Provisioning Procedure by using multiple configuration files

(KX-TGP600 series)

No. 01-002

Nov 12, 2015

Ver.1.0

Panasonic Corporation

Abstract about this document

This document describes about overview of provisioning process and show how to do provisioning by using multiple configuration files.

Revision history

Date	Version	Revision	Firmware version
Nov 12, 2015	Ver. 1.0	Initial Release	All versions

Outline

1) Basic Provisioning Flow including Pre Provisioning

2) Explanation about type and priority of configuration files

3) Configuration Procedure for Provisioning by using WEB interface.

Basic Provisioning Sequence with Pre Provisioning

STEP1 **DHCP**

When you connect TGP600 to the network, the TGP Gets TFTP server Address (Option66) from DHCP

STEP2 **Pre Provisioning**

TGP automatically download the Configuration file "**KX-TGP600CE.cfg**" from TFTP sever (Option 66)

Configuration file name "**KX-TGP600CE.cfg**" is specified by TGP's model name.

STEP3 **Provisioning**

After pre-provisioning, the TGP will automatically download the 1 to 3 types of Configuration files depends on the case.
-Master Configuration File
-Product Configuration File
-Standard Configuration File

This address can be specified by Pre Provisioning process or WEB interface or by each file.

TGP600   DHCP server   TFTP server (For Pre Provisioning)   File server (For Provisioning)

STEP1

STEP2

Standard Configuration file   STEP3

Product Configuration file

Master Configuration file

This document explains about "STEP 3" Provisioning
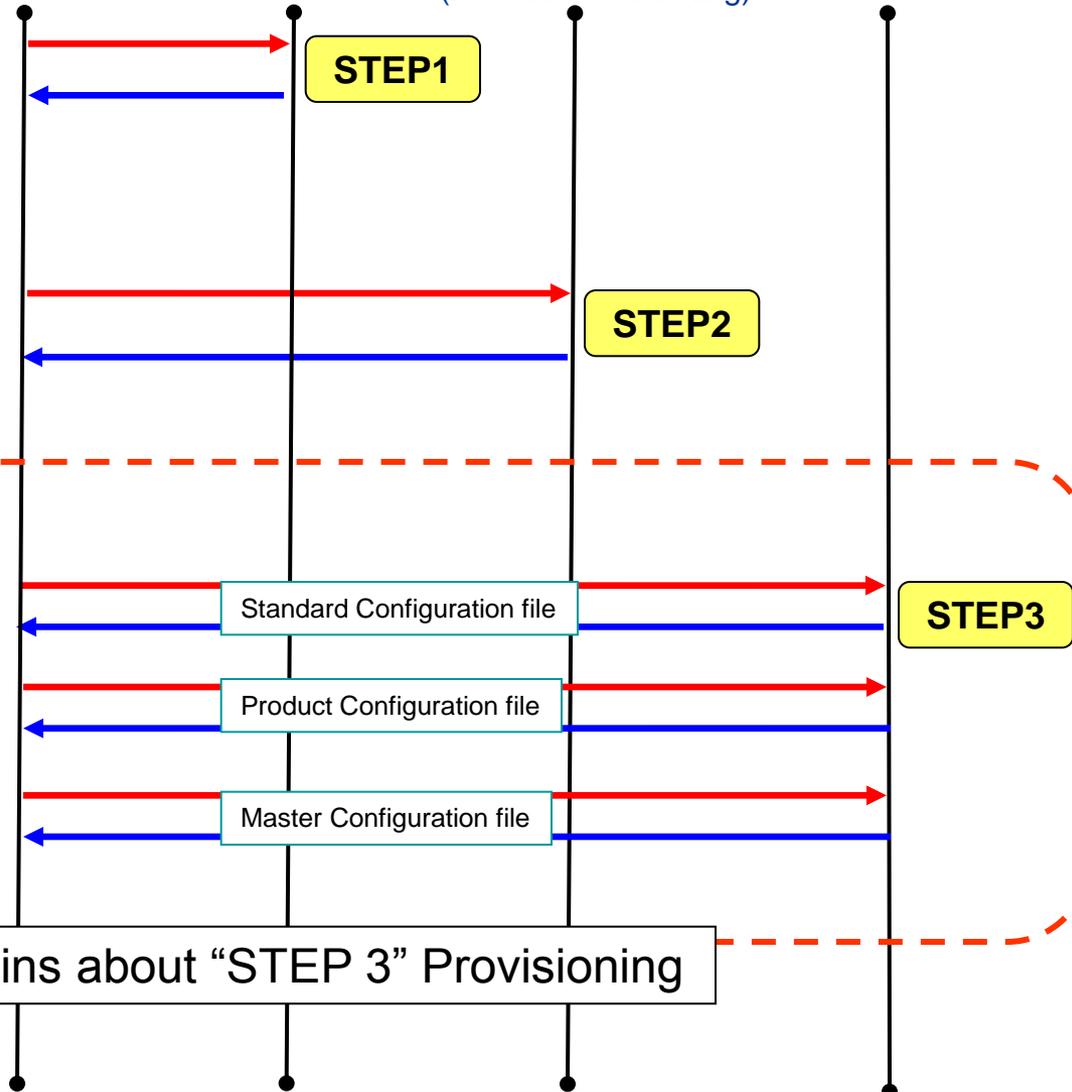
Various Pre Provisioning method

