPE
                       SYNTAX      TimeInterval
                       MAX-ACCESS  read-only
                       STATUS      current
                       DESCRIPTION
                            "This object describes the current minimum
                            elapsed time (in 1/100ths of a second) between
                            any two traversals of the poll list for a
                            primary SDLC port.

                            The object descriptor contains the name of an
                            NCP configuration parameter, PAUSE.  Please
                            note that the value of this object represents
                            1/100ths of a second while the NCP PAUSE is
                            represented in 1/10ths of a second.

                            This object only has meaning for SDLC ports
                            where
                                sdlcPortAdminRole == primary "
                            ::= { sdlcPortOperEntry 7 }

sdlcPortOperSlowPollMethod OBJECT-TYPE
                       SYNTAX      INTEGER
                       {
                            servlim(1),
                            pollpause(2),
                            other(3)
                       }
                       MAX-ACCESS  read-only
                       STATUS      current
                       DESCRIPTION
                            "This object defines the exact method that is in
                            effect for periodically polling failed secondary
                            link station addresses.

                            If sdlcPortOperSlowPollMethod == servlim, then
                            sdlcPortOperSERVLIM defines the actual polling
                            characteristics.

                            If sdlcPortOperSlowPollMethod == pollpause,
                            then sdlcPortOperSlowPollTimer defines the
                            actual polling characteristics.

                            If sdlcPortOperSlowPollMethod == other, then
                            the polling characteristics are modeled in
```

                        vendor-specific objects.

                        This object only has meaning for SDLC ports
                        where
                            sdlcPortOperRole == primary
                        and
                            sdlcPortOperTopology == multipoint "
                   ::= { sdlcPortOperEntry 8 }

sdlcPortOperSERVLIM OBJECT-TYPE
                   SYNTAX   Integer32
                   MAX-ACCESS   read-only
                   STATUS   current
                   DESCRIPTION
                       "This object describes the number of times the
                       active poll list is currently being traversed
                       before polling a station on the slow poll list
                       for a primary, multipoint SDLC port.

                       This object only has meaning for SDLC ports
                       where
                           sdlcPortOperRole == primary
                       and
                           sdlcPortOperTopology == multipoint "
                   ::= { sdlcPortOperEntry 9 }

sdlcPortOperSlowPollTimer OBJECT-TYPE
                   SYNTAX   TimeInterval
                   MAX-ACCESS   read-only
                   STATUS   current
                   DESCRIPTION
                       "This object describes the elapsed time (in
                       1/100ths of a second) between polls for failed
                       secondary link station addresses.

                       This object only has meaning for SDLC ports
                       where
                           sdlcPortOperRole == primary
                       and
                           sdlcPortOperTopology == multipoint "
                   ::= { sdlcPortOperEntry 10 }

sdlcPortOperLastModifyTime   OBJECT-TYPE
                   SYNTAX   TimeTicks
                   MAX-ACCESS   read-only
                   STATUS   current
                   DESCRIPTION
                       "This object describes the value of sysUpTime

```
                        when this port definition was last modified.
                        If the port has not been modified, then this
                        value shall be zero."
                    ::= { sdlcPortOperEntry 11 }


sdlcPortOperLastFailTime    OBJECT-TYPE
                    SYNTAX      TimeTicks
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object describes the value of sysUpTime
                        when this SDLC port last failed.  If the port
                        has not failed, then this value shall be zero."
                    ::= { sdlcPortOperEntry 12 }


sdlcPortOperLastFailCause   OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                        undefined(1),
                        physical(2)
                    }
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This enumerated object describes the cause of
                        the last failure of this SDLC port.  If the
                        port has not failed, then this object has a
                        value of undefined(1)."
                    DEFVAL { undefined }
                    ::= { sdlcPortOperEntry 13 }
```

```
--   **********************************************************
--   *                                                        *
--   *              THE SDLC PORT STATISTICS TABLE            *
--   *                                                        *
--   **********************************************************

sdlcPortStatsTable   OBJECT-TYPE
                     SYNTAX      SEQUENCE OF SdlcPortStatsEntry
                     MAX-ACCESS  not-accessible
                     STATUS      current
                     DESCRIPTION
                        "Each entry in this table contains statistics
                         for a specific SDLC port."
                      ::= { sdlcPortGroup 3 }

sdlcPortStatsEntry   OBJECT-TYPE
                     SYNTAX      SdlcPortStatsEntry
                     MAX-ACCESS  not-accessible
                     STATUS      current
                     DESCRIPTION
                        "A list of statistics for an SDLC port."
                     INDEX   { ifIndex }
                     ::= { sdlcPortStatsTable 1 }

SdlcPortStatsEntry ::= SEQUENCE
{
        sdlcPortStatsPhysicalFailures Counter32,
        sdlcPortStatsInvalidAddresses Counter32,
        sdlcPortStatsDwarfFrames      Counter32,
        sdlcPortStatsPollsIn          Counter32,
        sdlcPortStatsPollsOut         Counter32,
        sdlcPortStatsPollRspsIn       Counter32,
        sdlcPortStatsPollRspsOut      Counter32,
        sdlcPortStatsLocalBusies      Counter32,
        sdlcPortStatsRemoteBusies     Counter32,
        sdlcPortStatsIFramesIn        Counter32,
        sdlcPortStatsIFramesOut       Counter32,
        sdlcPortStatsOctetsIn         Counter32,
        sdlcPortStatsOctetsOut        Counter32,
        sdlcPortStatsProtocolErrs     Counter32,
        sdlcPortStatsActivityTOs      Counter32,
        sdlcPortStatsRNRLIMITs        Counter32,
        sdlcPortStatsRetriesExps      Counter32,
        sdlcPortStatsRetransmitsIn    Counter32,
        sdlcPortStatsRetransmitsOut   Counter32
}

sdlcPortStatsPhysicalFailures OBJECT-TYPE
```

```
                    SYNTAX      Counter32
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects the total number of times
                        this port has failed due to its physical media
                        since port startup.  At port startup time,
                        this object must be initialized to zero."
                    ::= { sdlcPortStatsEntry 1 }

sdlcPortStatsInvalidAddresses OBJECT-TYPE
                    SYNTAX      Counter32
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects the total number of
                        frames received by this port with invalid link
                        station addresses."
                    ::= { sdlcPortStatsEntry 2 }

sdlcPortStatsDwarfFrames OBJECT-TYPE
                    SYNTAX      Counter32
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects the total number of
                        frames received by this port which were
                        delivered intact by the physical layer but were
                        too short to be legal.

                        Ignoring the frame check sequence (FCS), a
                        frame is considered to be too short if it
                        is less than 2 bytes for sdlcLSOperMODULO of
                        eight, or if it is less than 3 bytes for
                        sdlcLSOperMODULO of onetwentyeight."

                    ::= { sdlcPortStatsEntry 3 }

sdlcPortStatsPollsIn OBJECT-TYPE
                    SYNTAX      Counter32
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects the total number of polls
                         received by this port since the port was
                         created."

                    ::= { sdlcPortStatsEntry 4 }
```

sdlcPortStatsPollsOut OBJECT-TYPE
                    SYNTAX   Counter32
                    MAX-ACCESS read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the total number of polls
                        sent by this port since the port was created."

                    ::= { sdlcPortStatsEntry 5 }

sdlcPortStatsPollRspsIn OBJECT-TYPE
                    SYNTAX   Counter32
                    MAX-ACCESS read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the total number of poll
                        responses received by this port since the port
                        was created."

                    ::= { sdlcPortStatsEntry 6 }

sdlcPortStatsPollRspsOut OBJECT-TYPE
                    SYNTAX   Counter32
                    MAX-ACCESS read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the total number of poll
                        responses sent by this port since the port was
                        created."

                    ::= { sdlcPortStatsEntry 7 }

sdlcPortStatsLocalBusies OBJECT-TYPE
                    SYNTAX   Counter32
                    MAX-ACCESS read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the total number of
                        times that the local SDLC link stations on
                        this port have entered a busy state (RNR).
                        This object is initialized to zero when the
                        port is created."
                    ::= { sdlcPortStatsEntry 8 }

sdlcPortStatsRemoteBusies OBJECT-TYPE
                    SYNTAX   Counter32
                    MAX-ACCESS read-only
                    STATUS   current

