Editors of this version:
Mike Ayers
BMC Software, Inc.
Kerry McDonald
CSU San Bernardino
John Flick
Hewlwett-Packard Company
K.C. Norseth
Enterasys Networks
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# Definition of Managed Objects for the Ethernet WAN Interface Sublayer <draft-ietf-hubmib-wis-mib-00.txt>

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## Abstract

This document defines a portion of the Management Information Base (MIB) for use with network management protocols in TCP/IP based internets. In particular, it defines objects for managing the Wide Area Network (WAN) Interface Sublayer (WIS) for Ethernet systems which support it.

Table of Contents

1. Introduction ..... 3
2. Overview ..... 4
3. Definitions ..... 4
4. Notice on Intellectual Property ..... 20
5. Acknowledgments ..... 21
6. Security ..... 21
7. References ..... 22
8. Editor's Address ..... 23
9. Full Copyright Statement ..... 23

## 1. Introduction

The SNMP Management Framework at the time of this writing consists of five major components:

- An overall architecture, described in RFC 2571 [RFC2571].

- Mechanisms for describing and naming objects and events for the purpose of management. The first version of this Structure of Management Information (SMI) is called SMIv1 and described in STD 16, RFC 1155 [RFC1155], STD 16, RFC 1212 [RFC1212] and RFC 1215 [RFC1215]. The second version, called SMIv2, is described in STD 58, RFC 2578 [RFC2578], STD 58, RFC 2579 [RFC2579] and STD 58, RFC 2580 [RFC2580].

- Message protocols for transferring management information. The first version of the SNMP message protocol is called SNMPv1 and described in STD 15, RFC 1157 [RFC1157]. A second version of the SNMP message protocol, which is not an Internet standards track protocol, is called SNMPv2c and described in RFC 1901 [RFC1901] and RFC 1906 [RFC1906]. The third version of the message protocol is called SNMPv3 and described in RFC 1906 [RFC1906], RFC 2572 [RFC2572] and RFC 2574 [RFC2574].

- Protocol operations for accessing management information. The first set of protocol operations and associated PDU formats is described in STD 15, RFC 1157 [RFC1157]. A second set of protocol operations and associated PDU formats is described in this document.

- A set of fundamental applications described in RFC 2573 [RFC2573] and the view-based access control mechanism described in RFC 2575 [RFC2575].

A more detailed introduction to the SNMP Management Framework at the time of this writing can be found in RFC 2570 [RFC2570].

Managed objects are accessed via a virtual information store, termed the Management Information Base or MIB. Objects in the MIB are defined using the mechanisms defined in the SMI.

This memo specifies a MIB module that is compliant to the SMIv2. A MIB conforming to the SMIv1 can be produced through the appropriate translations. The resulting translated MIB must be semantically equivalent, except where objects or events are omitted because no translation is possible (use of Counter64). Some machine readable information in SMIv2 will be converted into textual descriptions in

SMIv1 during the translation process. However, this loss of machine readable information is not considered to change the semantics of the MIB.

## 2. Overview

TBD - Include sections and/or references on measurement methods.

