

IANA Considerations for MFD Alert Codes

The following new Printer Alert Codes have been defined as a result of the MFD Faults Analysis performed during the development of the new Alert Table Groups.

1. **subunitLocked(39)**
2. **subunitUnlocked(40)**
3. **subunitIniitiazationFailure(41)**
4. **subunitFanMotorFailure(42)**

This section contains the exact registration information for IANA to update the IANA-PRINTER-MIB PrtAlertCodeTC Registry [IANAPTRMIB], according to the procedures defined in RFC 3805 [RFC3805] section 5, to cover the new group definitions defined in this document.

```
PrtAlertCodeTC ::= TEXTUAL-CONVENTION
  -- This TC was extracted from prtAlertCode in RFC 1759.
  STATUS      current
  DESCRIPTION
    "The code that describes the type of alert for this entry in

    the table. Binary change event alerts describe states of the
    subunit while unary change event alerts describe a single
    event. The same alert code can be used for a binary change
    event or a unary change event, depending on implementation.
    Also, the same alert code can be used to indicate a critical
    or non-critical (warning) alert, depending on implementation.
    The value of prtAlertSeverityLevel specifies binary vs. unary
    and critical vs. non-critical for each event for the
    implementation.
```

While there are some specific codes for many subunits, the generic codes should be used for most subunit alerts. The network management station can then query the subunit specified by prtAlertGroup to determine further subunit status and other subunit information.

An agent shall not add two entries to the alert table for the same event, one containing a generic event code and the other containing a specific event code; the agent shall add only one entry in the alert table for each event; either generic (preferred) or specific, not both.

Implementation of the unary change event alertRemovalOfBinaryChangeEntry(1801) is optional. When implemented, this alert code shall indicate to network management stations that the trailing edge of a binary change event has occurred and the corresponding alert entry has been removed from the alert table. As with all events, the alertRemovalOfBinaryChangeEntry(1801) alert shall be placed at the end of the alert table. Such an alert table entry shall specify the following information:

```

prtAlertSeverityLevel    warningUnaryChangeEvent(4)
prtAlertTrainingLevel    noInterventionRequired(7)
prtAlertGroup            alert(18)
prtAlertGroupIndex       the index of the row in the
                          alert table of the binary
                          change event that this event
                          has removed.

prtAlertLocation         unknown (-2)
prtAlertCode             alertRemovalOfBinaryChangeEvent(1801)
prtAlertDescription      <description or null string>
prtAlertTime             the value of sysUpTime at
                          the time of the removal of the
                          binary change event from the
                          alert table.

```

Optionally, the agent may generate a trap coincident with

removing the binary change event and placing the unary change event alertRemovalOfBinaryChangeEvent(1801) in the alert table. For such a trap, the prtAlertIndex sent with the above trap parameters shall be the index of the alertRemovalOfBinaryChangeEvent row that was added to the prtAlertTable; not the index of the row that was removed from the prtAlertTable."

```

SYNTAX    INTEGER {
            other(1),
            -- an event that is not represented
            -- by one of the alert codes
            -- specified below.
            unknown(2),
            -- The following generic codes are common to
            -- multiple groups.  The NMS may examine the
            -- prtAlertGroup object to determine what group
            -- to query for further information.
            coverOpen(3),
            coverClosed(4),
            interlockOpen(5),
            interlockClosed(6),
            configurationChange(7),
            jam(8),
            subunitMissing(9),          -- Not in RFC 1759
            -- The subunit tray, bin, etc.
            -- has been removed.
            subunitLifeAlmostOver(10),  -- Not in RFC 1759
            subunitLifeOver(11),        -- Not in RFC 1759
            subunitAlmostEmpty(12),     -- Not in RFC 1759
            subunitEmpty(13),           -- Not in RFC 1759
            subunitAlmostFull(14),      -- Not in RFC 1759
            subunitFull(15),            -- Not in RFC 1759
            subunitNearLimit(16),       -- Not in RFC 1759
            subunitAtLimit(17),         -- Not in RFC 1759
            subunitOpened(18),          -- Not in RFC 1759
            subunitClosed(19),          -- Not in RFC 1759
            subunitTurnedOn(20),        -- Not in RFC 1759
            subunitTurnedOff(21),       -- Not in RFC 1759
            subunitOffline(22),         -- Not in RFC 1759
            subunitPowerSaver(23),      -- Not in RFC 1759

