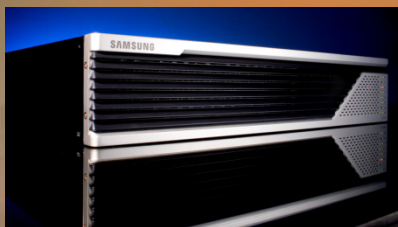


# System Installation



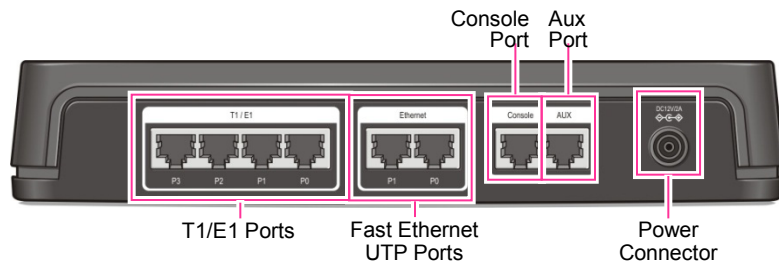
# Contents

- **Initializing System**
- **S/W Image & DB Management**
- **Enabling iBG-DM**
- **License Key Installation**

# System Initialization

# Cable Connection

- Connect a console cable and power on.



**Tera Term: Serial port setup**

Port: COM1

Baud rate: 9600

Data: 8 bit

Parity: none

Stop: 1 bit

Flow control: none

Transmit delay

0 msec/char 0 msec/line

OK Cancel Help

# Set the boot parameters



## POST

- Setting & changing the boot parameter

Diagram illustrating the process of setting boot parameters using a Tera Term VT terminal window.

The terminal window displays the following information:

**Boot version** (indicated by a yellow box and arrow): 1.1.0 (NORMAL Boot)

**iBG Model Name** (indicated by a yellow box and arrow): iBG1000\_Advanced\_1.1.3.0.2

**Command 'c'** (indicated by a yellow box and arrow): The user enters 'c' to set the boot parameter.

The terminal output shows the following configuration details:

```
Copyright (c) 2008 Samsung Electronics, Co.  
MODEL NAME      : Ubigate iBG1000  
PROCESSOR       : Freescale MPC8347EA  
SYSTEM MEMORY   : 512M  
H/W CPLD ver    : 7.0  
Boot version    : 1.1.0 (NORMAL Boot)  
Creation date   : Jun  4 2008, 16:34:35  
                By : build  
NORMAL Bt ver   : 1.1.0  
GOLDEN Bt ver   : 1.1.0  
GOLD Base ver   : 1.0.0  
  
Press any key to stop auto-boot...  
3  
[BOOT]:  
[BOOT]:  
[BOOT]:  
[BOOT]:  
[BOOT]: c  
Boot dev [ftp,active-ftp,cf0]: cf0  
Boot file name      : iBG1000_Advanced_1.1.3.0.2  
Server name         : host  
Server IP address   : 192.168.1.10  
My IP address       : 192.168.1.11  
My subnet mask      : 255.255.255.0  
Gateway IP address  : 192.168.1.1  
User name           : test  
Password            : good  
Checksum enable     [0:Check ,1:Skip ]: 0  
Show header enable  [0:Disalbe,1:Enable]: 0  
Save bootrom image  [0:AutoUpdate,1:NormalBTupd,3:NoUpd]: 0  
Golden boot autosync [0: disable, 1: enable]: 0  
Save Diag Flag      [0:Normal mode,1:Diag mode]: 0  
  
[BOOT]:  
[BOOT]:
```



# Set the boot parameters



- Displaying the boot parameter

Command 'p'

```
COM1 - Tera Term VT
File Edit Setup Control Window Help
[BOOT]:
[BOOT]:
[BOOT]:
[BOOT]:
[BOOT]: p
[00] Boot dev           : cf0
[01] Boot file name     : iBG1000_Advanced_1.1.3.0.2
[02] Server name       : host
[03] Server IP address  : 192.168.1.10
[04] My IP address      : 192.168.1.11
[05] My subnet mask     : 255.255.255.0
[06] Gateway IP address : 192.168.1.1
[07] User name          : test
[08] Password           : good
[09] Checksum enable    [0:Check ,1:Skip ]: 0
[10] Show header enable [0:Disable,1:Enable]: 0
[11] Save bootrom image [0:AutoUpdate,1:NormalBTupd,3:NoUpd]: 0
[12] Golden boot autosync [0:Disable, 1:Enable]: 0
[13] Save Diag Flag     [0:Normal mode,1:Diag mode]: 0
[BOOT]:
```