```
                     DESCRIPTION
                           "This object reflects the total number of
                           times that the adjacent (i.e., remote) SDLC
                           link stations on this port have entered a busy
                           state (RNR).  This object is initialized to
                           zero when the port is created."
                     ::= { sdlcPortStatsEntry 9 }

sdlcPortStatsIFramesIn OBJECT-TYPE
                     SYNTAX        Counter32
                     MAX-ACCESS    read-only
                     STATUS        current
                     DESCRIPTION
                           "This object reflects the total number of
                           I-Frames that have been received by SDLC link
                           stations on this port.  This object is
                           initialized to zero when the port is created."
                     ::= { sdlcPortStatsEntry 10 }

sdlcPortStatsIFramesOut OBJECT-TYPE
                     SYNTAX        Counter32
                     MAX-ACCESS    read-only
                     STATUS        current
                     DESCRIPTION
                           "This object reflects the total number of
                           I-Frames that have been transmitted by SDLC
                           link stations on this port.  This object is
                           initialized to zero when the port is created."
                     ::= { sdlcPortStatsEntry 11 }

sdlcPortStatsOctetsIn OBJECT-TYPE
                     SYNTAX        Counter32
                     MAX-ACCESS    read-only
                     STATUS        current
                     DESCRIPTION
                           "This object reflects the total octets
                           received from adjacent SDLC link stations on
                           this port.  This object covers the address,
                           control, and information field of I-Frames
                           only.  This object is initialized to zero when
                           the port is created."
                     ::= { sdlcPortStatsEntry 12 }

sdlcPortStatsOctetsOut OBJECT-TYPE
                     SYNTAX        Counter32
                     MAX-ACCESS    read-only
                     STATUS        current
                     DESCRIPTION
```

                        "This object reflects the total octets
                        transmitted to adjacent SDLC link stations on
                        this port. This object covers the address,
                        control, and information field of I-Frames
                        only. This object is initialized to zero when
                        the port is created."
                ::= { sdlcPortStatsEntry 13 }

sdlcPortStatsProtocolErrs OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS read-only
                STATUS   current
                DESCRIPTION
                        "This object reflects the total number of
                        times that the SDLC link stations on this port
                        have deactivated the link as a result of
                        having received a protocol violation from the
                        adjacent link station. This object is
                        initialized to zero when the port is created."
                ::= { sdlcPortStatsEntry 14 }

sdlcPortStatsActivityTOs OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS read-only
                STATUS   current
                DESCRIPTION
                        "This object reflects the total number of
                        times that the SDLC link stations on this port
                        have deactivated the link as a result of no
                        activity on the link. This object is
                        initialized to zero when the port is created."
                ::= { sdlcPortStatsEntry 15 }

sdlcPortStatsRNRLIMITs OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS read-only
                STATUS   current
                DESCRIPTION
                        "This object reflects the total number of
                        times that the SDLC link stations on this port
                        have deactivated the link as a result of its
                        RNRLIMIT timer expiring. This object is
                        initialized to zero when the port is created."
                ::= { sdlcPortStatsEntry 16 }

sdlcPortStatsRetriesExps OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS read-only

                        STATUS   current
                        DESCRIPTION
                            "This object reflects the total number of
                            times that the SDLC link stations on this port
                            have deactivated the link as a result of a
                            retry sequence being exhausted. This object
                            is initialized to zero when the port is
                            created."
                        ::= { sdlcPortStatsEntry 17 }

sdlcPortStatsRetransmitsIn OBJECT-TYPE
                        SYNTAX   Counter32
                        MAX-ACCESS   read-only
                        STATUS   current
                        DESCRIPTION
                            "This object reflects the total number of
                            I-Frames retransmitted by remote link stations
                            for all SDLC link stations on this port. This
                            object is initialized to zero when the port is
                            created."
                        ::= { sdlcPortStatsEntry 18 }

sdlcPortStatsRetransmitsOut OBJECT-TYPE
                        SYNTAX   Counter32
                        MAX-ACCESS   read-only
                        STATUS   current
                        DESCRIPTION
                            "This object reflects the total number of
                            I-Frames retransmitted by all local SDLC link
                            stations on this port. This object is
                            initialized to zero when the port is created."
                        ::= { sdlcPortStatsEntry 19 }

```
--
--   THE SDLC LINK STATION GROUP
--   ===========================
--

--   The following classes of information is modelled for each SDLC link
--   station:
--
--      1.   ADMINISTRATIVE ( read-write)
--      2.   OPERATIONAL    ( read-only)
--      3.   STATISTICS     ( read-only)


--   ************************************************************
--   *                                                          *
--   *         THE SDLC LINK STATION ADMINISTRATIVE TABLE       *
--   *                                                          *
--   ************************************************************

sdlcLSAdminTable   OBJECT-TYPE
                   SYNTAX       SEQUENCE OF SdlcLSAdminEntry
                   MAX-ACCESS   not-accessible
                   STATUS       current
                   DESCRIPTION
                       "This table contains objects that can be
                       changed to manage an SDLC link station.
                       Changing one of these parameters may take
                       effect in the operating link immediately or may
                       wait until the link is restarted depending on
                       the details of the implementation.

                       The entries in sdlcLSAdminTable can be created
                       either by an agent or a management station. The
                       management station can create an entry in
                       sdlcLSAdminTable by setting the appropriate
                       value in sdlcLSAdminRowStatus.

                       Most of the objects in this read-create table
                       have corresponding read-only objects in the
                       sdlcLSOperTable that reflect the current
                       operating value.

                       The operating values may be different from
                       these configured values if changed by XID
                       negotiation or if a configured parameter was
                       changed after the link was started."
                   ::= { sdlcLSGroup 1 }

sdlcLSAdminEntry   OBJECT-TYPE
```

```
                        SYNTAX      SdlcLSAdminEntry
                        MAX-ACCESS  not-accessible
                        STATUS      current
                        DESCRIPTION
                            "A list of configured values for an SDLC link
                            station."
                        INDEX   { ifIndex, sdlcLSAddress }
                        ::= { sdlcLSAdminTable 1 }

SdlcLSAdminEntry ::= SEQUENCE
{
        sdlcLSAddress            INTEGER,
        sdlcLSAdminName          DisplayString,
        sdlcLSAdminState         INTEGER,
        sdlcLSAdminISTATUS       INTEGER,
        sdlcLSAdminMAXDATASend   Integer32,
        sdlcLSAdminMAXDATARcv    Integer32,
        sdlcLSAdminREPLYTO       TimeInterval,
        sdlcLSAdminMAXIN         INTEGER,
        sdlcLSAdminMAXOUT        INTEGER,
        sdlcLSAdminMODULO        INTEGER,
        sdlcLSAdminRETRIESm      INTEGER,
        sdlcLSAdminRETRIESt      TimeInterval,
        sdlcLSAdminRETRIESn      Integer32,
        sdlcLSAdminRNRLIMIT      TimeInterval,
        sdlcLSAdminDATMODE       INTEGER,
        sdlcLSAdminGPoll         INTEGER,
        sdlcLSAdminSimRim        INTEGER,
        sdlcLSAdminXmitRcvCap    INTEGER,
        sdlcLSAdminRowStatus     RowStatus
}

sdlcLSAddress           OBJECT-TYPE
                        SYNTAX      INTEGER (1..255)
                        MAX-ACCESS  read-create
                        STATUS      current
                        DESCRIPTION
                            "This value is the poll address of the
                            secondary link station for this SDLC link.  It
                            uniquely identifies the SDLC link station
                            within a single SDLC port."
                        ::= { sdlcLSAdminEntry 1 }

sdlcLSAdminName         OBJECT-TYPE
                        SYNTAX      DisplayString (SIZE (1..10))
                        MAX-ACCESS  read-create
                        STATUS      current
                        DESCRIPTION
```

```
                     "An octet string that defines the local name of
                     the SDLC link station.  This field may be sent
                     in the XID3 control vector 0x0E, type 0xF7."
                ::= { sdlcLSAdminEntry 2 }


sdlcLSAdminState      OBJECT-TYPE
                SYNTAX      INTEGER
                {
                     inactive(1),
                     active(2)
                }
                MAX-ACCESS  read-create
                STATUS      current
                DESCRIPTION
                     "This object controls the desired state of the
                     SDLC station.  The managed system shall attempt
                     to keep the operational state, sdlcLSOperState,
                     consistent with this value."
                DEFVAL { active }
                ::= { sdlcLSAdminEntry 3 }


sdlcLSAdminISTATUS  OBJECT-TYPE
                SYNTAX      INTEGER
                {
                     inactive(1),
                     active(2)
                }
                MAX-ACCESS  read-create
                STATUS      current
                DESCRIPTION
                     "This parameter controls the desired state,
                     sdlcLSAdminState, of the SDLC link station at
                     link station start-up."
                DEFVAL { active }
                ::= { sdlcLSAdminEntry 4 }


