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Source(s)	Duke Dang, Lucy Chen, Li Li  HUAWEI HuaWei Bld., No.3 Xinxu Rd., Shang-Di Infomation Industry Base, Hai-Dian District Beijing P.R. China, 100085	Voice: 86-10-82882959 Fax: 86-10-82882966 <a href="mailto:dsjun@huawei.com">mailto:dsjun@huawei.com</a>
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Abstract	This contribution proposes a method to avoid to lose some log records. In details, in order to make the log information intact, a SNMP TRAP can be sent to the NMS when the log buffer is almost full, and the NMS will decide whether it gets the device's log or not when it receives the SNMP TRAP. Moreover, the log information may be saved in some local file if it is available.	
Purpose	Adoption	
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# The Event-log's Management Procedure in the BS and SS

*Duke Dang, Lucy Chen, Li Li*  
*HUAWEI*

## 1. Introduction

In IEEE802.16f/D3, the MIB and the associated management procedures are defined for the MAC and PHY, and SNMP is a protocol to access the managed objects in BS and SS. Especially, the current draft 3 defines the MIB sub-trees and the associated management procedures in order to manage the event log in BS and SS.

The event log records the device operation data, which include the user operation log information, the system debugging information and the device running log information, all those information is very important for the network operator to analyze the network throughput and the stability of the network devices. More importantly, the engineer can use the log information to shoot the trouble of the network.

However, in the current draft 3, "Event log uses the wrap-around buffers to store events. When the buffer is full, the oldest entry will be removed to make room for the new entry. The wrap-around can be disabled by NMS to prevent faulty events from flooding the log buffer quickly." The implementation in the current draft may make the event log information un-intact, and the un-intact log may bring difficulty to diagnose abnormal cases, which make the log less value for the operator and engineer.

This contribution proposes a method to avoid to lose some log records. In details, in order to make the log information intact, a SNMP TRAP can be sent to the NMS when the log buffer is almost full, and the NMS will decide whether it gets the device's log or not when it receives the SNMP TRAP. Moreover, the log information may be saved in some local file if it is available.

## 2. Proposed Text Changes

*[Modify the corresponding sections as follows:]*

*[Change the text in section 11.1.5.3 as the following]*

### **13.1.5.3 wmanIfBsEventLogTable**

This is the Syslog table that is used to store BS local events. This table should reside in the non-volatile memory. The Event Log consists of the following features:

- Event log uses the wrap-around buffers to store events. [When the buffer is almost full, a TRAP may be sent to the NMS.](#) When the buffer is full, the oldest entry will be removed to make room for the new entry. The wrap-around can be disabled by NMS to prevent faulty events from flooding the log buffer quickly.
- The sizes of the buffers is configurable.
- Events in the log have a lifespan that may be configurable.
- [The threshold of the residual buffer which triggers the TRAP may be configurable.](#)
- NMS can set the minimum severity fo the events that should be logged into the buffer.
- Certain events can trigger notifications that shall be sent to NMS.
- A pointer is provided to enable the access to the latest event.
- [All logs may be saved in the local files.](#)

The content of each entry should be retained after the power reset.

*[Change the text in section 11.2.4.3 as the following]*

### **13.1.5.3 wmanIfBsEventLogTable**

This is the Syslog table that is used to store BS local events. This table should reside in the non-volatile memory. The Event Log consists of the following features:

- Event log uses the wrap-around buffers to store events. [When the buffer is almost full, a TRAP may be sent to the NMS.](#) When the buffer is full, the oldest entry will be removed to make room for the new entry. The wrap-around can be disabled by NMS to prevent faulty events from flooding the log buffer quickly.
- The size of the buffers is configurable.
- Events in the log have a lifespan that may be configurable.
- [The threshold of the residual buffer which triggers the TRAP may be configurable.](#)
- NMS can set the minimum severity for the events that should be logged into the buffer.
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The content of each entry should be retained after the power reset.