	Pre provisioning method	Description	Note
1	SIP PnP	The device sends SIP/SUBSCRIBE with ua-profile event in multicast and gets provisioning server address with SIP/NOTIFY.	
2	DHCP option	The device gets provisioning server address with DHCP option.	Support options IPv4: 66, 159, 160 IPv6: 17
3	Redirection Server	The device gets provisioning server address from redirection server with preinstalled redirection server address.	Signing to Terms & conditions is necessary when using redirection server.

Types of Configuration file for Provisioning

■ There are three types of Configuration file.

Type	Usage
Master configuration file	● Common setting for **all units** • SIP server address • IP addresses of the DNS • IP addresses of the NTP (Network Time Protocol) servers ● Example of the configuration file's URL: http://prov.example.com/Panasonic/ConfigCommon.cfg
Product configuration file	● Common setting for **same model units** Default setting of the privacy mode ● Used by all the units that have the same model name ●Example of the configuration file's URL: http://prov.example.com/Panasonic/Config{MODEL}.cfg
Standard configuration file **This is the file for detailed information.**	● Setting for **each unit** • Phone number • User ID • Password, etc. ● Example of the configuration file's URL: http://prov.example.com/Panasonic/Config{MAC}.cfg

Priority of Settings

■ **Setting priority**

- Configured by different configuration methods: provisioning, Web user interface programming, etc.
- Settings configured later override previous settings
- Settings by the phone user interface, Web, configuration file and TR-069 are highest priority

Priority

Low
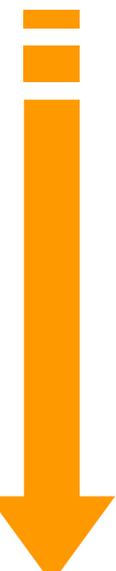
High

Setting Order	Priority	Setting Method
1	3	The **factory default** settings for the unit
2	2	**Pre-provisioning** with the configuration file
3	1	**Provisioning** with the configuration file (**standard > product > master**)
3	1	Parameter settings with **TR-069**
4	1	Settings configured from the **Web user** interface or the **phone user** Interface

*lower numbers indicate higher priority

How to set Provisioning Information from WEB

<u>Setting vary depend on how many configuration file you use.</u>

<u>Case 1</u> : Provisioning by only 1 configuration file (Standard Configuration File)
 If you use only 1 file, then you can put URL into "Standard" Configuration File in WEB setting.

<u>Case 2</u> : Provisioning by 2 files (Master and Standard / Product and Standard)
 If you use 2 configuration files, then you can put URL into "Master" or "Product" configuration file in WEB setting.
 And in configuration file, you need to specify the URL of "Standard" configuration file.