sdlcLSAdminMAXDATASend  OBJECT-TYPE
                SYNTAX      Integer32
                MAX-ACCESS  read-create
                STATUS      current
                DESCRIPTION
                     "This object contains the maximum PDU size that
                     the local link station thinks it can send to
                     the adjacent link station before having
                     received any XID from the ALS.  After the
                     maximum PDU size that the ALS can receive is
                     known (via XID exchange) that value is
                     reflected in sdlcLSOperMAXDATASend and takes
```

                        precedence over this object.

                        This value includes the Transmission Header
                        (TH) and the Request Header (RH)."
                   ::= { sdlcLSAdminEntry 5 }

sdlcLSAdminMAXDATARcv OBJECT-TYPE
                   SYNTAX   Integer32
                   MAX-ACCESS   read-create
                   STATUS   current
                   DESCRIPTION
                        "This object contains the maximum PDU size that
                        the local link station can receive from the
                        adjacent link station. This value is sent in
                        the XID to the ALS.

                        This value includes the Transmission Header
                        (TH) and the Request Header (RH)."
                   ::= { sdlcLSAdminEntry 6 }

sdlcLSAdminREPLYTO   OBJECT-TYPE
                   SYNTAX   TimeInterval
                   MAX-ACCESS   read-create
                   STATUS   current
                   DESCRIPTION
                        "This object controls the reply timeout (in
                        1/100ths of a second) for an SDLC link
                        station. If the link station does not receive
                        a response to a poll or message before the
                        specified time expires then the appropriate
                        error recovery shall be initiated.

                        The object descriptor contains the name of an
                        NCP configuration parameter, REPLYTO. Please
                        note that the value of this object represents
                        1/100ths of a second while the NCP REPLYTO is
                        represented in 1/10ths of a second.

                        Depending on the implementation, a write
                        operation to this administered value may not
                        change the operational value, sdlcLSOperREPLYTO,
                        until the link station is cycled inactive.

                        This object only has meaning for SDLC ports
                        where sdlcPortAdminRole == primary "
                   DEFVAL { 100 }
                   ::= { sdlcLSAdminEntry 7 }

sdlcLSAdminMAXIN   OBJECT-TYPE
                       SYNTAX   INTEGER (1..127)
                       MAX-ACCESS   read-create
                       STATUS   current
                       DESCRIPTION
                           "This object controls the maximum number of
                           unacknowledged I-frames which an SDLC link
                           station may receive. This should range from 1
                           to (sdlcLSAdminMODULO - 1). This value is sent
                           in the XID to the ALS.

                           A write operation to this administered value
                           will not change the operational value,
                           sdlcLSOperMAXIN, until the link station is
                           cycled inactive."
                       DEFVAL { 7 }
                       ::= { sdlcLSAdminEntry 8 }

sdlcLSAdminMAXOUT   OBJECT-TYPE
                       SYNTAX   INTEGER (1..127)
                       MAX-ACCESS   read-create
                       STATUS   current
                       DESCRIPTION
                           "This object controls the maximum number of
                           consecutive unacknowledged I-frames which an
                           SDLC link station shall send without an
                           acknowledgement. This shall range from 1 to
                           (sdlcLSAdminMODULO - 1).

                           For link stations on switched SDLC lines,
                           certain implementions may choose to override
                           this administered value with the value
                           received in the XID exchange.

                           Depending on the implementation, a write
                           operation to this administered value may not
                           change the operational value,
                           sdlcLSOperMAXOUT, until the link station is
                           cycled inactive.

                           An implementation can support only modulo 8,
                           only modulo 128, or both."
                       DEFVAL { 1 }
                       ::= { sdlcLSAdminEntry 9 }

sdlcLSAdminMODULO   OBJECT-TYPE
                       SYNTAX   INTEGER
                       {

```
                                eight(8),
                                onetwentyeight(128)
                            }
                        MAX-ACCESS  read-create
                        STATUS      current
                        DESCRIPTION
                            "This object controls the modulus for an SDLC
                            link station.  This modulus determines the size
                            of the rotating acknowledgement window used the
                            SDLC link station pair.

                            A write operation to this administered value
                            will not change the operational value,
                            sdlcLSOperMODULO, until the link station is
                            cycled inactive.

                            An implementation can support only modulo 8,
                            only modulo 128, or both."
                        DEFVAL { eight }
                        ::= { sdlcLSAdminEntry 10 }

sdlcLSAdminRETRIESm OBJECT-TYPE
                        SYNTAX      INTEGER (0..128)
                        MAX-ACCESS  read-create
                        STATUS      current
                        DESCRIPTION
                            "This object controls number of retries in a
                            retry sequence for the local SDLC link
                            station.  A retry sequence is a series of
                            retransmitted frames ( data or control) for
                            which no positive acknowledgement is received.

                            The number of times that the retry sequence is
                            to be repeated is controlled by the object:
                            sdlcLSAdminRETRIESn.  The interval between retry
                            sequences is controlled by the object:
                            sdlcLSAdminRETRIESt.

                            A value of zero indicates no retries. If the
                            value of sdlcLSAdminRETRIESm is zero, then the
                            values of sdlcLSAdminRETRIESt and
                            sdlcLSAdminRETRIESn should also be zero.

                            Depending on the implementation, a write
                            operation to this administered value  may not
                            change the operational value,
                            sdlcLSOperRETRIESm, until the link station is
                            cycled inactive."
```

```
                        DEFVAL { 15 }
                        ::= { sdlcLSAdminEntry 11 }

sdlcLSAdminRETRIESt OBJECT-TYPE
                        SYNTAX      TimeInterval
                        MAX-ACCESS  read-create
                        STATUS      current
                        DESCRIPTION
                            "This object controls the interval (in 1/100ths
                            of a second) between retry sequences for the
                            local SDLC link station if multiple retry
                            sequences are specified .  A retry sequence is
                            a series of retransmitted frames ( data or
                            control) for which no positive acknowledgement
                            is received.

                            The number of repeated retries sequences is
                            controlled by the object: sdlcLSAdminRETRIESn.
                            The retries per sequence is controlled by the
                            object:  sdlcLSAdminRETRIESm.

                            The object descriptor contains the name of an
                            NCP configuration parameter, RETRIESt.  Please
                            note that the value of this object represents
                            1/100ths of a second while the NCP RETRIESt is
                            represented in seconds.

                            Depending on the implementation, a write
                            operation to this administered value  may not
                            change the operational value,
                            sdlcLSOperRETRIESt, until the link station is
                            cycled inactive."
                        DEFVAL { 0 }
                        ::= { sdlcLSAdminEntry 12 }

sdlcLSAdminRETRIESn OBJECT-TYPE
                        SYNTAX      Integer32
                        MAX-ACCESS  read-create
                        STATUS      current
                        DESCRIPTION
                            "This object controls the number of times that
                            a retry sequence is repeated for the local SDLC
                            link station.  A retry sequence is a series of
                            retransmitted frames ( data or control) for
                            which no positive acknowledgement is received.

                            The interval between retry sequences is
                            controlled by the object: sdlcLSAdminRETRIESn.
```

                         The retries per sequence is controlled by the
                         object: sdlcLSAdminRETRIESm.

                         Depending on the implementation, a write
                         operation to this administered value may not
                         change the operational value,
                         sdlcLSOperRETRIESn, until the link station is
                         cycled inactive."
                    DEFVAL { 0 }
                    ::= { sdlcLSAdminEntry 13 }

sdlcLSAdminRNRLIMIT OBJECT-TYPE
                    SYNTAX   TimeInterval
                    MAX-ACCESS read-create
                    STATUS   current
                    DESCRIPTION
                         "This object controls the length of time (in
                         1/100ths of a second) that an SDLC link station
                         will allow its adjacent link station to remain
                         in a busy (RNR) state before declaring it
                         inoperative.

                         A value of sdlcLSAdminRNRLIMIT == 0 means there
                         is no limit.

                         The object descriptor contains the name of an
                         NCP configuration parameter, RNRLIMIT. Please
                         note that the value of this object represents
                         1/100ths of a second while the NCP RNRLIMIT is
                         represented in minutes.

                         Depending on the implementation, a write
                         operation to this administered value may not
                         change the operational value,
                         sdlcLSOperRNRLIMIT, until the link station is
                         cycled inactive."
                    DEFVAL { 18000 }
                    ::= { sdlcLSAdminEntry 14 }

sdlcLSAdminDATMODE   OBJECT-TYPE
                    SYNTAX   INTEGER
                    {
                        half(1),
                        full(2)
                    }
                    MAX-ACCESS read-create
                    STATUS   current
                    DESCRIPTION

                    "This object controls whether communications
                    mode with the adjacent link station is
                    two-way-alternate (half) or two-way-simultaneous
                    (full).

                    A write operation to this administered value
                    will not change the operational value,
                    sdlcLSOperDATMODE, until the link station is
                    cycled inactive."
                DEFVAL { half }
                ::= { sdlcLSAdminEntry 15 }

sdlcLSAdminGPoll   OBJECT-TYPE
                SYNTAX   INTEGER (0..254)
                MAX-ACCESS   read-create
                STATUS   current
                DESCRIPTION
                    "This object describes the group poll address
                    for this link station instance. If group poll
                    is not in effect for this link station
                    instance, the value for sdlcLSAdminGPoll should
                    be zero.

                    Depending on the implementation, a write
                    operation to this administered value may not
                    change the operational value, sdlcLSOperGPoll,
                    until the link station is cycled inactive."
                ::= { sdlcLSAdminEntry 16 }

sdlcLSAdminSimRim   OBJECT-TYPE
                SYNTAX   INTEGER
                {
                     no(1),
                     yes(2)
                }
                MAX-ACCESS   read-create
                STATUS   current
                DESCRIPTION
                    "This object controls the support for
                    transmission and receipt of SIM and RIM control
                    frames for this link station. The value of
                    this object controls the setting of the
                    transmit-receive capability sent in the XID
                    field."
                DEFVAL { no }
                ::= { sdlcLSAdminEntry 17 }

sdlcLSAdminXmitRcvCap OBJECT-TYPE

```
                    SYNTAX      INTEGER
                    {
                        twa(1),
                        tws(2)
                    }
                    MAX-ACCESS  read-create
                    STATUS      current
                    DESCRIPTION
                        "This object controls the transmit-receive
                        capabilities for this SDLC link station.  The
                        value of this object establishes the value of
                        the transmit-receive capability indicator sent
                        in the XID image to the adjacent link station."
                    DEFVAL { twa }
                    ::= { sdlcLSAdminEntry 18 }

sdlcLSAdminRowStatus OBJECT-TYPE
                    SYNTAX      RowStatus
                    MAX-ACCESS  read-create
                    STATUS      current
                    DESCRIPTION
                        "This object is used by a management station to
                        create or delete the row entry in
                        sdlcLSAdminTable following the RowStatus
                        textual convention.