## 3. Definitions

```
ETHER-WIS DEFINITIONS ::= BEGIN

IMPORTS
    MODULE-IDENTITY, OBJECT-TYPE,
    Integer32, mib-2
        FROM SNMPv2-SMI
    ifIndex
        FROM IF-MIB
    MODULE-COMPLIANCE, OBJECT-GROUP
        FROM SNMPv2-CONF;

etherWisMIB MODULE-IDENTITY
    LAST-UPDATED "200107270000Z"
    ORGANIZATION "IETF Hubmib Working Group"
    CONTACT-INFO
      "Mike Ayers
       BMC Software
       Tel: +1 408-546-0947
       email: mayers@bmc.com"
    DESCRIPTION
      "The MIB module to describe Ethernet WIS objects"

    ::= { mib-2 XX }  -- to be assigned by IANA

-- The main sections of the module

etherWisDevice          OBJECT IDENTIFIER ::= { etherWisMIB 1 }

etherWisSection         OBJECT IDENTIFIER ::= { etherWisMIB 2 }

etherWisLine            OBJECT IDENTIFIER ::= { etherWisMIB 3 }

etherWisPath            OBJECT IDENTIFIER ::= { etherWisMIB 4 }

etherWisConformance     OBJECT IDENTIFIER ::= { etherWisMIB 5 }
```

```
-- The Device group

-- These objects apply to functions which may be implemented in
-- devices which support more than one physical connection.
-- Therefore, changes to these objects may affect instances other
-- than the changed instance.

etherWisDeviceTable OBJECT-TYPE
    SYNTAX  SEQUENCE OF EtherWisDeviceEntry
    MAX-ACCESS  not-accessible
    STATUS  current
    DESCRIPTION
       "The table for Ethernet WIS devices"
     ::= { etherWisDevice 1 }

etherWisDeviceEntry OBJECT-TYPE
    SYNTAX  EtherWisDeviceEntry
    MAX-ACCESS  not-accessible
    STATUS  current
    DESCRIPTION
       "An entry in the Ethernet WIS device table"
    INDEX  { ifIndex }
     ::= { etherWisDeviceTable 1}

EtherWisDeviceEntry ::=
    SEQUENCE {
        etherWisDeviceReset                        INTEGER,
        etherWisDeviceLoopback                     INTEGER,
        etherWisDeviceSpeedSelection               INTEGER,
        etherWisDevicePowerDown                    INTEGER,
        etherWisDevicePresent                      INTEGER,
        etherWisDeviceModesAllowed                 INTEGER,
        etherWisDeviceModeSelect                   INTEGER,
        etherWisDeviceJitterTestMode               INTEGER
        }

etherWisDeviceReset OBJECT-TYPE
    SYNTAX  INTEGER {
                running(0),
                reset(1)
            }
    MAX-ACCESS  read-write
    STATUS  current
    DESCRIPTION
       "This variable can be used to reset the WIS.  The interface may
       be unavailable while the reset occurs and data may be lost."
     ::= { etherWisDeviceEntry 1 }
```

```
etherWisDeviceLoopback OBJECT-TYPE
    SYNTAX  INTEGER {
                noLoopback(0),
                loopBack(1)
            }
    MAX-ACCESS  read-write
    STATUS  current
    DESCRIPTION
       "Setting this variable to loopback will cause data sent into the
       interface to be returned on the same interface."
     ::= { etherWisDeviceEntry 2 }

etherWisDeviceSpeedSelection OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS  read-write
    STATUS  current
    DESCRIPTION
       "This variable is currently being changed by the IEEE."
     ::= { etherWisDeviceEntry 3 }

etherWisDevicePowerDown OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS  read-write
    STATUS  current
    DESCRIPTION
       "This variable is currently being changed by the IEEE."
     ::= { etherWisDeviceEntry 4 }

etherWisDevicePresent OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS  read-only
    STATUS  current
    DESCRIPTION
       "This variable is currently being changed by the IEEE."
     ::= { etherWisDeviceEntry 5 }

etherWisDeviceModesAllowed OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS  read-only
    STATUS  current
    DESCRIPTION
       "This is a bit pattern indicating which modes this device
       will permit etherWisDeviceModeSelect to be set to.  The
       bit positions, with 0 being the LSB, indicate:

           0 - 10GBASE-W
           1 - 10GBASE-R"
     ::= { etherWisDeviceEntry 6 }
```

```
etherWisDeviceModeSelect OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS  read-write
    STATUS  current
    DESCRIPTION
       "This variable indicates the current operating state of the
       device.  The values use the same bit pattern as
       etherWisDeviceModesAllowed.  Attempts to set this variable
       to a value which would cause conflicting mode settings will
       result in an inconsistentValue error."
     ::= { etherWisDeviceEntry 7 }

etherWisDeviceJitterTestMode OBJECT-TYPE
    SYNTAX  INTEGER {
                disable(0),
                enable(1)
            }
    MAX-ACCESS read-write
    STATUS current
    DESCRIPTION
       "This variable controls jitter test mode."
     ::= { etherWisDeviceEntry 8 }

etherWisSectionCurrentTable OBJECT-TYPE
    SYNTAX  SEQUENCE OF EtherWisSectionCurrentEntry
