



Grandstream Networks, Inc.

**XML Configuration File Generator User Guide
(For Linux Users)**

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INTRODUCTION

All Grandstream SIP products support being provisioned by an XML configuration file which consists of <Pxxxx > tags (xxxx is a number that can be 0-99999) known as P values. Every P value is mapped to a configurable option of the device. By setting/changing the values of those P values, we can provision the device with zero touch. This XML provisioning mechanism is beneficial to every GS customer since the very beginning. To learn more about Grandstream SIP device provisioning, please refer [GS SIP Device Provisioning Guide](#).

Since there are thousands of P values for each product, and all required configurations come with a default value, usually there is no need to set all the P values but only the ones to be customized in real usage. Also, some users, especially resellers and VoIP providers, need to deploy a lot of devices by using the XML files that only have different SIP credentials while all other settings such as network settings, call feature settings, audio settings and etc., which are the same parameters. Creating XML file one by one for each device is very time consuming. This XML configuration file generator is designed to save time for these customers in this situation.

The principle of this software is using a TXT/XML format file to store all these “same” values of P values, and using a CSV format file to store the “various” value of P values, and generate a batch of XML configuration files from the two input files, with most identical settings having only a few fields different.

This user guide introduces how to use the Linux-based XML configuration file generator to create XML configuration files.



CHANGE LOG

Version 1.11

Added support for MAC address starting with EC74D7.

Version 1.10

Supported keeping all blank space in the value in TXT templates.

Version 1.9

Added support for MAC address starting with C074AD.



FILES IN THE PACKAGE

The package includes three files: XML Configuration File Generator, Configuration File Example (TXT file), and CSV File. Below are the descriptions for each file.

Files Description

XML Configuration File Generator	XML Configuration File Generator can convert Configuration Template TXT file into XML file under the Linux OS system.
Configuration File Example (TXT File)	An example of Configuration Template with some P-values which could be used for getting the XML file.
CSV File	A list includes MAC address, SIP User ID, Authentication ID, and Authentication Password, all of these will be added into the converted XML configuration file.



USING THE XML CONFIGURATION GENERATOR (FOR LINUX)

Please follow the steps below to use the XML configuration generator for Linux environment.

1. Save XML Configuration File Generator, the configuration file example, and the CSV file in the same directory on Linux OS system.
2. Open configuration file example, fill the pre-provisioned P-values such as Account Name, SIP Server, SIP User ID, and SIP Authenticate Password into the TXT file. Moreover, users also can configure other more options manually before converting. As the figure shows below.

```
#####
## Example P values                                     ##
#####
# Account Active. 0 - No, 1 - Yes. Default value is 0
# Number: 0, 1
P271 = 1

# Account Name
P270 = Grandstream

# SIP Server
P47 = grandstream.com

# SIP User ID
P35 =

# SIP Authenticate ID
P36 =

# SIP Authenticate Password
P34 =

# Name (Display Name, e.g., John Doe)
P3 = Grandstream Network

#####
## Example P values End                               ##
#####
```

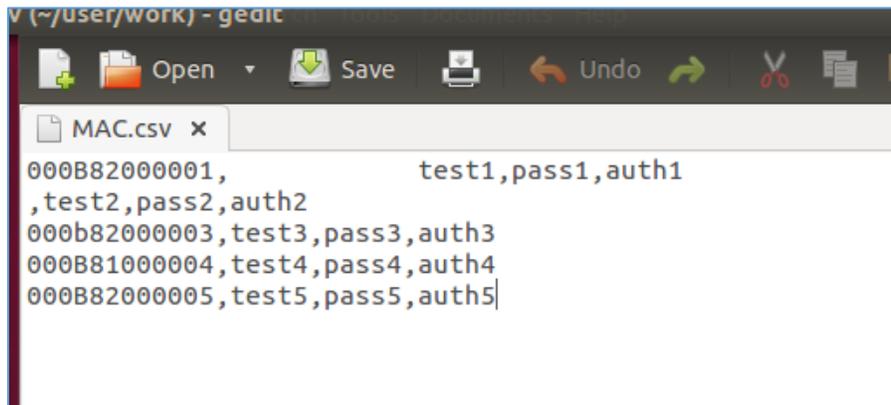
Figure 1: Filling information to the configuration file example

Note:

- a) To read User ID, Password, Auth ID in the MAC.csv, please add the corresponding P value of User ID in this TXT template to let the script know which the device is. The P value of User ID is different in different devices:
 - i. In DP715, GXW40xx, GXW42XX, HT704, the corresponding P values are P4060.
 - ii. In GXW410X, the corresponding P values are P3060.
 - iii. In all the other devices, the corresponding P values are P35.