                        Upon successful creation of the row, an agent
                        automatically creates a corresponding entry in
                        the sdlcLSOperTable with sdlcLSOperState equal
                        to 'discontacted (1)'."
                    ::= { sdlcLSAdminEntry 19 }

--   ***********************************************************
--   *                                                         *
--   *          THE SDLC LINK STATION OPERATIONAL TABLE        *
--   *                                                         *
--   ***********************************************************

sdlcLSOperTable      OBJECT-TYPE
                    SYNTAX      SEQUENCE OF SdlcLSOperEntry
                    MAX-ACCESS  not-accessible
                    STATUS      current
                    DESCRIPTION
                        "This table contains current SDLC link
                        parameters.  Many of these objects have
                        corresponding objects in the
                        sdlcLSAdminTable."
                    ::= { sdlcLSGroup 2 }
```

```
sdlcLSOperEntry        OBJECT-TYPE
                       SYNTAX      SdlcLSOperEntry
                       MAX-ACCESS  not-accessible
                       STATUS      current
                       DESCRIPTION
                           "A list of status and control values for an
                            SDLC link station."
                       INDEX   { ifIndex, sdlcLSAddress }
                       ::= { sdlcLSOperTable 1 }

SdlcLSOperEntry        ::= SEQUENCE
{
        sdlcLSOperName                  DisplayString,
        sdlcLSOperRole                  INTEGER,
        sdlcLSOperState                 INTEGER,
        sdlcLSOperMAXDATASend           Integer32,
        sdlcLSOperREPLYTO               TimeInterval,
        sdlcLSOperMAXIN                 INTEGER,
        sdlcLSOperMAXOUT                INTEGER,
        sdlcLSOperMODULO                INTEGER,
        sdlcLSOperRETRIESm              INTEGER,
        sdlcLSOperRETRIESt              TimeInterval,
        sdlcLSOperRETRIESn              INTEGER,
        sdlcLSOperRNRLIMIT              TimeInterval,
        sdlcLSOperDATMODE               INTEGER,
        sdlcLSOperLastModifyTime        TimeTicks,
        sdlcLSOperLastFailTime          TimeTicks,
        sdlcLSOperLastFailCause         INTEGER,
        sdlcLSOperLastFailCtrlIn        OCTET STRING,
        sdlcLSOperLastFailCtrlOut       OCTET STRING,
        sdlcLSOperLastFailFRMRInfo      OCTET STRING,
        sdlcLSOperLastFailREPLYTOs      Counter32,
        sdlcLSOperEcho                  INTEGER,
        sdlcLSOperGPoll                 INTEGER,
        sdlcLSOperSimRim                INTEGER,
        sdlcLSOperXmitRcvCap            INTEGER
}

sdlcLSOperName         OBJECT-TYPE
                       SYNTAX      DisplayString (SIZE (1..10))
                       MAX-ACCESS  read-only
                       STATUS      current
                       DESCRIPTION
                           "An octet string that defines the name of the
                            remote SDLC link station.  This field is
                            received in the XID3 control vector 0x0E, type
                            0xF7."
                       ::= { sdlcLSOperEntry 1 }
```

sdlcLSOperRole   OBJECT-TYPE
                        SYNTAX   INTEGER
                        {
                            primary(1),
                            secondary(2),
                            undefined(3)
                        }
                        MAX-ACCESS   read-only
                        STATUS   current
                        DESCRIPTION
                            "This object reflects the current role that the
                            link station is assuming.

                            The value of sdlcLSOperRole is undefined(3)
                            whenever the link station role has not yet been
                            established by the mode setting command."
                        ::= { sdlcLSOperEntry 2 }

sdlcLSOperState   OBJECT-TYPE
                        SYNTAX   INTEGER
                        {
                            discontacted(1),
                            contactPending(2),
                            contacted(3),
                            discontactPending(4)
                        }
                        MAX-ACCESS   read-only
                        STATUS   current
                        DESCRIPTION
                            "This object describes the operational state of
                            the SDLC link station. The managed system
                            shall attempt to keep this value consistent
                            with the administered state, sdlcLSAdminState"
                        ::= { sdlcLSOperEntry 3 }

sdlcLSOperMAXDATASend   OBJECT-TYPE
                        SYNTAX   Integer32
                        MAX-ACCESS   read-only
                        STATUS   current
                        DESCRIPTION
                            "This object contains the actual maximum PDU
                            size that the local link station can send to
                            the adjacent link station. This object is
                            established from the value received in the XID
                            from the adjacent link station. If no XID
                            is received, then this value is implementation
                            dependent (for instance, it could be the value
                            of sdlcLSAdminMAXDATASend).

                         This value includes the Transmission Header
                         (TH) and the Request Header (RH)."
                    ::= { sdlcLSOperEntry 4 }

sdlcLSOperREPLYTO   OBJECT-TYPE
                    SYNTAX   TimeInterval
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the current reply timeout
                         (in 1/100ths of a second) for an SDLC link
                         station. If the link station does not receive
                         a response to a poll or message before the
                         specified time expires then the appropriate
                         error recovery shall be initiated.

                         The object descriptor contains the name of an
                         NCP configuration parameter, REPLYTO. Please
                         note that the value of this object represents
                         1/100ths of a second while the NCP REPLYTO is
                         represented in 1/10ths of a second.

                         This object only has meaning for SDLC ports
                         where sdlcPortOperRole == primary "
                    ::= { sdlcLSOperEntry 5 }

sdlcLSOperMAXIN   OBJECT-TYPE
                     SYNTAX   INTEGER (1..127)
                     MAX-ACCESS   read-only
                     STATUS   current
                     DESCRIPTION
                        "This object reflects the current maximum
                         number of unacknowledged I-frames which an SDLC
                         link station may receive. This shall range
                         from 1 to (sdlcLSOperMODULO - 1)."
                     ::= { sdlcLSOperEntry 6 }

sdlcLSOperMAXOUT   OBJECT-TYPE
                    SYNTAX   INTEGER (1..127)
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                        "This object controls the maximum number of
                         consecutive unacknowledged I-frames which an
                         SDLC link station shall send without an
                         acknowledgement. This shall range from 1 to
                         (sdlcLSAdminMODULO - 1).

                     This value may controlled by the administered
                     MAXOUT, sdlcLSAdminMAXOUT, or by the MAXIN value
                     received during the XID exchange."
                 ::= { sdlcLSOperEntry 7 }

sdlcLSOperMODULO   OBJECT-TYPE
                    SYNTAX   INTEGER
                    {
                        eight(8),
                        onetwentyeight(128)
                    }
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the current modulus for
                        an SDLC link station. This modulus determines
                        the size of rotating acknowledgement window
                        used by the SDLC link station pair."
                     DEFVAL { eight }
                    ::= { sdlcLSOperEntry 8 }

sdlcLSOperRETRIESm OBJECT-TYPE
                    SYNTAX   INTEGER (0..128)
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                        "This object controls number of retries in a
                        retry sequence for an SDLC link station. A
                        retry sequence is a series of retransmitted
                        frames (data or control) for which no positive
                        acknowledgement is received.

                        The current number of times that the retry
                        sequence is to be repeated is reflected by the
                        object: sdlcLSOperRETRIESn. The current
                        interval between retry sequences is reflected
                        by the object: sdlcLSOperRETRIESt."
                    ::= { sdlcLSOperEntry 9 }

sdlcLSOperRETRIESt OBJECT-TYPE
                    SYNTAX   TimeInterval
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                        "This object reflects the current interval (in
                        1/100ths of a second) between retry sequences
                        for an SDLC link station if multiple retry
                        sequences are specified. A retry sequence is a

                         series of retransmitted frames (data or
                         control) for which no positive acknowledgement
                         is received.

                         The object descriptor contains the name of an
                         NCP configuration parameter, RETRIESt. Please
                         note that the value of this object represents
                         1/100ths of a second while the NCP RETRIESt is
                         represented in seconds.

                         The current number of repeated retries
                         sequences is reflected by the object:
                         sdlcLSOperRETRIESn. The current retries per
                         sequence is reflected by the object:
                         sdlcLSOperRETRIESm."
                    ::= { sdlcLSOperEntry 10 }

sdlcLSOperRETRIESn OBJECT-TYPE
                    SYNTAX   INTEGER (0..127)
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                         "This object reflects the current number of
                         times that a retry sequence is repeated for an
                         SDLC link station. A retry sequence is a
                         series of retransmitted frames (data or
                         control) for which no positive acknowledgement
                         is received.

                         The current interval between retry sequences is
                         reflected by the object: sdlcLSOperRETRIESn.
                         The current retries per sequence is reflected
                         by the object: sdlcLSOperRETRIESm."
                    ::= { sdlcLSOperEntry 11 }

sdlcLSOperRNRLIMIT OBJECT-TYPE
                    SYNTAX   TimeInterval
                    MAX-ACCESS   read-only
                    STATUS   current
                    DESCRIPTION
                         "This object reflects the current length of
                         time (in 1/100ths of a second) that an SDLC
                         link station will allow its adjacent link
                         station to remain in a busy (RNR) state before
                         declaring it inoperative.

                         The object descriptor contains the name of an
                         NCP configuration parameter, RNRLIMIT. Please

```
                         note that the value of this object represents
                         1/100ths of a second while the NCP RNRLIMIT is
                         represented in minutes.