    MAX-ACCESS  not-accessible
    STATUS  current
    DESCRIPTION
       "The table for the current state of Ethernet WIS sections."
     ::= { etherWisSection 1 }

etherWisSectionCurrentEntry OBJECT-TYPE
    SYNTAX  EtherWisSectionCurrentEntry
    MAX-ACCESS  not-accessible
    STATUS  current
    DESCRIPTION
       "An entry in the etherWisSectionCurrentTable."
    INDEX  { ifIndex }
     ::= { etherWisSectionCurrentTable 1 }

EtherWisSectionCurrentEntry ::=
    SEQUENCE {
        etherWisSectionCurrentJ0Transmitted        INTEGER,
        etherWisSectionCurrentJ0Expected           INTEGER,
        etherWisSectionCurrentJ0Received           INTEGER,
        etherWisSectionCurrentStatus               Integer32,
        etherWisSectionCurrentESs                  Integer32,
        etherWisSectionCurrentSESs                 Integer32,
```

```
          etherWisSectionCurrentSEFSs                Integer32,
          etherWisSectionCurrentCVs                  Integer32
          }

   etherWisSectionCurrentJ0Transmitted OBJECT-TYPE
       SYNTAX  INTEGER ( 0..255 )
       MAX-ACCESS  read-write
       STATUS  current
       DESCRIPTION
          "This is the section trace J0 byte which is to be
          transmitted."
        ::= { etherWisSectionCurrentEntry 1 }

   etherWisSectionCurrentJ0Expected OBJECT-TYPE
       SYNTAX  INTEGER ( 0..255 )
       MAX-ACCESS  read-write
       STATUS  current
       DESCRIPTION
          "This is the section trace J0 byte which is
          expected to be received."
        ::= { etherWisSectionCurrentEntry 2 }

   etherWisSectionCurrentJ0Received OBJECT-TYPE
       SYNTAX  INTEGER ( 0..255 )
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "This is the section trace J0 byte which was
          actually received."
        ::= { etherWisSectionCurrentEntry 3 }

   etherWisSectionCurrentStatus OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "This variable indicates the current status of the
          section with a bit map which can indicate several
          defects at once.  The etherWisSectionNoDefect should
          be set if and only if no other flag is set.

          The bit positions are:
              1  etherWisSectionNoError
              2  etherWisSectionLocalFault
              4  etherWisSectionLinkDown
              8  etherWisSectionLOS
             16  etherWisSectionLOF"
        ::= { etherWisSectionCurrentEntry 4 }
```

```
etherWisSectionCurrentESs OBJECT-TYPE
    SYNTAX  Integer32
    MAX-ACCESS  read-only
    STATUS  current
    DESCRIPTION
       "The count of Errored Seconds in the current
       measuring interval."
     ::= { etherWisSectionCurrentEntry 5 }

etherWisSectionCurrentSESs OBJECT-TYPE
    SYNTAX  Integer32
    MAX-ACCESS  read-only
    STATUS  current
    DESCRIPTION
       "The count of Severely Errored Seconds in the current
       measuring interval."
     ::= { etherWisSectionCurrentEntry 6 }

etherWisSectionCurrentSEFSs OBJECT-TYPE
    SYNTAX  Integer32
    MAX-ACCESS  read-only
    STATUS  current
    DESCRIPTION
       "The count of Severely Errored Framing Seconds in the
       current measuring interval."
     ::= { etherWisSectionCurrentEntry 7 }

etherWisSectionCurrentCVs OBJECT-TYPE
    SYNTAX  Integer32
    MAX-ACCESS  read-only
    STATUS  current
    DESCRIPTION
       "The count of Coding Violations in the current
       measuring interval."
     ::= { etherWisSectionCurrentEntry 8 }

etherWisSectionIntervalTable OBJECT-TYPE
    SYNTAX  SEQUENCE OF EtherWisSectionIntervalEntry
    MAX-ACCESS  not-accessible
    STATUS  current
    DESCRIPTION
       "The table for storage of Ethernet WIS section
       historical data."
     ::= { etherWisSection 2 }

etherWisSectionIntervalEntry OBJECT-TYPE
    SYNTAX  EtherWisSectionIntervalEntry
    MAX-ACCESS  not-accessible
```

```
        STATUS  current
        DESCRIPTION
           "An entry in the etherWisSectionIntervalTable."
        INDEX  { ifIndex,
                 etherWisSectionIntervalNumber }
         ::= { etherWisSectionIntervalTable 1 }

    EtherWisSectionIntervalEntry ::=
        SEQUENCE {
            etherWisSectionIntervalNumber               Integer32,
            etherWisSectionIntervalESs                  Integer32,
            etherWisSectionIntervalSESs                 Integer32,
            etherWisSectionIntervalSEFSs                Integer32,
            etherWisSectionIntervalCVs                  Integer32
            }

    etherWisSectionIntervalNumber OBJECT-TYPE
        SYNTAX  Integer32 ( 1..96 )
        MAX-ACCESS not-accessible
        STATUS  current
        DESCRIPTION
           "A number identifying which 15 minute interval is
           refereneced by the data in the table.  The value