# Set the boot parameters



- Boot up the system

Vendor & system  
informations

```
COM1 - Tera Term VT
File Edit Setup Control Window Help
[BOOT]: @
[BOOTM] Loading package...
  Loading [100]
[BOOTM] System image loading done
  Loading [100]
[BOOTM] Bootrom image loading done
[BOOTM] Checksum validation is checked.[OK]
[BOOTM] Package validation pass
[BOOTM] Bootrom checksum validation is checked.[OK]
[BOOTM] Checking boot image for auto update...
[BOOTM] Done : No need to update Normal boot image
[BOOTM] System image validation pass
[BOOTM] System image is decompressing
[BOOTM] System image loading on the start address
[ATA] Starting ATA driver(S) 1.5

=====
SAMSUNG UBIGATE SNOS
=====
SAMSUNG ELECTRONICS CO., LTD.
Suwon-si, Gyeonggi-do 442-600, Korea
Copyright (c) 2008,2009
Samsung SNOS Software, iBG1000 Software

[SVS] Target Name: Ubigate
[SVS] Streams initialization Done
Freescale MPC8347EA processor, 512 MB memory
->
[INIT] Performing Level-1 Init. SUCCESS
[STDBG] tDbgTask (0x1ffb548) is spawned ...
[CPUMON] tCpUMon (0x1ffb8c28) is spawned ...
[SYSLOG] tSyslogTask (0x1ffb4b98) is spawned ...
[EVMGR] tEvMgr (0x1ffa8638) is spawned ...
[INIT] Performing Level-2 Init. SUCCESS
[COMMBUF] Buffer Mgmt: Allocating default # of buffers
[COMMBUF] totalBuf = 0x03bc0      tBufs = 0x1280  xtraBufs 0x0
[COMMBUF] Calculated Total-Buffers = 15296
[COMMBUF] SYS_COMM_BUF_ALLOC_MAX= 35202
[COMMBUF] Allocating 1952 size 15296 packet buffers
```

# Set the boot parameters



## ● Help facilities

```
COM1 - Tera Term VT
File Edit Setup Control Window Help

[BOOT]: h
?          - print this list
@          - boot (load and go)
p          - print boot params
c          - change boot params
v          - print boot logo with version
o          - show bootrom header information
L          - show file list in Flash
F          - format the Flash
A          - show simple PCI device scan result
T          - dram test after cold reset
r          - show current boot image(Golden/Normal)
w          - print status of watchdog timer
D          - cold reset
u          - change User ID and PW default set
U          - reset to factory
W          - Set Watch Dog Time.
J          - Change Vender Information.
t          - Run HDLC Diagnostic

Available boot devices:
'ftp','active-ftp','cf0'
Checksum enable:
0 - check image checksum
1 - skip checking image checksum
Show header enable:
0 - disable showing image header contents
1 - enable showing image header contents
Save bootrom image:
0 - autoupdate NORMAL boot area rom image by checking version
1 - save boot image on the NORMAL flash area
3 - No bootrom update
Boot image redundancy:
NORMAL boot image - Default boot image saved on the NORMAL boot area
GOLDEN boot image - Backup boot image saved on the GOLDEN boot area
                    GOLDEN image area should not be corrupted

[BOOT]:
[BOOT]:
```



# Basic Commands



## ● Login

- Username: samsung
- Password: samsung

## ● System Information CLI

- show version
- show system configuration
- show system memory
- file ls
- show running-config
- show boot\_params
- show user\_accounts

## ● CLI Main Modes

- Show : /#
- Configure (configure terminal) : /configure#
- Debug : /debug#
- Test : /test#

Ex) show version

```
COM1 - Tera Term VT
File Edit Setup Control Window Help

Ubigate#
Ubigate# show version
  Kernel: WIND version 2.6.
    Boot: 1.1.0 (NORMAL Boot)
  Model: iBG1000 System
  System: R2 1.1.3
  Created: Sep 25 2008, 06:01:53
  Bld Path: "/home1/build/release/ucrel_1.1.3.0/src"
    By: build
  Package type: Security SNOS
  Including features: Basic + Security
  NorBoot: 1.1.0
  GolBoot: 1.1.0
  Checking System Boot Version: OK
  NorBoot(Pkg) : 1.1.0
  GolBootBase(Pkg): 1.0.0

Chassis info:

Slot/SubSlot  Card-Type  Status  FPGA-Rev  CPLD-Rev
-----
0/-          CBU       NORMAL  N/A       0x07

Ubigate#
```