                         A value of sdlcLSOperRNRLIMIT == 0 means there
                         is no limit."
                    ::= { sdlcLSOperEntry 12 }


sdlcLSOperDATMODE    OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                        half(1),
                        full(2)
                    }
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects whether the current
                        communications mode with the adjacent link
                        station is two-way-alternate (half) or
                        two-way-simultaneous (full)."
                    ::= { sdlcLSOperEntry 13 }


sdlcLSOperLastModifyTime    OBJECT-TYPE
                    SYNTAX      TimeTicks
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object describes the value of sysUpTime
                         when this link station definition was last
                         modified.  If the link station has not been
                         modified, then this value shall be zero."
                    ::= { sdlcLSOperEntry 14 }


sdlcLSOperLastFailTime    OBJECT-TYPE
                    SYNTAX      TimeTicks
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object describes the value of sysUpTime
                         when this SDLC link station last failed.  If
                         the link station has not failed, then this
                         value shall be zero."
                    ::= { sdlcLSOperEntry 15 }


sdlcLSOperLastFailCause    OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
```

```
                        undefined(1),
                        rxFRMR(2),
                        txFRMR(3),
                        noResponse(4),
                        protocolErr(5),
                        noActivity(6),
                        rnrLimit(7),
                        retriesExpired(8)
                    }
                MAX-ACCESS   read-only
                STATUS       current
                DESCRIPTION
                    "This enumerated object reflects the cause of
                    the last failure of this SDLC link station.  If
                    the link station has not failed, then this
                    object will have a value of undefined(1)."
                DEFVAL { undefined }
                ::= { sdlcLSOperEntry 16 }

sdlcLSOperLastFailCtrlIn  OBJECT-TYPE
                SYNTAX       OCTET STRING (SIZE(1..2))
                MAX-ACCESS   read-only
                STATUS       current
                DESCRIPTION
                    "This object reflects the last control octet or
                    octets (depending on modulus) received by this
                    SDLC link station at the time of the last
                    failure.  If the link station has not failed,
                    then this value has no meaning."
                ::= { sdlcLSOperEntry 17 }

sdlcLSOperLastFailCtrlOut  OBJECT-TYPE
                SYNTAX       OCTET STRING (SIZE(1..2))
                MAX-ACCESS   read-only
                STATUS       current
                DESCRIPTION
                    "This object reflects the last control octet or
                    octets (depending on modulus) sent by this SDLC
                    link station at the time of the last failure.
                    If the link station has not failed, then this
                    value has no meaning."
                ::= { sdlcLSOperEntry 18 }

sdlcLSOperLastFailFRMRInfo  OBJECT-TYPE
                SYNTAX       OCTET STRING (SIZE(3))
                MAX-ACCESS   read-only
                STATUS       current
                DESCRIPTION
```

```
                         "This object reflects the information field of
                         the FRMR frame if the last failure for this
                         SDLC link station was as a result of an invalid
                         frame.  Otherwise, this field has no meaning."
                    ::= { sdlcLSOperEntry 19 }


sdlcLSOperLastFailREPLYTOs  OBJECT-TYPE
                    SYNTAX      Counter32
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                         "This object reflects the number of times that
                         the REPLYTO timer had expired for an SDLC link
                         station at the time of the last failure. If the
                         link station has not failed, then this value
                         has no meaning."
                    ::= { sdlcLSOperEntry 20 }


sdlcLSOperEcho       OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                         no(1),
                         yes(2)
                    }
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object identifies whether the echo bit is
                         in effect for this particular link station."
                    DEFVAL { no }
                    ::= { sdlcLSOperEntry 21 }


sdlcLSOperGPoll      OBJECT-TYPE
                    SYNTAX      INTEGER (0..254)
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object describes the group poll address
                         in effect for this link station instance."
                    DEFVAL { 0 }
                    ::= { sdlcLSOperEntry 22 }


sdlcLSOperSimRim     OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                         no(1),
                         yes(2)
                    }
```

```
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects the support for
                        transmission and receipt of SIM and RIM control
                        frames for the adjacent link station.  The
                        value of this object is set from the XID field
                        received from the adjacent link station."
                    DEFVAL { no }
                    ::= { sdlcLSOperEntry 23 }

sdlcLSOperXmitRcvCap OBJECT-TYPE
                    SYNTAX      INTEGER
                    {
                        twa(1),
                        tws(2)
                    }
                    MAX-ACCESS  read-only
                    STATUS      current
                    DESCRIPTION
                        "This object reflects the transmit-receive
                        capabilities for the adjacent SDLC link
                        station.  The value of this object is the value
                        of the transmit-receive capability indicator
                        received in the XID image from the adjacent
                        link station."
                    DEFVAL { twa }
                    ::= { sdlcLSOperEntry 24 }


--   ***********************************************************
--   *                                                         *
--   *           THE SDLC LINK STATION STATISTICS TABLE        *
--   *                                                         *
--   ***********************************************************

sdlcLSStatsTable  OBJECT-TYPE
                    SYNTAX      SEQUENCE OF SdlcLSStatsEntry
                    MAX-ACCESS  not-accessible
                    STATUS      current
                    DESCRIPTION
                        "Each entry in this table contains statistics
                        for a specific SDLC link station."
                     ::= { sdlcLSGroup 3 }

sdlcLSStatsEntry  OBJECT-TYPE
                    SYNTAX      SdlcLSStatsEntry
                    MAX-ACCESS  not-accessible
```

```
                        STATUS        current
                        DESCRIPTION
                            "A list of statistics for an SDLC link station."
                        INDEX   { ifIndex, sdlcLSAddress }
                        ::= { sdlcLSStatsTable 1 }

SdlcLSStatsEntry ::= SEQUENCE
{
        sdlcLSStatsBLUsIn              Counter32,
        sdlcLSStatsBLUsOut            Counter32,
        sdlcLSStatsOctetsIn           Counter32,
        sdlcLSStatsOctetsOut          Counter32,
        sdlcLSStatsPollsIn            Counter32,
        sdlcLSStatsPollsOut           Counter32,
        sdlcLSStatsPollRspsIn         Counter32,
        sdlcLSStatsPollRspsOut        Counter32,
        sdlcLSStatsLocalBusies        Counter32,
        sdlcLSStatsRemoteBusies       Counter32,
        sdlcLSStatsIFramesIn          Counter32,
        sdlcLSStatsIFramesOut         Counter32,
        sdlcLSStatsUIFramesIn         Counter32,
        sdlcLSStatsUIFramesOut        Counter32,
        sdlcLSStatsXIDsIn             Counter32,
        sdlcLSStatsXIDsOut            Counter32,
        sdlcLSStatsTESTsIn            Counter32,
        sdlcLSStatsTESTsOut           Counter32,
        sdlcLSStatsREJsIn             Counter32,
        sdlcLSStatsREJsOut            Counter32,
        sdlcLSStatsFRMRsIn            Counter32,
        sdlcLSStatsFRMRsOut           Counter32,
        sdlcLSStatsSIMsIn             Counter32,
        sdlcLSStatsSIMsOut            Counter32,
        sdlcLSStatsRIMsIn             Counter32,
        sdlcLSStatsRIMsOut            Counter32,
        sdlcLSStatsDISCIn             Counter32,
        sdlcLSStatsDISCOut           Counter32,
        sdlcLSStatsUAIn               Counter32,
        sdlcLSStatsUAOut             Counter32,
        sdlcLSStatsDMIn               Counter32,
        sdlcLSStatsDMOut             Counter32,
        sdlcLSStatsSNRMIn             Counter32,
        sdlcLSStatsSNRMOut           Counter32,
        sdlcLSStatsProtocolErrs       Counter32,
        sdlcLSStatsActivityTOs        Counter32,
        sdlcLSStatsRNRLIMITs          Counter32,
        sdlcLSStatsRetriesExps        Counter32,
        sdlcLSStatsRetransmitsIn       Counter32,
        sdlcLSStatsRetransmitsOut      Counter32
```