           1 represents the most recent completed interval."
         ::= { etherWisSectionIntervalEntry 1 }

    etherWisSectionIntervalESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Errored Seconds in this
           measuring interval."
         ::= { etherWisSectionIntervalEntry 2 }

    etherWisSectionIntervalSESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Severely Errored Seconds in this
           measuring interval."
         ::= { etherWisSectionIntervalEntry 3 }

    etherWisSectionIntervalSEFSs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
```

```
        DESCRIPTION
           "The count of Severely Errored Framing Seconds in the
           measuring interval."
         ::= { etherWisSectionIntervalEntry 4 }

    etherWisSectionIntervalCVs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Coding Violations in the
           measuring interval."
         ::= { etherWisSectionIntervalEntry 5 }

    etherWisLineCurrentTable OBJECT-TYPE
        SYNTAX  SEQUENCE OF EtherWisLineCurrentEntry
        MAX-ACCESS  not-accessible
        STATUS  current
        DESCRIPTION
           "The table for the current state of Ethernet WIS lines."
         ::= { etherWisLine 1 }

    etherWisLineCurrentEntry OBJECT-TYPE
        SYNTAX  EtherWisLineCurrentEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
           "An entry in the etherWisLineCurrentTable."
        INDEX  { ifIndex }
         ::= { etherWisLineCurrentTable 1 }

    EtherWisLineCurrentEntry ::=
        SEQUENCE {
            etherWisLineCurrentStatus                  Integer32,
            etherWisLineCurrentESs                     Integer32,
            etherWisLineCurrentSESs                    Integer32,
            etherWisLineCurrentCVs                     Integer32,
            etherWisLineCurrentUASs                    Integer32
            }

    etherWisLineCurrentStatus OBJECT-TYPE
        SYNTAX  Integer32 ( 1..6 )
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "This variable indicates the current status of the
           line with a bit map which can indicate several
           defects at once.  The etherWisLineNoDefect should
```

```
          be set if and only if no other flag is set.

          The bit positions are:
              1  etherWisLineNoDefect
              2  etherWisLineRDI
              4  etherWisLineAIS"
       ::= { etherWisLineCurrentEntry 1 }

   etherWisLineCurrentESs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Errored Seconds in the current
          measuring interval."
       ::= { etherWisLineCurrentEntry 2 }

   etherWisLineCurrentSESs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Severely Errored Seconds in the current
          measuring interval."
       ::= { etherWisLineCurrentEntry 3 }

   etherWisLineCurrentCVs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Coding Violations in the current
          measuring interval."
       ::= { etherWisLineCurrentEntry 4 }

   etherWisLineCurrentUASs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Unavailable Seconds in the current
          measuring interval."
       ::= { etherWisLineCurrentEntry 5 }

   etherWisLineIntervalTable OBJECT-TYPE
       SYNTAX  SEQUENCE OF EtherWisLineIntervalEntry
       MAX-ACCESS  not-accessible
       STATUS  current
```

```
        DESCRIPTION
           "The table for the historical data of Ethernet WIS lines."
         ::= { etherWisLine 2 }

    etherWisLineIntervalEntry OBJECT-TYPE
        SYNTAX  EtherWisLineIntervalEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
           "An entry in the etherWisLineIntervalTable."
        INDEX  { ifIndex,
                 etherWisLineIntervalNumber }
         ::= { etherWisLineIntervalTable 1 }

    EtherWisLineIntervalEntry ::=
        SEQUENCE {
            etherWisLineIntervalNumber                  Integer32,
            etherWisLineIntervalESs                     Integer32,
            etherWisLineIntervalSESs                    Integer32,
            etherWisLineIntervalCVs                     Integer32,
            etherWisLineIntervalUASs                    Integer32
            }

    etherWisLineIntervalNumber OBJECT-TYPE
        SYNTAX  Integer32 ( 1..96 )
        MAX-ACCESS not-accessible
        STATUS  current
        DESCRIPTION
           "A number identifying which 15 minute interval is
           refereneced by the data in the table.  The value
           1 represents the most recent completed interval."
         ::= { etherWisLineIntervalEntry 1 }

    etherWisLineIntervalESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Errored Seconds in the
           measuring interval."
         ::= { etherWisLineIntervalEntry 2 }

    etherWisLineIntervalSESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Severely Errored Seconds in the
