



SECO S.p.A.  
Via Calamandrei, 91  
52100 Arezzo – Italy  
Ph: +39 0575 26979  
Fax: +39 0575 350210

P.IVA – VAT IT 00325250512  
Cap. Soc. € 763.439 i.v.  
Reg. Imprese n. 4196 Arezzo  
REA n. 70645  
Meccanografico AR007079

1

# SMBIOS SYSTEM INFORMATION TABLE CUSTOMIZATION USING AMI DMIEDIT

## Revision History

Revision	Date	Author	Changes
1.0	25 <sup>th</sup> January 2018	G.G	First Release
1.1	3 <sup>rd</sup> May 2018	G.G.	Updated document template
1.2	16 <sup>th</sup> September 2019	M.D.M.	Add “known issue” section

All rights reserved. All information contained in this document is proprietary and confidential material of SECO S.p.a.

WWW.SECO.COM

AREZZO



Qseven

MILAN



COM Express

FRANKFURT



SBC

BOSTON



SMARC



ETX / XTX

BANGALORE



Carrier board

TAIPEI



Services & Solutions

## 1 Introduction

---

The System Management BIOS (SMBIOS) specification defines data structures (and access methods) that can be used to read information stored in the BIOS of a computer.

By parsing this table it is possible to access information about the system and its capabilities. AptioV DmiEdit is a tool that allows to read the SMBIOS table and edit their contents; in particular is useful for editing the System Information table that contains data like the manufacturer of the system, the product name and the version.

The utility is distributed in the following versions:

**AmiDeWin32.exe** For Windows 32-bit

**AmiDeWin64.exe** For Windows 64-bit

**AmiDeLn timer32** For Linux 32-bit

**AmiDeLn timer64** For Linux 64-bit

**NOTE:** Please be aware that using Linux or Windows version of the utility, this must be run with root/admin privileges.

WWW.SECO.COM

AREZZO



Qseven

MILAN



COM Express

FRANKFURT



SBC

BOSTON



ETX / XTX

BANGALORE



Carrier board

TAIPEI



Services & Solutions

## 2 SMBIOS System Information table customization (Linux)

The following operations are used for customizing the System Information table (Type1) of the SMBIOS with custom strings and values:

- 1) Copy the DmiEdit tool in a folder inside the disk.
- 2) Open a Linux Terminal and move to the folder where the DmiEdit utility is placed
- 3) Make the program executable launching the following command:  
**chmod +x AmiDeLnx32** for 32-bit versions of Linux  
**chmod +x AmiDeLnx64** for 64-bit versions of Linux
- 4) Launch the command for SMBIOS customization (must have root/administrator privileges)  
**./AmiDeLnx32 [command] [value]** for 32-bit versions of Linux  
**./AmiDeLnx64 [command] [value]** for 64-bit versions of Linux

Where the fields [command] [value] are used for selecting which item to change and the value to insert for replacing the default one

[command]	[value]	Action
<b>/SM</b>	["String"]	Read/Write System manufacture in Type 1
<b>/SP</b>	["String"]	Read/Write System product in Type 1
<b>/SV</b>	["String"]	Read/Write System version in Type 1
<b>/SS</b>	["String"]	Read/Write System Serial number in Type 1
<b>/SU</b>	[16 Bytes]	Read/Write System UUID in Type 1
<b>/SK</b>	["String"]	Read/Write System SKU number in Type 1
<b>/SF</b>	["String"]	Read/Write System family in Type 1

NOTE: field [value] is optional, if not specified the utility will display the current corresponding value inserted in the SMBIOS without editing.

WWW.SECO.COM

AREZZO



Qseven

MILAN



COM Express

FRANKFURT



SBC



SMARC

BOSTON



ETX / XTX

BANGALORE



Carrier board



Services & Solutions

TAIPEI

```
root@ubuntu:/home/ubuntu/Downloads/Dmi_Edit# ./AmiDeLnx64 /SS
+-----+
|          AMIDELNX64 Utility for SecovS.20          |
|          Copyright (c)2017 American Megatrends Inc. All Rights Reserved.          |
+-----+

Initializing the SMBIOS interface. Please wait a moment.....
      Name      R/W  Status  Information
+-----+
(/SS)System Serial number  R   Done  "Default string"
root@ubuntu:/home/ubuntu/Downloads/Dmi_Edit# ./AmiDeLnx64 /SS "CustomSerial"
+-----+
|          AMIDELNX64 Utility for SecovS.20          |
|          Copyright (c)2017 American Megatrends Inc. All Rights Reserved.          |
+-----+

Initializing the SMBIOS interface. Please wait a moment.....
      Name      R/W  Status  Information
+-----+
(/SS)System Serial number  W   Done  "CustomSerial"
root@ubuntu:/home/ubuntu/Downloads/Dmi_Edit#
```