<u>Case 3</u> : Provisioning by 3 files (Master, Product and Standard)
 If you use 3 configuration files, then you can put URL into "Master" configuration file in WEB setting.
 And in configuration file, you need to specify the URL of "Product" and "Standard" configuration file in WEB setting.

From next page, detailed step is described

How to set Provisioning Information from WEB (Case1 : With 1 file)

Setting Steps

Step 1. Put standard configuration file with all parameters into provisioning server.

provisioning server

Standard Configuration File

Step 2. Enter Standard File URL into Provisioning Maintenance setting in WEB.

Panasonic

KX-TGP600

| Status | Network | System | VoIP | Telephone | **Maintenance** |

Web Port Close

Provisioning Maintenance

Maintenance
Provisioning Maintenance
Firmware Maintenance
Upgrade Firmware
Import Wallpaper
Export Logging File
Reset to Defaults
Restart

Provisioning Maintenance

Standard File URL	tftp://192.168.0.10/Config(MAC).cfg
Product File URL	
Master File URL	
Cyclic Auto Resync	○ Yes ● No
Resync Interval	10080 minutes [1-40320]
Time Resync	[00:00-23:59, NULL: Disable]
Header Value for Resync Event	check-sync

Save   Cancel

Step 3. Phone get Standard File from provisioning server from address input into WEB setting.

TGP600

provisioning server

Get Standard Configuration File

Standard Configuration File

How to set Provisioning Information from WEB (Case1 : With 1 file)

Step 1. Please put configuration file (Standard File) under server.

Config{MAC}.cfg : for each unit setting file like account name, password and SIP Server address.

**{MAC} indicate actual MAC address of phone

Example of "Config{MAC}.cfg" for Standard file.

```
# Panasonic SIP Phone Standard Format File # DO NOT CHANGE THIS LINE!
########################################################
# This is a sample configuration file. #
# Most of the parameters below are just default values... #
########################################################
## Provisioning Settings
CFG_STANDARD_FILE_PATH="http://192.168.0.10/Config{MAC}.cfg"
CFG_PRODUCT_FILE_PATH=
CFG_MASTER_FILE_PATH=

#--------------------------------------------------------#
# Setting for line 1 #
#--------------------------------------------------------#
## SIP Settings
PHONE_NUMBER_1="111111"
SIP_URI_1=""
SIP_RGSTR_ADDR_1=«registrar.example.com"
SIP_RGSTR_PORT_1="5060"
SIP_PRXY_ADDR_1=«proxy.example.com "
SIP_PRXY_PORT_1="5060"
SIP_PRSNC_ADDR_1=«presence.example.com "
SIP_PRSNC_PORT_1="5060"
SIP_OUTPROXY_ADDR_1=""
SIP_OUTPROXY_PORT_1="5060"
SIP_SVCDOMAIN_1=""
SIP_AUTHID_1="abc"
SIP_PASS_1="abc"
SIP_SRC_PORT_1="5060"
```

Please refer administrator guide for more detailed about each parameter

How to set Provisioning Information from WEB (Case1 : With 1 file)