```
        }

sdlcLSStatsBLUsIn    OBJECT-TYPE
                     SYNTAX      Counter32
                     MAX-ACCESS  read-only
                     STATUS      current
                     DESCRIPTION
                         "This object reflects the total basic link
                         units (BLUs; frames) received from an adjacent
                         SDLC link station since link station startup.
                         At link station startup time, this object must
                         be initialized to zero."
                     ::= { sdlcLSStatsEntry 1 }

sdlcLSStatsBLUsOut   OBJECT-TYPE
                     SYNTAX      Counter32
                     MAX-ACCESS  read-only
                     STATUS      current
                     DESCRIPTION
                         "This object reflects the total basic link
                         units (BLUs; frames), transmitted to an
                         adjacent SDLC link station since link station
                         startup.  At link station startup time, this
                         object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 2 }

sdlcLSStatsOctetsIn  OBJECT-TYPE
                     SYNTAX      Counter32
                     MAX-ACCESS  read-only
                     STATUS      current
                     DESCRIPTION
                         "This object reflects the total octets received
                         from an adjacent SDLC link station since link
                         station startup.  This object covers the
                         address, control, and information field of
                         I-Frames only.  At link station startup time,
                         this object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 3 }

sdlcLSStatsOctetsOut OBJECT-TYPE
                     SYNTAX      Counter32
                     MAX-ACCESS  read-only
                     STATUS      current
                     DESCRIPTION
                         "This object reflects the total octets
                         transmitted to an adjacent SDLC link station
                         since link station startup.  This object covers
                         the address, control, and information field of
```

```
                     I-Frames only.  At link station startup time,
                     this object must be initialized to zero."
                ::= { sdlcLSStatsEntry 4 }


sdlcLSStatsPollsIn   OBJECT-TYPE
                SYNTAX      Counter32
                MAX-ACCESS  read-only
                STATUS      current
                DESCRIPTION
                     "This object reflects the total polls received
                     from an adjacent SDLC link station since link
                     station startup.  At link station startup time,
                     this object must be initialized to zero."
                ::= { sdlcLSStatsEntry 5 }


sdlcLSStatsPollsOut  OBJECT-TYPE
                SYNTAX      Counter32
                MAX-ACCESS  read-only
                STATUS      current
                DESCRIPTION
                     "This object reflects the total polls sent to
                     an adjacent SDLC link station since link
                     station startup.  At link station startup time,
                     this object must be initialized to zero."
                ::= { sdlcLSStatsEntry 6 }


sdlcLSStatsPollRspsOut OBJECT-TYPE
                SYNTAX      Counter32
                MAX-ACCESS  read-only
                STATUS      current
                DESCRIPTION
                     "This object reflects the total number of poll
                     responses sent to the adjacent SDLC link
                     station since link station startup.  This value
                     includes I-frames that are sent in response to
                     a poll.

                     At link station startup time, this object must
                     be initialized to zero."
                ::= { sdlcLSStatsEntry 7 }


sdlcLSStatsPollRspsIn OBJECT-TYPE
                SYNTAX      Counter32
                MAX-ACCESS  read-only
                STATUS      current
                DESCRIPTION
                     "This object reflects the total number of poll
                     responses received from the adjacent SDLC link
```

                    station since station startup. This value
                    includes I-frames that are received in response
                    to a poll.

                    At link station startup time, this object must
                    be initialized to zero."
                ::= { sdlcLSStatsEntry 8 }

sdlcLSStatsLocalBusies OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS   read-only
                STATUS   current
                DESCRIPTION
                    "This object reflects the total number of times
                    that the local SDLC link station has entered a
                    busy state (RNR) since link station startup.
                    At link station startup time, this object must
                    be initialized to zero."
                ::= { sdlcLSStatsEntry 9 }

sdlcLSStatsRemoteBusies OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS   read-only
                STATUS   current
                DESCRIPTION
                    "This object reflects the total number of times
                    that an adjacent (remote) SDLC link station
                    has entered a busy state (RNR) since link
                    station startup. At link station startup time,
                    this object must be initialized to zero."
                ::= { sdlcLSStatsEntry 10 }

sdlcLSStatsIFramesIn OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS   read-only
                STATUS   current
                DESCRIPTION
                    "This object reflects the total I-frames
                    received from an adjacent SDLC link station
                    since link station startup. At link station
                    startup time, this object must be initialized
                    to zero."
                ::= { sdlcLSStatsEntry 11 }

sdlcLSStatsIFramesOut OBJECT-TYPE
                SYNTAX   Counter32
                MAX-ACCESS   read-only
                STATUS   current

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                        DESCRIPTION
                            "This object reflects the total I-frames
                            transmitted to an adjacent SDLC link station
                            since link station startup. At link station
                            startup time, this object must be initialized
                            to zero."
                        ::= { sdlcLSStatsEntry 12 }

sdlcLSStatsUIFramesIn OBJECT-TYPE
                        SYNTAX   Counter32
                        MAX-ACCESS read-only
                        STATUS   current
                        DESCRIPTION
                            "This object reflects the total UI-frames
                            received from an adjacent SDLC link station
                            since link station startup."
                        ::= { sdlcLSStatsEntry 13 }

sdlcLSStatsUIFramesOut OBJECT-TYPE
                        SYNTAX   Counter32
                        MAX-ACCESS read-only
                        STATUS   current
                        DESCRIPTION
                           "This object reflects the total UI-frames
                           transmitted to an adjacent SDLC link station
                           since link station startup."
                        ::= { sdlcLSStatsEntry 14 }

sdlcLSStatsXIDsIn   OBJECT-TYPE
                        SYNTAX   Counter32
                        MAX-ACCESS read-only
                        STATUS   current
                        DESCRIPTION
                            "This object reflects the total XID frames
                            received from an adjacent SDLC link station
                            since link station startup."
                        ::= { sdlcLSStatsEntry 15 }

sdlcLSStatsXIDsOut   OBJECT-TYPE
                        SYNTAX   Counter32
                        MAX-ACCESS read-only
                        STATUS   current
                        DESCRIPTION
                            "This object reflects the total XID frames
                            transmitted to an adjacent SDLC link station
                            since link station startup."
                        ::= { sdlcLSStatsEntry 16 }

sdlcLSStatsTESTsIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total TEST frames,
                         commands or responses, received from an
                         adjacent SDLC link station since link station
                         startup."
                     ::= { sdlcLSStatsEntry 17 }

sdlcLSStatsTESTsOut OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total TEST frames,
                         commands or responses, transmitted to an
                         adjacent SDLC link station since link station
                         startup."
                     ::= { sdlcLSStatsEntry 18 }

sdlcLSStatsREJsIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total REJ frames
                         received from an adjacent SDLC link station
                         since link station startup."
                     ::= { sdlcLSStatsEntry 19 }

sdlcLSStatsREJsOut   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total REJ frames
                         transmitted to an adjacent SDLC link station
                         since link station startup."
                     ::= { sdlcLSStatsEntry 20 }

sdlcLSStatsFRMRsIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total frame reject

                                 (FRMR) frames received from an adjacent SDLC
                                 link station since link station startup."
                            ::= { sdlcLSStatsEntry 21 }

sdlcLSStatsFRMRsOut OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total frame reject
                         (FRMR) frames transmitted to an adjacent SDLC
                         link station since link station startup."
                     ::= { sdlcLSStatsEntry 22 }

sdlcLSStatsSIMsIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total set
                         initialization mode (SIM) frames received from
                         an adjacent SDLC link station since link station
                         startup."
                     ::= { sdlcLSStatsEntry 23 }

sdlcLSStatsSIMsOut   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total set
                         initialization mode (SIM) frames transmitted to
                         an adjacent SDLC link station since link station
                         startup. At link station startup time, this
                         object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 24 }

sdlcLSStatsRIMsIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total request
                         initialization mode (RIM) frames received from
                         an adjacent SDLC link station since link station
                         startup. At link station startup time, this
                         object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 25 }

sdlcLSStatsRIMsOut   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total request
                         initialization mode (RIM) frames transmitted to
                         an adjacent SDLC link station since link station
                         startup. At link station startup time, this
                         object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 26 }

sdlcLSStatsDISCIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total number of
                          disconnect (DISC) requests received from an
                          adjacent SDLC link station since link station
                          startup. At link station startup time, this
                          object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 27 }

sdlcLSStatsDISCOut   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total number of
                          disconnect (DISC) requests transmited to an
                          adjacent SDLC link station since link station
                          startup. At link station startup time, this
                          object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 28 }

sdlcLSStatsUAIn   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total number of
                          unnumbered acknowledgements (UA) requests
                          received from an adjacent SDLC link station
                          since link station startup. At link station
                          startup time, this object must be initialized
                          to zero."
                     ::= { sdlcLSStatsEntry 29 }

sdlcLSStatsUAOut   OBJECT-TYPE
                       SYNTAX   Counter32
                       MAX-ACCESS read-only
                       STATUS   current
                       DESCRIPTION
                           "This object reflects the total number of
                            unnumbered acknowledgements (UA) requests
                            transmited to an adjacent SDLC link station
                            since link station startup. At link station
                            startup time, this object must be initialized
                            to zero."
                       ::= { sdlcLSStatsEntry 30 }

sdlcLSStatsDMIn   OBJECT-TYPE
                       SYNTAX   Counter32
                       MAX-ACCESS read-only
                       STATUS   current
                       DESCRIPTION
                           "This object reflects the total number of
                            disconnect mode (DM) requests received from an
                            adjacent SDLC link station since link station
                            startup. At link station startup time, this
                            object must be initialized to zero."
                       ::= { sdlcLSStatsEntry 31 }

sdlcLSStatsDMOut   OBJECT-TYPE
                       SYNTAX   Counter32
                       MAX-ACCESS read-only
                       STATUS   current
                       DESCRIPTION
                           "This object reflects the total number of
                            disconnect mode (DM) requests transmited to an
                            adjacent SDLC link station since link station
                            startup. At link station startup time, this
                            object must be initialized to zero."
                       ::= { sdlcLSStatsEntry 32 }

sdlcLSStatsSNRMIn   OBJECT-TYPE
                       SYNTAX   Counter32
                       MAX-ACCESS read-only
                       STATUS   current
                       DESCRIPTION
                           "This object reflects the total number of
                            set normal response mode (SNRM/SNRME) requests
                            received from an adjacent SDLC link station
                            since link station startup. At link station
                            startup time, this object must be initialized
                            to zero."

                        ::= { sdlcLSStatsEntry 33 }

sdlcLSStatsSNRMOut   OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS   read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total number of
                          set normal response mode (SNRM/SNRME) requests
                          transmited to an adjacent SDLC link station
                          since link station startup. At link station
                          startup time, this object must be initialized
                          to zero."
                     ::= { sdlcLSStatsEntry 34 }

sdlcLSStatsProtocolErrs OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS   read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total occurrences,
                         since link station startup, where this SDLC
                         link station has inactivated the link as a
                         result of receiving a frame from its adjacent
                         link station which was in violation of the
                         protocol. At link station startup time, this
                         object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 35 }

sdlcLSStatsActivityTOs OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS   read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total occurrences,
                         since startup, where this SDLC link station has
                         inactivated the link as a result of no activity
                         on the link. At link station startup time,
                         this object must be initialized to zero."
                     ::= { sdlcLSStatsEntry 36 }

sdlcLSStatsRNRLIMITs OBJECT-TYPE
                     SYNTAX   Counter32
                     MAX-ACCESS   read-only
                     STATUS   current
                     DESCRIPTION
                         "This object reflects the total occurrences,
                         since startup, where this SDLC link station has