### 3 SMBIOS System Information table customization (Windows)

The following operations are used for customizing the System Information table (Type1) of the SMBIOS with custom strings and values:

- 1) Copy the DmiEdit tool in a folder inside the disk.
- 2) Run the "cmd" shell with Administrator privileges
- 3) Move to the folder where the DmiEdit utility is placed
- 4) Launch the command for SMBIOS customization

**AmiDeWin32 [command] [value]** for 32-bit versions of Windows

**AmiDeWin64 [command] [value]** for 64-bit versions of Windows

Where the fields [command] [value] are used for selecting which item to change and the value to insert for replacing the default one

[command]	[value]	Action
<b>/SM</b>	["String"]	Read/Write System manufacture in Type 1
<b>/SP</b>	["String"]	Read/Write System product in Type 1
<b>/SV</b>	["String"]	Read/Write System version in Type 1
<b>/SS</b>	["String"]	Read/Write System Serial number in Type 1
<b>/SU</b>	[16 Bytes]	Read/Write System UUID in Type 1
<b>/SK</b>	["String"]	Read/Write System SKU number in Type 1
<b>/SF</b>	["String"]	Read/Write System family in Type 1

NOTE: field [value] is optional, if not specified the utility will display the current corresponding value inserted in the SMBIOS without editing.

WWW.SECO.COM

AREZZO



Qseven

MILAN



COM Express

FRANKFURT



SBC



SMARC



ETX / XTX

BOSTON



Carrier board

BANGALORE



Services & Solutions

TAIPEI

```
C:\Users\secouser\Desktop\DMI>AmiDeWin64.exe /SM
+-----+
|          AMIDEWIN64 Utility Seco v.1.0v5.20          |
| Copyright (C)2017 American Megatrends Inc. All Rights Reserved. |
+-----+

Initializing the SMBIOS interface. Please wait a moment.....
      Name           R/W   Status   Information
+-----+
(/SM)System manufacture   R     Done    "Seco"

C:\Users\secouser\Desktop\DMI>AmiDeWin64.exe /SM "ManufacturerString"
+-----+
|          AMIDEWIN64 Utility Seco v.1.0v5.20          |
| Copyright (C)2017 American Megatrends Inc. All Rights Reserved. |
+-----+

Initializing the SMBIOS interface. Please wait a moment.....
      Name           R/W   Status   Information
+-----+
(/SM)System manufacture   W     Done    "ManufacturerString"

C:\Users\secouser\Desktop\DMI>
```

## 4 Known issues

We need to report a tool malfunction, the item "SM" (Read/Write System manufacture in Type 1) can be used to write a new value only one time.

An error will be displayed from the second attempt onwards.

This issue affects all the operating systems we have tested (Windows and Linux).

```
Administrator: Command Prompt
C:\Users\seco\Desktop\RomUtils\DmiEdit\DmiEditWin64\AmiDeWin64\AmiDeWin64>AMIDEWIN64.EXE /SM "SECO"
+-----+
|          AMIDEWIN64 Utility v5.26.0102          |
| Copyright (c) 1985-2019, American Megatrends International LLC. |
| All rights reserved. Subject to AMI licensing agreement. |
+-----+

Initializing the SMBIOS interface. Please wait a moment.....
ERR_DMI_READ_ONLY
02 - Error: DMI Data write failed.

C:\Users\seco\Desktop\RomUtils\DmiEdit\DmiEditWin64\AmiDeWin64\AmiDeWin64>
```

If you need help with this issue please feel free to contact us via our ticket service.

Ticket service : <https://www.seco.com/it/support/ticketing.html?SID=v46sos5rotgos2k26qjeu9l5j0>

WWW.SECO.COM

AREZZO



Qseven

MILAN



COM Express

FRANKFURT



SBC



SMARC



ETX / XTX

BOSTON



Carrier board

BANGALORE



Services & Solutions

TAIPEI