```

```
subunitWarmingUp(24),          -- Not in RFC 1759
subunitAdded(25),              -- Not in RFC 1759
subunitRemoved(26),           -- Not in RFC 1759
subunitResourceAdded(27),     -- Not in RFC 1759
subunitResourceRemoved(28),   -- Not in RFC 1759
subunitRecoverableFailure(29), -- Not in RFC 1759
subunitUnrecoverableFailure(30),
                                -- Not in RFC 1759
subunitRecoverableStorageError(31),
                                -- Not in RFC 1759
subunitUnrecoverableStorageError(32),
                                -- Not in RFC 1759
subunitMotorFailure(33),      -- Not in RFC 1759
subunitMemoryExhausted(34),   -- Not in RFC 1759
subunitUnderTemperature(35),  -- Not in RFC 1759
subunitOverTemperature(36),   -- Not in RFC 1759
subunitTimingFailure(37),     -- Not in RFC 1759
subunitThermistorFailure(38), -- Not in RFC 1759
subunitLocked(39),            -- MFD addition
subunitUnlocked(40),          -- MFD addition
subunitInitializationFailure(41), -- MFD Addition
subunitFanMotorFailure(42),   -- MFD addition

-- General Printer group
doorOpen(501),                -- DEPRECATED
                                -- Use coverOpened(3)
doorClosed(502),              -- DEPRECATED
                                -- Use coverClosed(4)
powerUp(503),
powerDown(504),
printerNMSReset(505),         -- Not in RFC 1759
                                -- The printer has been reset by some
                                -- network management station(NMS)
                                -- writing into 'prtGeneralReset'.
printerManualReset(506),      -- Not in RFC 1759
                                -- The printer has been reset manually.
printerReadyToPrint(507),     -- Not in RFC 1759
                                -- The printer is ready to print. (i.e.,
                                -- not warming up, not in power save
                                -- state, not adjusting print quality,
                                -- etc.).

-- Input Group
inputMediaTrayMissing(801),
inputMediaSizeChange(802),
inputMediaWeightChange(803),
inputMediaTypeChange(804),
inputMediaColorChange(805),
inputMediaFormPartsChange(806),
inputMediaSupplyLow(807),
inputMediaSupplyEmpty(808),
inputMediaChangeRequest(809), -- Not in RFC 1759
                                -- An interpreter has detected that a
                                -- different medium is need in this input
                                -- tray subunit. The prtAlertDescription may
```

```
-- be used to convey a human readable
-- description of the medium required to
-- satisfy the request.
inputManualInputRequest(810), -- Not in RFC 1759

-- An interpreter has detected that manual
-- input is required in this subunit. The
-- prtAlertDescription may be used to convey
-- a human readable description of the medium
-- required to satisfy the request.
inputTrayPositionFailure(811), -- Not in RFC 1759
-- The input tray failed to position correctly.
inputTrayElevationFailure(812),
-- Not in RFC 1759
inputCannotFeedSizeSelected(813),
-- Not in RFC 1759
-- Output Group
outputMediaTrayMissing(901),
outputMediaTrayAlmostFull(902),
outputMediaTrayFull(903),
outputMailboxSelectFailure(904),
-- Not in RFC 1759
-- Marker group
markerFuserUnderTemperature(1001),
markerFuserOverTemperature(1002),
markerFuserTimingFailure(1003),
-- Not in RFC 1759
markerFuserThermistorFailure(1004),
-- Not in RFC 1759
markerAdjustingPrintQuality(1005),
-- Not in RFC 1759
-- Marker Supplies group
markerTonerEmpty(1101),
markerInkEmpty(1102),
markerPrintRibbonEmpty(1103),
markerTonerAlmostEmpty(1104),
markerInkAlmostEmpty(1105),
markerPrintRibbonAlmostEmpty(1106),
markerWasteTonerReceptacleAlmostFull(1107),
markerWasteInkReceptacleAlmostFull(1108),
markerWasteTonerReceptacleFull(1109),
markerWasteInkReceptacleFull(1110),
markerOpcLifeAlmostOver(1111),
markerOpcLifeOver(1112),
markerDeveloperAlmostEmpty(1113),
markerDeveloperEmpty(1114),
markerTonerCartridgeMissing(1115),
-- Not in RFC 1759
-- Media Path Device Group
mediaPathMediaTrayMissing(1301),
mediaPathMediaTrayAlmostFull(1302),
mediaPathMediaTrayFull(1303),
mediaPathCannotDuplexMediaSelected(1304),
-- Not in RFC 1759
-- Interpreter Group
interpreterMemoryIncrease(1501),
```

```
interpreterMemoryDecrease(1502),
interpreterCartridgeAdded(1503),
interpreterCartridgeDeleted(1504),
interpreterResourceAdded(1505),
interpreterResourceDeleted(1506),
interpreterResourceUnavailable(1507),
interpreterComplexPageEncountered(1509),
    -- Not in RFC 1759
    -- The interpreter has encountered a page
    -- that is too complex for the resources that
    -- are available.
-- Alert Group
alertRemovalOfBinaryChangeEntry(1801)
    -- Not in RFC 1759
    -- A binary change event entry has been
    -- removed from the alert table. This unary
    -- change alert table entry is added to the
    -- end of the alert table.
}
```