```
                     inactivated the link as a result of its
                     RNRLIMIT timer expiring.  At link station
                     startup time, this object must be initialized
                     to zero."
                ::= { sdlcLSStatsEntry 37 }


sdlcLSStatsRetriesExps OBJECT-TYPE
                SYNTAX       Counter32
                MAX-ACCESS   read-only
                STATUS       current
                DESCRIPTION
                     "This object reflects the total occurrences,
                     since startup, where this SDLC link station has
                     inactivated the link as a result of a retry
                     sequence being exhausted.  At link station
                     startup time, this object must be initialized
                     to zero."
                ::= { sdlcLSStatsEntry 38 }


sdlcLSStatsRetransmitsIn OBJECT-TYPE
                SYNTAX       Counter32
                MAX-ACCESS   read-only
                STATUS       current
                DESCRIPTION
                     "This object reflects the total number of
                      information frames retransmitted by the remote
                      link station because the N(s) received from
                      that link station indicated that one or more
                      information frames sent by that station were
                      lost.  This event causes the first missing
                      information frame of a window and all
                      subsequent information frames to be
                      retransmitted.  At link station startup time,
                      this object must be initialized to zero.

                      Management: If the value of
                      sdlcLSStatsRetransmitsIn grows over time, then
                      the quality of the serial line is in
                      question.  You might want to look at
                      decreasing the value for
                      sdlcLSAdminMAXDATASend to compensate for the
                      lower quality line."
                ::= { sdlcLSStatsEntry 39 }


sdlcLSStatsRetransmitsOut OBJECT-TYPE
                SYNTAX       Counter32
                MAX-ACCESS   read-only
                STATUS       current
```

                            DESCRIPTION
                                "This object reflects the total number of
                                 information frames retransmitted to a remote
                                 link station because the N(r) received from
                                 that link station indicated that one or more
                                 information frames sent to that station were
                                 lost. This event causes the first missing
                                 information frame of a window and all
                                 subsequent information frames to be
                                 retransmitted. At link station startup time,
                                 this object must be initialized to zero.

                                 Management: If the value of
                                 sdlcLSStatsRetransmitsOut grows over time,
                                 then the quality of the serial line is in
                                 question. You might want to look at
                                 decreasing the value for sdlcLSAdminMAXDATASend
                                 to compensate for the lower quality line."
                        ::= { sdlcLSStatsEntry 40 }

--
--   TRAP DEFINITIONS
--

--
--   Notifications
--

sdlcTraps   OBJECT IDENTIFIER ::= { sdlc 3 }

sdlcPortStatusChange NOTIFICATION-TYPE
                    OBJECTS   { ifIndex,
                                    ifAdminStatus,
                                    ifOperStatus,
                                    sdlcPortOperLastFailTime,
                                    sdlcPortOperLastFailCause
                                }
                    STATUS current
                    DESCRIPTION
                        "This trap indicates that the state of an SDLC
                         port has transitioned to active or inactive."
                    ::= { sdlcTraps 1 }

sdlcLSStatusChange   NOTIFICATION-TYPE
                    OBJECTS   { ifIndex,
                                    sdlcLSAddress,
                                    sdlcLSOperState,
                                    sdlcLSAdminState,

```
                                sdlcLSOperLastFailTime,
                                sdlcLSOperLastFailCause,
                                sdlcLSOperLastFailFRMRInfo,
                                sdlcLSOperLastFailCtrlIn,
                                sdlcLSOperLastFailCtrlOut,
                                sdlcLSOperLastFailREPLYTOs
                            }
                      STATUS  current
                      DESCRIPTION
                          "This trap indicates that the state of an SDLC
                          link station has transitioned to contacted or
                          discontacted."
                      ::= { sdlcTraps 2 }


--
-- Conformance Information
--

sdlcConformance OBJECT IDENTIFIER ::= { sdlc 4 }

sdlcCompliances   OBJECT IDENTIFIER ::= { sdlcConformance 1 }
sdlcGroups        OBJECT IDENTIFIER ::= { sdlcConformance 2 }

--
-- Compliance Statements
--

sdlcCoreCompliance MODULE-COMPLIANCE
                      STATUS current
                      DESCRIPTION
                          "The core compliance statement for all SDLC
                          nodes."
                      MODULE
                          MANDATORY-GROUPS
                          {
                              sdlcCorePortAdminGroup,
                              sdlcCorePortOperGroup,
                              sdlcCorePortStatsGroup,
                              sdlcCoreLSAdminGroup,
                              sdlcCoreLSOperGroup,
                              sdlcCoreLSStatsGroup
                          }

                      OBJECT      sdlcPortAdminName
                      MIN-ACCESS  read-only
                      DESCRIPTION
                          "Write access is not required."
```

```
            OBJECT      sdlcPortAdminRole
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcPortAdminType
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcPortAdminTopology
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcPortAdminISTATUS
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcLSAddress
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcLSAdminName
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcLSAdminState
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcLSAdminISTATUS
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcLSAdminMAXDATASend
            MIN-ACCESS  read-only
            DESCRIPTION
                "Write access is not required."

            OBJECT      sdlcLSAdminMAXDATARcv
            MIN-ACCESS  read-only
            DESCRIPTION
```

                                 "Write access is not required."

                    OBJECT   sdlcLSAdminMAXIN
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminMAXOUT
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminMODULO
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminRETRIESm
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminRETRIESt
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminRETRIESn
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminRNRLIMIT
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminDATMODE
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminGPoll
                    MIN-ACCESS   read-only
                    DESCRIPTION
                        "Write access is not required."

                    OBJECT   sdlcLSAdminSimRim

```
                        MIN-ACCESS  read-only
                        DESCRIPTION
                            "Write access is not required."

                        OBJECT      sdlcLSAdminRowStatus
                        MIN-ACCESS  read-only
                        DESCRIPTION
                            "Write access is not required."

                        ::= { sdlcCompliances 1 }

sdlcPrimaryCompliance  MODULE-COMPLIANCE
                        STATUS current
                        DESCRIPTION
                            "The compliance statement for all nodes that
                            are performing the role of a Primary link
                            station."
                        MODULE
                            MANDATORY-GROUPS { sdlcPrimaryGroup }

                        OBJECT      sdlcPortAdminPAUSE
                        MIN-ACCESS  read-only
                        DESCRIPTION
                            "Write access is not required."

                        OBJECT      sdlcLSAdminREPLYTO
                        MIN-ACCESS  read-only
                        DESCRIPTION
                            "Write access is not required."

                        ::= { sdlcCompliances 2 }

sdlcPrimaryMultipointCompliance  MODULE-COMPLIANCE
                        STATUS current
                        DESCRIPTION
                            "The compliance statement for all nodes that
                            are performing the role of a primary link
                            station on a multipoint line."
                        MODULE
                            MANDATORY-GROUPS { sdlcPrimaryMultipointGroup }

                        OBJECT      sdlcPortAdminSERVLIM
                        MIN-ACCESS  read-only
                        DESCRIPTION
                            "Write access is not required."

                        OBJECT      sdlcPortAdminSlowPollTimer
                        MIN-ACCESS  read-only
```

```
                         DESCRIPTION
                             "Write access is not required."