```

```
          measuring interval."
        ::= { etherWisLineIntervalEntry 3 }

   etherWisLineIntervalCVs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Coding Violations in the
          measuring interval."
        ::= { etherWisLineIntervalEntry 4 }

   etherWisLineIntervalUASs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Unavailable Seconds in the
          measuring interval."
        ::= { etherWisLineIntervalEntry 5 }

   etherWisPathCurrentTable OBJECT-TYPE
       SYNTAX  SEQUENCE OF EtherWisPathCurrentEntry
       MAX-ACCESS  not-accessible
       STATUS  current
       DESCRIPTION
          "The table for the current state of Ethernet WIS paths."
        ::= { etherWisPath 1 }

   etherWisPathCurrentEntry OBJECT-TYPE
       SYNTAX  EtherWisPathCurrentEntry
       MAX-ACCESS not-accessible
       STATUS current
       DESCRIPTION
          "An entry in the etherWisPathCurrentTable."
       INDEX  { ifIndex }
        ::= { etherWisPathCurrentTable 1 }

   EtherWisPathCurrentEntry ::=
       SEQUENCE {
           etherWisPathCurrentStatus                   Integer32,
           etherWisPathCurrentESs                      Integer32,
           etherWisPathCurrentSESs                     Integer32,
           etherWisPathCurrentCVs                      Integer32,
           etherWisPathCurrentUASs                     Integer32
           }

   etherWisPathCurrentStatus OBJECT-TYPE
```

```
        SYNTAX  Integer32 ( 1..6 )
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "This variable indicates the current status of the
           line with a bit map which can indicate several
           defects at once.  The etherWisPathNoDefect flag should
           be set if and only if no other flag is set.

           The bit positions are:
               1  etherWisPathNoDefect
               2  etherWisPathLCD
               4  etherWisPathPLM
               8  etherWisPathAIS
              16  etherWisPathLOP"
         ::= { etherWisPathCurrentEntry 1 }

    etherWisPathCurrentESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Errored Seconds in the current
           measuring interval."
         ::= { etherWisPathCurrentEntry 2 }

    etherWisPathCurrentSESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Severely Errored Seconds in the current
           measuring interval."
         ::= { etherWisPathCurrentEntry 3 }

    etherWisPathCurrentCVs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Coding Violations in the current
           measuring interval."
         ::= { etherWisPathCurrentEntry 4 }

    etherWisPathCurrentUASs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
```

```
        DESCRIPTION
           "The count of Unavailable Seconds in the current
           measuring interval."
         ::= { etherWisPathCurrentEntry 5 }

    etherWisPathIntervalTable OBJECT-TYPE
        SYNTAX  SEQUENCE OF EtherWisPathIntervalEntry
        MAX-ACCESS  not-accessible
        STATUS  current
        DESCRIPTION
           "The table for the historical data of Ethernet WIS lines."
         ::= { etherWisPath 2 }

    etherWisPathIntervalEntry OBJECT-TYPE
        SYNTAX  EtherWisPathIntervalEntry
        MAX-ACCESS not-accessible
        STATUS current
        DESCRIPTION
           "An entry in the etherWisPathIntervalTable."
        INDEX  { ifIndex,
                 etherWisPathIntervalNumber }
         ::= { etherWisPathIntervalTable 1 }

    EtherWisPathIntervalEntry ::=
        SEQUENCE {
            etherWisPathIntervalNumber                  Integer32,
            etherWisPathIntervalESs                     Integer32,
            etherWisPathIntervalSESs                    Integer32,
            etherWisPathIntervalCVs                     Integer32,
            etherWisPathIntervalUASs                    Integer32
            }

    etherWisPathIntervalNumber OBJECT-TYPE
        SYNTAX  Integer32 ( 1..96 )
        MAX-ACCESS not-accessible
        STATUS  current
        DESCRIPTION
           "A number identifying which 15 minute interval is
           refereneced by the data in the table.  The value
           1 represents the most recent completed interval."
         ::= { etherWisPathIntervalEntry 1 }

    etherWisPathIntervalESs OBJECT-TYPE
        SYNTAX  Integer32
        MAX-ACCESS  read-only
        STATUS  current
        DESCRIPTION
           "The count of Errored Seconds in the
```

```
          measuring interval."
        ::= { etherWisPathIntervalEntry 2 }

   etherWisPathIntervalSESs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Severely Errored Seconds in the
          measuring interval."
        ::= { etherWisPathIntervalEntry 3 }

   etherWisPathIntervalCVs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Coding Violations in the