Step 2. After you log in to WEB setting menu by administrator account, Please go to [Maintenance] -> [Provisioning Maintenance] menu.
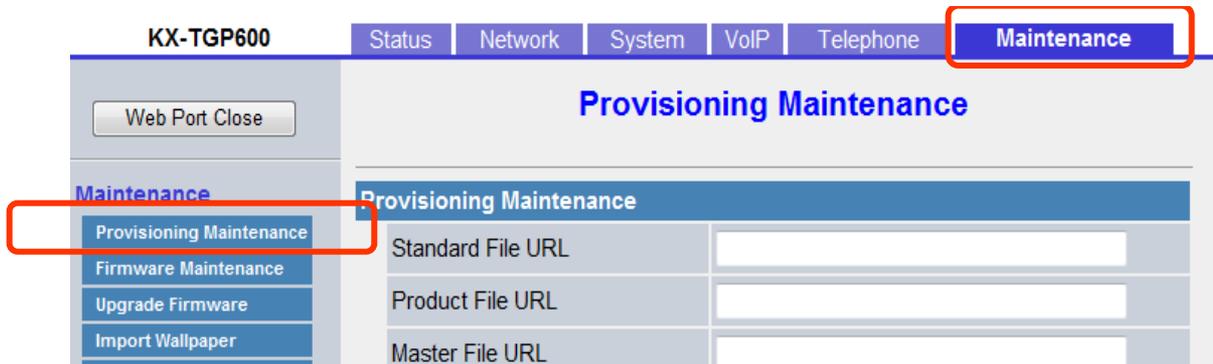
Please input file path of configuration file for "Standard" where you put.
And press [save] button.
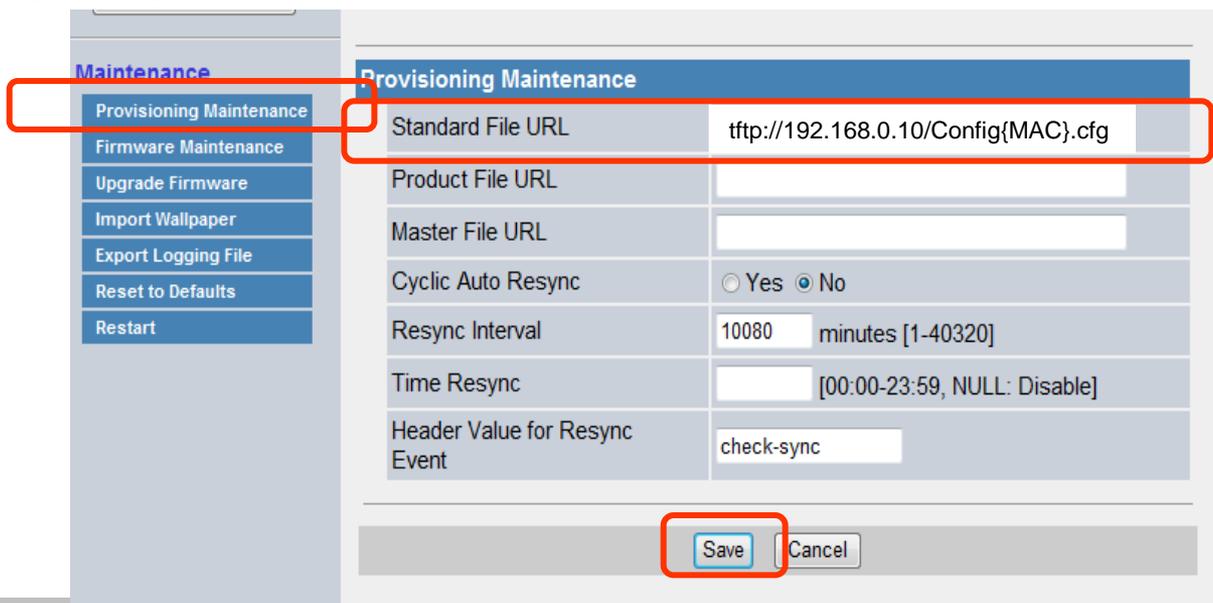
How to set Provisioning Information from WEB (Case2 : With 2 files)

Setting Steps

Step 1. Put Master configuration file with Standard File URL and Standard configuration file with each unit parameters into provisioning server.

provisioning server

Master Configuration File

Standard Configuration File

Step 2. Enter Master File URL into Provisioning Maintenance setting in WEB.

Panasonic

KX-TGP600 | Status | Network | System | VoIP | Telephone | **Maintenance**

Web Port Close

Provisioning Maintenance

Maintenance
Provisioning Maintenance
Firmware Maintenance
Upgrade Firmware
Import Wallpaper
Export Logging File
Reset to Defaults
Restart

Provisioning Maintenance	
Standard File URL	
Product File URL	
Master File URL	tftp://192.168.0.10/ConfigCommon.cfg
Cyclic Auto Resync	○ Yes ● No
Resync Interval	10080 minutes [1-40320]
Time Resync	[00:00-23:59, NULL: Disable]
Header Value for Resync Event	check-sync

Save Cancel

Step 3. Phone get Master File from provisioning server from address input into WEB setting.
And then, Phone get Standard File from provisioning server by using address described in Master File.