                         ::= { sdlcCompliances 3 }


--
-- Core Conformance Groups for All Link Stations
--

sdlcCoreGroups OBJECT IDENTIFIER ::= { sdlcGroups 1 }

sdlcCorePortAdminGroup OBJECT-GROUP
                         OBJECTS
                         {
                             sdlcPortAdminName,       sdlcPortAdminRole,
                             sdlcPortAdminType,       sdlcPortAdminTopology,
                             sdlcPortAdminISTATUS
                         }
                         STATUS current
                         DESCRIPTION
                             "The sdlcCorePortAdminGroup defines objects
                             which are common to the PortAdmin group of all
                             compliant link stations."
                         ::= { sdlcCoreGroups 1 }

sdlcCorePortOperGroup OBJECT-GROUP
                         OBJECTS
                         {
                             sdlcPortOperName,
                             sdlcPortOperRole,
                             sdlcPortOperType,
                             sdlcPortOperTopology,
                             sdlcPortOperISTATUS,
                             sdlcPortOperACTIVTO,
                             sdlcPortOperLastFailTime,
                             sdlcPortOperLastFailCause
                         }
                         STATUS current
                         DESCRIPTION
                             "The sdlcCorePortOperGroup defines objects
                             which are common to the PortOper group of all
                             compliant link stations."
                         ::= { sdlcCoreGroups 2 }


sdlcCorePortStatsGroup OBJECT-GROUP
                         OBJECTS
```

```
                    {
                        sdlcPortStatsPhysicalFailures,
                        sdlcPortStatsInvalidAddresses,
                        sdlcPortStatsDwarfFrames
                    }
                    STATUS current
                    DESCRIPTION
                        "The sdlcCorePortStatsGroup defines objects
                        which are common to the PortStats group of all
                        compliant link stations."
                    ::= { sdlcCoreGroups 3 }


sdlcCoreLSAdminGroup OBJECT-GROUP
                    OBJECTS
                    {
                        sdlcLSAddress,
                        sdlcLSAdminName,
                        sdlcLSAdminState,
                        sdlcLSAdminISTATUS,
                        sdlcLSAdminMAXDATASend,
                        sdlcLSAdminMAXDATARcv,
                        sdlcLSAdminMAXIN,
                        sdlcLSAdminMAXOUT,
                        sdlcLSAdminMODULO,
                        sdlcLSAdminRETRIESm,
                        sdlcLSAdminRETRIESt,
                        sdlcLSAdminRETRIESn,
                        sdlcLSAdminRNRLIMIT,
                        sdlcLSAdminDATMODE,
                        sdlcLSAdminGPoll,
                        sdlcLSAdminSimRim,
                        sdlcLSAdminRowStatus
                    }
                    STATUS current
                    DESCRIPTION
                        "The sdlcCorePortAdminGroup defines objects
                        which are common to the PortAdmin group of all
                        compliant link stations."
                    ::= { sdlcCoreGroups 4 }

sdlcCoreLSOperGroup  OBJECT-GROUP
                    OBJECTS
                    {
                        sdlcLSOperRole,
                        sdlcLSOperState,
                        sdlcLSOperMAXDATASend,
                        sdlcLSOperMAXIN,
```

```
                           sdlcLSOperMAXOUT,
                           sdlcLSOperMODULO,
                           sdlcLSOperRETRIESm,
                           sdlcLSOperRETRIESt,
                           sdlcLSOperRETRIESn,
                           sdlcLSOperRNRLIMIT,
                           sdlcLSOperDATMODE,
                           sdlcLSOperLastFailTime,
                           sdlcLSOperLastFailCause,
                           sdlcLSOperLastFailCtrlIn,
                           sdlcLSOperLastFailCtrlOut,
                           sdlcLSOperLastFailFRMRInfo,
                           sdlcLSOperLastFailREPLYTOs,
                           sdlcLSOperEcho,
                           sdlcLSOperGPoll
                       }
                       STATUS current
                       DESCRIPTION
                           "The sdlcCorePortOperGroup defines objects
                           which are common to the PortOper group of all
                           compliant link stations."
                       ::= { sdlcCoreGroups 5 }


    sdlcCoreLSStatsGroup OBJECT-GROUP
                       OBJECTS
                       {
                           sdlcLSStatsBLUsIn,
                           sdlcLSStatsBLUsOut,
                           sdlcLSStatsOctetsIn,
                           sdlcLSStatsOctetsOut,
                           sdlcLSStatsPollsIn,
                           sdlcLSStatsPollsOut,
                           sdlcLSStatsPollRspsIn,
                           sdlcLSStatsPollRspsOut,
                           sdlcLSStatsLocalBusies,
                           sdlcLSStatsRemoteBusies,
                           sdlcLSStatsIFramesIn,
                           sdlcLSStatsIFramesOut,
                           sdlcLSStatsRetransmitsIn,
                           sdlcLSStatsRetransmitsOut,
                           sdlcLSStatsUIFramesIn,
                           sdlcLSStatsUIFramesOut,
                           sdlcLSStatsXIDsIn,
                           sdlcLSStatsXIDsOut,
                           sdlcLSStatsTESTsIn,
                           sdlcLSStatsTESTsOut,
                           sdlcLSStatsREJsIn,
```

```
                        sdlcLSStatsREJsOut,
                        sdlcLSStatsFRMRsIn,
                        sdlcLSStatsFRMRsOut,
                        sdlcLSStatsSIMsIn,
                        sdlcLSStatsSIMsOut,
                        sdlcLSStatsRIMsIn,
                        sdlcLSStatsRIMsOut,
                        sdlcLSStatsProtocolErrs,
                        sdlcLSStatsRNRLIMITs,
                        sdlcLSStatsRetriesExps
                    }
                    STATUS current
                    DESCRIPTION
                        "The sdlcCorePortStatsGroup defines objects
                        which are common to the PortStats group of all
                        compliant link stations."
                    ::= { sdlcCoreGroups 6 }


--
-- Conformance Groups for Primary Link Stations
--

sdlcPrimaryGroups OBJECT IDENTIFIER ::= { sdlcGroups 2 }

sdlcPrimaryGroup OBJECT-GROUP
                    OBJECTS
                    {
                        sdlcPortAdminPAUSE,
                        sdlcPortOperPAUSE,
                        sdlcLSAdminREPLYTO,
                        sdlcLSOperREPLYTO
                    }
                    STATUS current
                    DESCRIPTION
                        "The sdlcPrimaryGroup defines objects which
                        are common to all compliant primary link
                        stations."
                    ::= { sdlcPrimaryGroups 1 }

sdlcPrimaryMultipointGroup OBJECT-GROUP
                    OBJECTS
                    {
                        sdlcPortAdminSERVLIM,
                        sdlcPortAdminSlowPollTimer,
                        sdlcPortOperSlowPollMethod,
                        sdlcPortOperSERVLIM,
                        sdlcPortOperSlowPollTimer
```

```
                        }
                        STATUS current
                        DESCRIPTION
                            "The sdlcPrimaryMultipointGroup defines objects
                            which are common to all compliant primary link
                            stations that are in a multipoint topology."
                        ::= { sdlcPrimaryGroups 2 }
```

END

4. Acknowledgments

    Thanks goes to the SNADLC MIB working group for reviewing this MIB
    and for their infinite patience through the editing process.

5. References

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        GA27-3093-04, 5th edition, May 1992.

    [3] "Vocabulary for Data Processing Telecommunications, and Office
        Systems", IBM Publication No. GC20-1699-6.

    [4] Kostick, D., Kielczewski, Z., and K. Shih, Editors, "Definitions
        of Managed Objects for SNA NAUs using SMIv2", RFC 1666, Eicon
        Technology Corporation, Bell Communications Research, Novell,
        August 1994.

    [5] Waldbusser, S., "Row Creation with SNMPv1", Work in Progress.

    [6] McCloghrie K., and F. Kastenholz, "Evolution of the Interfaces
        Group of MIB-II", RFC 1573, Hughes LAN Syst, FTP Software,
        January 1994.

6. Glossary

     link station
          A link station comprises procedures and control information
          that coordinate the transfer of data between two nodes joined
          by a link connection. All traffic over the link connection is
          from the primary link station to one or more secondary link
          stations, or from a secondary link station to the primary link
          station.

     primary link station
          The link station instance on a link connection that is
          responsible for the control of the data link. There must be
          only one primary link station on a link connection. The
          primary link station issues commands to one or more secondary
          link stations.

     secondary link station
          The link station instance on a link connection that receives
          commands from the primary link station and issues responses to
          it.

     switched line
          A telecommunications line in which the connection is
          established by dialing. For switched lines, the SDLC startup
          sequence typically begins with a null exchange identifier (null
          XID).

     leased line
          A telecommunications line on which connections do not have to
          be established by dialing. For leased lines, the SDLC startup
          sequence may or may not begin with an exchange identifer (XID).
          While there are interface (e.g., RS.232) differences between
          leased and switched lines, those interface differences do not
          map one-to-one with differences in the SDLC startup protocol
          (i.e., the interface and the SDLC protocol are independent from
          one another).

     point-to-point link
          A link that connects the single primary link station to single
          secondary link station. A point-to-point link may be either
          switched or leased.

     multipoint link
          A link that connects the single primary link station to several
          secondary link stations. A multipoint link may be either
          switched or leased. Note: The physical interface signals for a
          multipoint link are different than for a point-to-point link.

Synonymous with multidrop line.

7. Security Considerations

Security issues are not discussed in this memo.

8. Authors' Addresses

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