          measuring interval."
        ::= { etherWisPathIntervalEntry 4 }

   etherWisPathIntervalUASs OBJECT-TYPE
       SYNTAX  Integer32
       MAX-ACCESS  read-only
       STATUS  current
       DESCRIPTION
          "The count of Unavailable Seconds in the
          measuring interval."
        ::= { etherWisPathIntervalEntry 5 }

   --
   --     Conformance Statements
   --

   etherWisGroups      OBJECT IDENTIFIER ::= { etherWisConformance 1 }

   etherWisCompliances OBJECT IDENTIFIER ::= { etherWisConformance 2 }


   --     Compliance Statements

   etherWisCurrentCompliance MODULE-COMPLIANCE
       STATUS  current
       DESCRIPTION
          "The compliance statement for implementations which do not
          support historical data."

       MODULE  -- this module
```

```
            MANDATORY-GROUPS {
                etherWisDeviceGroup,
                etherWisSectionCurrentGroup,
                etherWisLineCurrentGroup,
                etherWisPathCurrentGroup
                }

        ::= { etherWisCompliances 1 }

    etherWisIntervalCompliance MODULE-COMPLIANCE
        STATUS  current
        DESCRIPTION
           "The compliance statement for implementations which support
           historical data."

        MODULE  -- this module
            MANDATORY-GROUPS {
                etherWisDeviceGroup,
                etherWisSectionCurrentGroup,
                etherWisSectionIntervalGroup,
                etherWisLineCurrentGroup,
                etherWisLineIntervalGroup,
                etherWisPathCurrentGroup,
                etherWisPathIntervalGroup
                }

        ::= { etherWisCompliances 2 }

    etherWisDeviceGroup OBJECT-GROUP
        OBJECTS {
            etherWisDeviceReset,
            etherWisDeviceLoopback,
            etherWisDeviceSpeedSelection,
            etherWisDevicePowerDown,
            etherWisDevicePresent,
            etherWisDeviceModesAllowed,
            etherWisDeviceModeSelect,
            etherWisDeviceJitterTestMode
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide information about the
           state of the WIS device."
        ::= { etherWisGroups 1 }

    etherWisSectionCurrentGroup OBJECT-GROUP
        OBJECTS {
            etherWisSectionCurrentJ0Transmitted,
```

```
            etherWisSectionCurrentJ0Expected,
            etherWisSectionCurrentJ0Received,
            etherWisSectionCurrentStatus,
            etherWisSectionCurrentESs,
            etherWisSectionCurrentSESs,
            etherWisSectionCurrentSEFSs,
            etherWisSectionCurrentCVs
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide information about the
           current state of the WIS section."
         ::= { etherWisGroups 2 }

    etherWisSectionIntervalGroup OBJECT-GROUP
        OBJECTS {
            etherWisSectionIntervalNumber,
            etherWisSectionIntervalESs,
            etherWisSectionIntervalSESs,
            etherWisSectionIntervalSEFSs,
            etherWisSectionIntervalCVs
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide historical data
           about the WIS section."
         ::= { etherWisGroups 3 }

    etherWisLineCurrentGroup OBJECT-GROUP
        OBJECTS {
            etherWisLineCurrentStatus,
            etherWisLineCurrentESs,
            etherWisLineCurrentSESs,
            etherWisLineCurrentCVs,
            etherWisLineCurrentUASs
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide information about the
           current state of the WIS line."
         ::= { etherWisGroups 4 }

    etherWisLineIntervalGroup OBJECT-GROUP
        OBJECTS {
            etherWisLineIntervalNumber,
            etherWisLineIntervalESs,
            etherWisLineIntervalSESs,
            etherWisLineIntervalCVs,
```

```
            etherWisLineIntervalUASs
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide historical data
           about the WIS line."
         ::= { etherWisGroups 5 }

    etherWisPathCurrentGroup OBJECT-GROUP
        OBJECTS {
            etherWisPathCurrentStatus,
            etherWisPathCurrentESs,
            etherWisPathCurrentSESs,
            etherWisPathCurrentCVs,
            etherWisPathCurrentUASs
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide information about the
           current state of the WIS path."
         ::= { etherWisGroups 6 }

    etherWisPathIntervalGroup OBJECT-GROUP
        OBJECTS {
            etherWisPathIntervalNumber,
            etherWisPathIntervalESs,
            etherWisPathIntervalSESs,
            etherWisPathIntervalCVs,
            etherWisPathIntervalUASs
            }
        STATUS  current
        DESCRIPTION
           "A collection of objects which provide historical data
           about the WIS path."
         ::= { etherWisGroups 7 }

    END
```