- a. The “Space” in MAC.csv file will be ignored by Configuration File Converter.
- b. If the MAC address in the MAC.csv file is not valid, the corresponding XML configuration file will not be generated.
- c. The config tool supports MAC addresses “000B82xxxxxx” “C074ADxxxxxx” and “EC74D7xxxxxx” in the MAC CSV file, all the MAC addresses without this specified starting string will be regarded as invalid. As the figure shows below:



```

000B82000001,          test1,pass1,auth1
, test2,pass2,auth2
000b82000003, test3,pass3,auth3
000B81000004, test4,pass4,auth4
000B82000005, test5,pass5,auth5
  
```

Figure 5: Another CSV file example

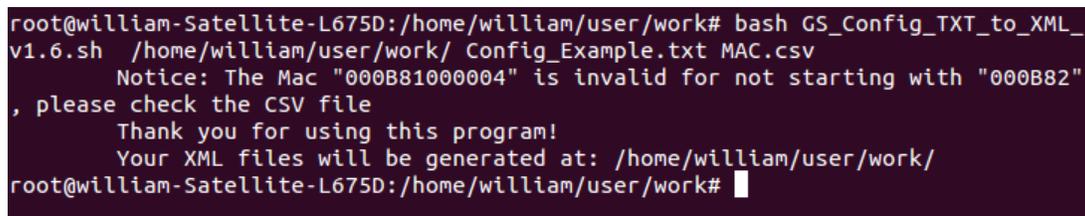
The 1st, 3rd, and 5th MAC addresses with the configurations will be converted to XML configuration file. The 2nd and 4th MAC addresses will not be considered as valid MAC addresses, so the corresponding XML configuration file will not be generated.

4. Run the converting command to generate the XML configuration files, the command format is:

`bash (converting tool name) (directory path) (config template) (MAC.csv)`

For example:

`bash GS_Config_TXT_to_XML_v1.5.sh /home/William/user/work/ Config_Example.txt MAC.csv`



```

root@william-Satellite-L675D:/home/william/user/work# bash GS_Config_TXT_to_XML_
v1.6.sh /home/william/user/work/ Config_Example.txt MAC.csv
Notice: The Mac "000B81000004" is invalid for not starting with "000B82"
, please check the CSV file
Thank you for using this program!
Your XML files will be generated at: /home/william/user/work/
root@william-Satellite-L675D:/home/william/user/work#
  
```

Figure 6: Execute the command to generate XML configuration files

5. Finally, the XML configuration files will be generated in the same directory with the P-values in the CSV file, users could use the generated XML files to provision a specified phone. As the figure shows below:



```

<?xml version="1.0" encoding="UTF-8" ?>
<!-- Grandstream XML Provisioning Configuration -->
<gs_provision version="1">
<mac>000B82000005</mac>
  <config version="1">
<!--#####
<!--###          Configuration Template Exmple for testing the converting tool
<!--#####
<!--#####-->
<!--## Example P values                                ##-->
<!--#####-->
<!--# Account Active. 0 - No, 1 - Yes. Default value is 0-->
<!--# Number: 0, 1-->
    <P271>1</P271>

<!--# Account Name-->
    <P270>Grandstream</P270>

<!--# SIP Server-->
    <P47>grandstream.com</P47>

<!--# SIP User ID-->
    <P35>test5</P35>

<!--# SIP Authenticate ID-->
    <P36>auth5</P36>

<!--# SIP Authenticate Password-->
    <P34>pass5</P34>

<!--# Name (Display Name, e.g., John Doe)-->
    <P3>GrandstreamNetwork</P3>

<!--#####-->
<!--## Example P values End                                ##-->
<!--#####-->

    </config>
  </gs_provision>

```

Figure 7: The XML file after the generating process