TGP600   provisioning server

Get Master Configuration File

Master Configuration File

Get Standard Configuration File

Standard Configuration File
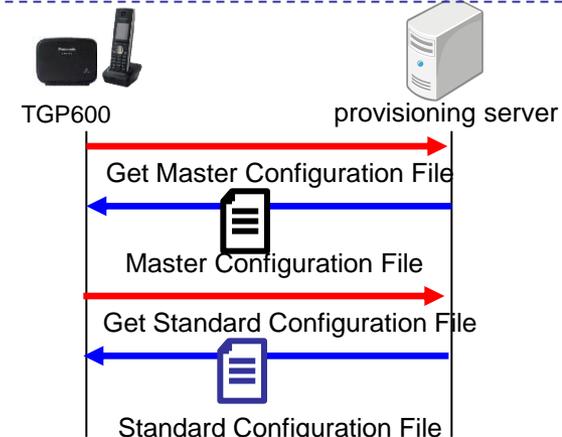
How to set Provisioning Information from WEB (Case2 : With 2 files)

Step 1. Please put configuration file under server.

ConfigCommon.cfg : for common setting across all phones, like SIP server address.
Config{MAC}.cfg : for each unit setting file like account name, password.
**{MAC} indicate actual MAC address of phone

Example of "ConfigCommon.cfg" for Master file.

```
# Panasonic SIP Phone Standard Format File # DO NOT CHANGE THIS LINE!
## Provisioning Settings
CFG_STANDARD_FILE_PATH="tftp://192.168.0.10/Config{MAC}.cfg"

## SIP Settings
SIP_PRXY_ADDR_1="192.168.0.10"
SIP_RGSTR_ADDR_1="192.168.0.10"
SIP_SVCDOMAIN_1="192.168.0.10"
```

There is a file path for Standard file. So that phone can know the address of Standard file after download Master file.

How to set Provisioning Information from WEB (Case2 : With 2 files)

Step 2. After you log in to WEB setting menu by administrator account, Please go to [Maintenance] -> [Provisioning Maintenance] menu.
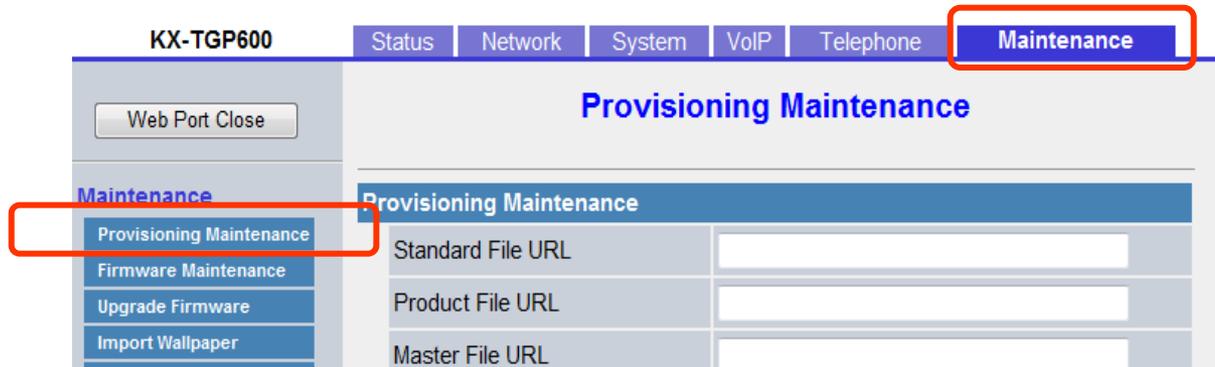
Please input file path of configuration for "Master" file where you put.
And press [save] button.
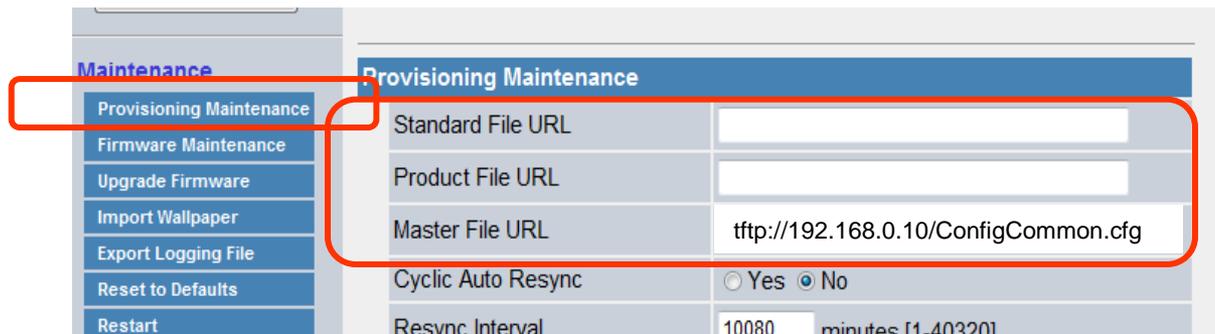
Note : you don't need to input Standard File URL. Standard File URL is obtained from Master File as described in previous page.

