Software Release Note

Z-Wave Zniffer v4.69

Document No.:	SRN13233
Version:	11
Description:	-
Written By:	ANERDO;MAMIHALI;BSANTOK;
Date:	2024-05-31
Reviewed By:	BSANTOK;MAMIHALI;PEBALOGH;ANERDO;JUTIRON;LAURGE;TASZABO
Restrictions:	Public

Approved by:

Date	CET	Initials Name	Justification
2024-05-31	12:22:09	ANERDO	András Erdo

REVISION RECORD

Doc. Rev	Date	By	Pages affected	Brief description of changes
1	20150411	JFR	All	Initial draft
2	20150518	JFR	All	Minor typos
3	20150625	JFR	2.1.2	Clarified ZDB5202 support
4	20160307	SRO	2.1.1	Updated supported OS list Updated list of new features
5	20160420	JFR	2.1.1	Updated releases to ZWaveZniffer 4.55
6	20160722	JFR	2.1.1	Updated releases to ZWaveZniffer 4.56 and ZWaveXMLEditor 2.05
6	20160725	SRO	2.1.1	Release changed to ZWaveZniffer 4.57
7	20180306	BBR	All	Added Silicon Labs template
8	20180531	JFR	References	Updated Command Class references
9	20190313	SRO	2.1.1	Updated release to Z-Wave Zniffer 4.60
10	20190319	Ayurttas	All	TechPub Reviewed version
11	20190918	seroman1	All	Updated release to Z-Wave Zniffer 4.62 remove ZWaveXMLEditor 2.05 remove File Converter 1.05
12	20200708	OBOIKO	2.1.1	Updated release to Z-Wave Zniffer 4.63
13	20200831	OBOIKO	2.1.1	Updated release to Z-Wave Zniffer 4.64
14	20201124	OBOIKO	2.1.1	Updated release to Z-Wave Zniffer 4.65
15	20201128	SCBROWNI	2.1.1	Tech Pubs review of new section
16	20220426	VOSAVOST	2.1.1	Updated release to Z-Wave Zniffer 4.66 Updated list of new features and fixed issues
17	20220531	VOSAVOST	0, 2.1.1.3	Updated lists of fixed and known issues
18	20220531	CAOWENS	All	Minor typo
19	20230602	VOSAVOST	2.1	Updated release to Z-Wave Zniffer 4.67 Updated list of new features, fixed and known issues
20	20231205	ANERDO	2.1.3	Updated release to Z-Wave Zniffer 4.68 Updated with new CSV export feature
21	20240530	ANERDO MAMIHALI	2	Update release to Z-Wave Zniffer 4.69 Updated with the EU-LR support and channel selection mode
22	20240531	BSANTOK	2	Improved descriptions, updated list of known issues

Table of Contents

1 Introduction

The PC based Z-Wave Zniffer tool enables Z-Wave developers to analyze unsecure/secure 9.6/40/100kbps/Long Range RF communication between Z-Wave nodes.

2   Releases

2.1   PC-Based Z-Wave Zniffer v4.69

2.1.1   PC-Based Z-Wave Zniffer

The PC-based Z-Wave Zniffer tool enables Z-Wave developers to analyze unsecured/secured 9.6/40/100kbps/Long Range (LR) RF communication between Z-Wave nodes. The tool requires the Zniffer firmware to be downloaded to the Z-Wave module to enable logging the RF communication. Both the Zniffer PTI and the NCP Zniffer (non-PTI) firmware are supported. Note: The Zniffer PTI firmware can only be used over an Ethernet connection, while the NCP Zniffer can be used with a USB connection. Be aware that the range of the Zniffer module may prevent logging of the full network traffic from one location. The Zniffer host application supports Windows 7/8/10 (32/64-bit). The libraries are implemented in C# using Microsoft Visual Studio 2017. The .NET Framework version 4.6.1 or later is required. For detailed information, refer to [1].

2.1.1.1   New Features

1241724 – Z-Wave Long Range EU support, region-channel selection separation

EU-LR support:

- From the 7.22.0 Z-Wave SDK release, the Zniffer firmware supports the Long Range EU region.

Separate region and channel selection:

- Due to hardware limitations, the application can only listen on up to four channels: 3 classic and one Long Range.
  From version 7.22.x of the "NCP Zniffer" application with Long Range frequencies, three different channel selection modes are available:

    o   3 classic channels + LR A

    o   3 classic channels + LR B

    o   Only LR channels: LR A + LR B

- This behavior has not changed in the "Zniffer PTI" application. It can only listen on 3 classic channels and the LR A channel.

2.1.1.2   Fixed issues

1058635 – The decoding of the LR Wake Up Beam frames.

635412 – Parsing of bit mask fields used for S2 Keys Exchange.

2.1.1.3   Known issues

854558 – Reloading the XML file doesn't work.
Workaround: The PC Zniffer must be restarted.

1155198 – Wake Up Beams are not captured if the capturing device is the one transmitting the beams using the Zniffer PTI application.
No known workaround.

1182988 – Zniffer Traces for the JP and KR regions from Zniffer NCP aren't parsed correctly when saved and reopened.
No known workaround

1201280 – Long Range broadcast destination and source Node ID are reversed in the Frame Details view.
No known workaround.

1203456 – Negative values in the Configuration Command Class are displayed incorrectly.
No known workaround.

1227370 – On-the-fly region selection is not possible from the UI using the Zniffer PTI application.
Workaround: The Zniffer PTI firmware with the desired region needs to be flashed.

1266411 – An exception is thrown due to an out of bounds array index after a prolonged period.
Workaround: If the current trace is needed, save it before clicking the OK button.

1281464 – Encrypted flags are erroneously interpreted in Security Message Encapsulation Nonce Get frames.
No known workaround.

2.1.2   Z-Wave Zniffer 500 Series Firmware v2.55

The 500 Series Zniffer firmware that resides on the Z-Wave module enables logging RF communication. The Zniffer firmware does not support the ZDB5202 module.

2.1.2.1   New Features

None.

2.1.3   Z-Wave Zniffer 400 Series Firmware v2.33

The 400 Series Zniffer firmware that resides on the Z-Wave module enables logging RF communication.

2.1.3.1   New Features

None.

2.1.4   Z-Wave Zniffer 300 Series Firmware v2.29

The 300 Series Zniffer firmware that resides on the Z-Wave module enables logging RF communication.

2.1.4.1   New Features

None.

References

[1]   Silicon Labs, INS10249, Instruction, Z-Wave Zniffer User Guide.

[2]   Silicon Labs, INS10680, Instruction, Z-Wave XML Editor User Guide.

[3]   Silicon Labs, SDS11847, Software Design Specification, Z-Wave Plus Device Types Specification.

[4]   Silicon Labs, SDS13781, Software Design Specification, Z-Wave Application Command Class Specification.

[5]   Silicon Labs, SDS13782, Software Design Specification, Z-Wave Management Command Class Specification.

[6]   Silicon Labs, SDS13783, Software Design Specification, Z-Wave Transport-Encapsulation Command Class Specification.

[7]   Silicon Labs, SDS13784, Software Design Specification, Z-Wave Network-Protocol Command Class Specification.

[8]   Silicon Labs, SDS13548, Software Design Specification, List of defined Z-Wave Command Classes.

Index

Z