## ● Reset to factory

- configure/system#reset-to-factory

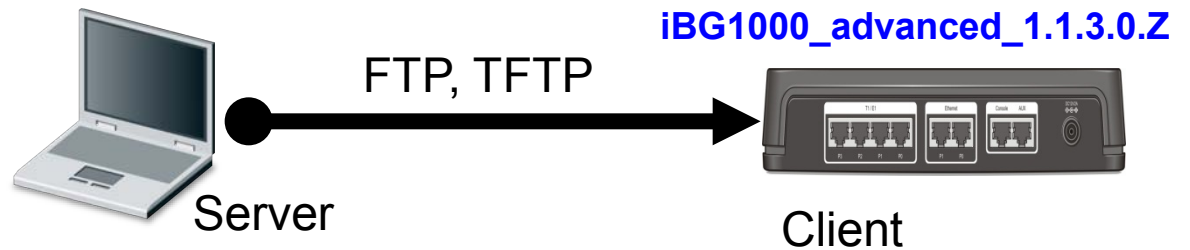
## ● Configure Ethernet 0/0

- ip address 10.10.10.1/24
- show ip interfaces brief
- show interface ethernet 0/0
- ping 10.10.10.10
- ping 10.10.10.10 ? => Lots of options.
- save local
- show ip route

# S/W Image & DB Management

# Basic Concept (1/2)

## ● Image Upgrade



## ● Image Backup



## ● Image Restore



## ● Configuration DB Backup



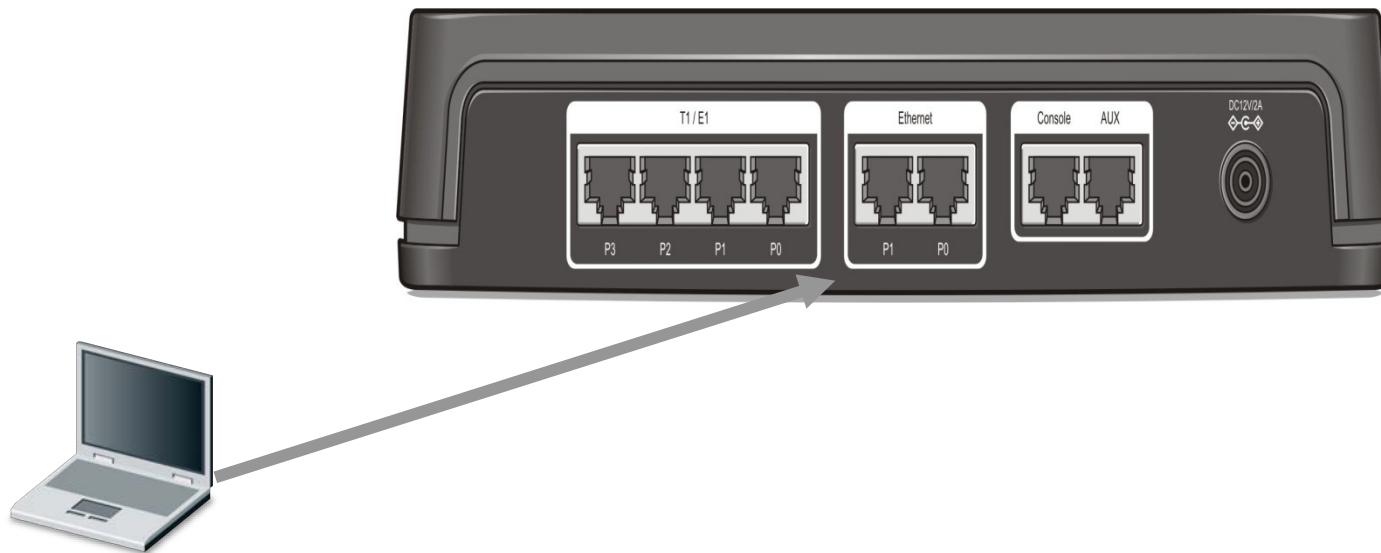
## ● Configuration DB Restore



# SNOS Image Upgrade (1/6)



- Connect ftp server and iBG1000





# SNOS Image Upgrade (2/6)



## ● Set IP address of the Ethernet 0/0

```
Ubigate# configure terminal
Ubigate/configure# *Feb 07 01:30:22: #PARSER-warning: samsung entered configuration mode
ON MON FEB 07 01:30:22 2000 FROM SERIAL

Ubigate/configure# interface ethernet 0/0
Configuring existing Ethernet interface
Ubigate/configure/interface/ethernet (0/0)# ip address 165.213.164.20/24
Ubigate/configure/interface/ethernet (0/0)# end
Ubigate# *Feb 07 01:30:44: #PARSER-warning: samsung exit configuration mode ON MON FEB
07 01:30:44 2000 FROM SERIAL

Ubigate# show ip interfaces brief
```

Interface	Type	IP-Address/Mask	Status
ethernet0/0	ETHERNET (802.3)	165.213.164.20/24	Up

```
Ubigate#
```

# SNOS Image Upgrade (3/6)

- Enable External Ftp Server (165.213.164.27)
- Copy SNOS S/W to the CF (Compact Flash)

```
Ubigate# file
Ubigate/file# download 165.213.164.27 iBG1000_Advanced_1.1.3.0.Z
/cf0/iBG1000_Advanced_1.1.3.0.Z type ftp
Handling FTP request !
Continue with the download ? (y/n) : y

WARNING :
Do not reboot during this process
login: test
password:
Transfer complete:          17519446 bytes [100%]

Download successful
Ubigate/file#
```