How to set Provisioning Information from WEB (Case3 : With 3 files)

Setting Steps

Step 1. Put Master configuration file with Standard/Product File URL and Standard configuration file with each unit parameters into provisioning server.

provisioning server

Master Configuration File

ProductConfiguration File

Standard Configuration File

Step 2. Enter Master File URL into Provisioning Maintenance setting in WEB.

Panasonic

KX-TGP600 | Status | Network | System | VoIP | Telephone | **Maintenance**

Web Port Close | **Provisioning Maintenance**

Maintenance
Provisioning Maintenance
Firmware Maintenance
Upgrade Firmware
Import Wallpaper
Export Logging File
Reset to Defaults
Restart

Provisioning Maintenance

Standard File URL	
Product File URL	
Master File URL	tftp://192.168.0.10/ConfigCommon.cfg
Cyclic Auto Resync	○ Yes ● No
Resync Interval	10080 minutes [1-40320]
Time Resync	[00:00-23:59, NULL: Disable]
Header Value for Resync Event	check-sync

Save Cancel
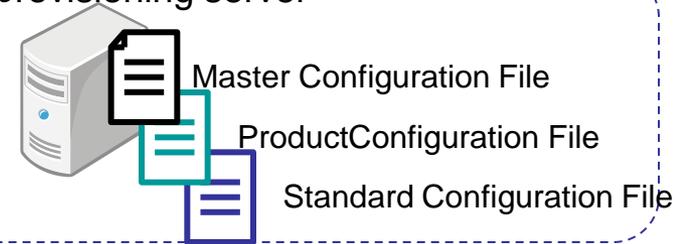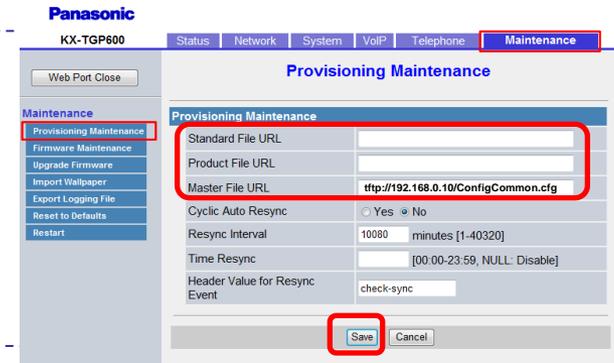
Step 3. Phone get Master File from provisioning server from address input into WEB setting. And then, Phone get Product / Standard File from provisioning server by using address described in Master File.