## 4. Notice on Intellectual Property

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## 5. Acknowledgments

This document is the product of the IETF Hubmib Working Group.

## 6. Security

There are a number of management objects defined in this MIB that have a MAX-ACCESS clause of read-write and/or read-create. Such objects may be considered sensitive or vulnerable in some network environments. The support for SET operations in a non-secure environment without proper protection can have a negative effect on network operations.

SNMPv1 by itself is not a secure environment. Even if the network itself is secure (for example by using IPSec), even then, there is no control as to who on the secure network is allowed to access and GET/SET (read/change/create/delete) the objects in this MIB.

It is recommended that the implementers consider the security features as provided by the SNMPv3 framework. Specifically, the use of the User-based Security Model RFC 2574 [RFC2574] and the View-based Access Control Model RFC 2575 [RFC2575] is recommended.

It is then a customer/user responsibility to ensure that the SNMP entity giving access to an instance of this MIB, is properly configured to give access to the objects only to those principals (users) that have legitimate rights to indeed GET or SET (change/create/delete) them.

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## 8. Editor's Address

Mike Ayers
BMC Software, Inc.
2141 North First Street
San Jose, CA 95131
USA

Phone: +1 408 546 0947
Fax: +1 408 965 0359
Email: mayers@bmc.com

Kerry McDonald
Institute for Applied Supercomputing
California State University San Bernardino

Email: kerry_mcd@hotmail.com
kmcdonal@csci.csusb.edu

K.C. Norseth
Enterasys Networks
2691 South Decker Lake Lane
Salt Lake City, Utah 84119

Phone: +1 801 887 9823
Email: knorseth@enterasys.com

John Flick
Hewlett-Packard Company
8000 Foothills Blvd. M/S 5557
Roseville, CA 95747-5557

Phone: +1 916 785 4018
Fax: +1 916 785 1199
Email: johnf@rose.hp.com

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