TGP600

provisioning server

Get Master Configuration File

Master Configuration File

Get Standard Configuration File

Standard Configuration File

Get Product Configuration File

Product Configuration File
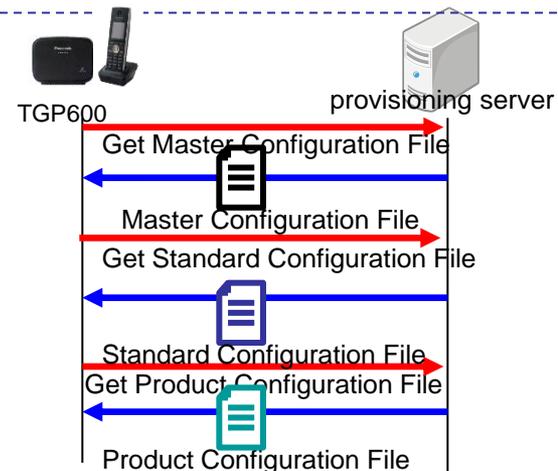
How to set Provisioning Information from WEB (Case3 : With 3 files)

Step 1. Please put configuration file under server.

Config0080F0C56F69.cfg
Config0080F0C5728F.cfg
ConfigCommon.cfg
ConfigKX-TGP600CE.cfg
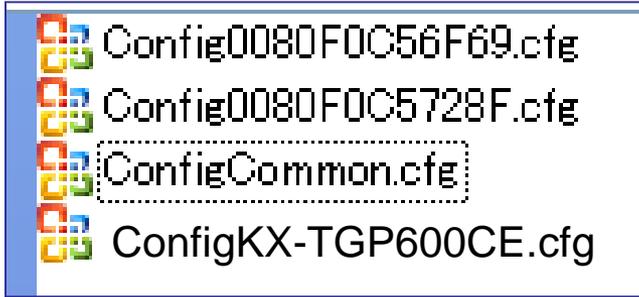
ConfigCommon.cfg : for common setting across all phones, like SIP server address.
Config{MODEL}.cfg for each model setting.
**{MODEL} indicate the model name of phone
Config{MAC}.cfg : for each unit setting file like account name, password.
**{MAC} indicate actual MAC address of phone

Example of "ConfigCommon.cfg" for Master file.

```
# Panasonic SIP Phone Standard Format File # DO NOT CHANGE THIS LINE!
## Provisioning Settings
PROVISION_ENABLE="Y"
CFG_PRODUCT_FILE_PATH="tftp://192.168.0.10/Config{MODEL}.cfg"
CFG_STANDARD_FILE_PATH="tftp://192.168.0.10/Config{MAC}.cfg"

## SIP Settings
SIP_PRXY_ADDR_1="192.168.0.10"
SIP_RGSTR_ADDR_1="192.168.0.10"
SIP_SVCDOMAIN_1="192.168.0.10"
```

There is a file path for Standard file and Product file. So that phone can know the address of Standard file and Product file after download Master file.

How to set Provisioning Information from WEB (Case3 : With 3 files)

Step 2. After you log in to WEB setting menu by administrator account, Please go to [Maintenance] -> [Provisioning Maintenance] menu.

Please input file path of configuration for "Master" file where you put .
And press [save] button.

Note : you don't need to input Standard / Product File URL. Standard / Product File URL are obtained from Master File as described in previous page.

How to access Web user interface

1. Confirm the IP address of KX-TGP600.
   1-1 : Handset [System Settings] →[Status] →[IPv4 Settings(IPv6 Settings)]
   1-2 : Confirm the IP address displayed on LCD.

2. Embedded Web.
   2-1 : Handset [Setting Handset] → [Other Option] →[Embedded Web]
   2-2 : Select (On) → [SAVE] → [OFF].

3. Access the Web user interface.
   3-1 : Open your Web browser.
   3-2 : Enter your KX-TGP600 URL to Web browser
          (http://your KX-TGP600 IP address) .
   3-3 : Enter Authentication ID and password and click "OK".
          (Default :ID="admin", password="adminpass")