# SNOS Image Upgrade (4/6)



## ● Check the new image file in CF

```
Ubigate/file# ls
WARNING :
Do not reboot during this process
CONTENTS OF /cf0:
```

size	date	time	name
16373854	MAR-23-2006	12:33:36	iBG1000_Advanced_1.1.3.0.Z
4110679	FEB-24-2006	06:04:56	ibgdm.jar
2582440	FEB-24-2006	06:10:44	mediation.jar
2381940	FEB-24-2006	06:11:56	jhclass.jar
3089709	FEB-24-2006	06:13:08	ibgdmres.jar
856764	FEB-24-2006	06:15:08	ibgdmhelp.jar
228	FEB-24-2006	06:15:58	ibg-dmapp.bat
179005	FEB-24-2006	06:27:06	ibgdmloader.jar
579	FEB-24-2006	06:27:44	ibgdmloader.xml
3328	FEB-24-2006	06:28:34	login.htm
899	FEB-24-2006	06:29:06	start.html
577	FEB-24-2006	06:29:42	errlogin.htm
175471	FEB-24-2006	06:30:18	login_bg.png
3452	FEB-24-2006	06:30:50	ok_normal.png
3386	FEB-24-2006	06:35:36	20.0.0.27.bak
3423	MAR-09-2006	04:08:54	165.213.164.27.bak
3736	MAR-14-2006	11:28:52	system.cfg
3437	FEB-27-2006	06:37:24	old165.213.164.27.bak
3736	MAR-09-2006	12:35:20	oldsystem.cfg
15749160	MAR-23-2006	03:51:08	iBG1000_Advanced_1.0.0.2.Z

```
Free space: 18,403,328 bytes
Capacity : 63,929,131 bytes
Ubigate/file#
```

## ● Change the boot parameter in CLI

```
Ubigate/configure# boot_params

WARNING : Configuration changes not yet saved!

Boot dev  [ftp,active-ftp,cf0]: cf0
Boot file name      : iBG1000_Advanced_1.0.0.2.Z iBG1000_Advanced_1.1.3.0.Z
Server name        : host
Server IP address   : 165.213.164.203 165.213.164.27
My IP address       : xxx 165.213.164.20
My subnet mask      : 255.255.255.0
Gateway IP address  : 165.213.164.1
User name           : test
Password            : good
Checksum enable     [0:Check ,1:Skip ]: 0
Show header enable  [0:Disalbe,1:Enable]: 0
Save bootrom image  [0:AutoUpdate,1:NormalBTupd,3:NoUpd]: 0
Golden boot autosync [0: disable, 1: enable]: 0
Save Diag Flag      [0:Normal mode,1:Diag mode]: 0

Boot parameters were changed.
Do you want to save the changed parameter(s) and reboot: (Y/N) ? : y
  *Feb 17,2000,23:55:29 #PLATFORM-emergency: User types reboot CLI command, the
system will be rebooted.

WARNING : Configuration changes was not saved yet!
Do you wish to save the current configuration? (y/n): y
```



## ● Check the new version

```
lab5# show version
```

```
Model: Ubigate iBG1000
```

```
SNOS: Advanced SNOS (Basic + Security/Voice)
```

```
Version: 1.3.1
```

```
Bld date: Jul 31 2009, 13:56:54 (by build)
```

```
Bld Path: "/home1/build/release/ucrel_1.3.1.0/src"
```

```
SNOS package boot version: 1.2.0 (golden boot base version: 1.0.1)
```

```
Flash normal boot version: 1.2.0 (golden boot version: 0.3.0)
```

```
Flash boot version check : Golden boot image must be upgraded to 1.0.1
```

```
Chassis info:
```

Slot/SubSlot	Card-Type	Status	FPGA-Rev	CPLD-Rev
0/-	CBU	NORMAL	N/A	0x07

```
Ubigate#
```

## ● SNOS Image Backup to remote FTP server

```
Ubigate/file# ls

WARNING :
Do not reboot during this process

CONTENTS OF /cf0:

   size          date       time       name
   -----
15629198    FEB-21-2006   09:29:10   iBG1000_Advanced_1.0.0.2.Z

Free space: 746,668,042 bytes
Capacity : 916,483,931 bytes
Ubigate/file# upload /cf0/iBG1000_Advanced_1.0.0.2.Z 165.213.164.27
iBG1000_Advanced_1.0.0.2.Z_backup ftp
Handling FTP request !
Continue with the upload ? (y/n) : y

WARNING :
Do not reboot during this process
login: test
password:
Transfer complete:          15629198 bytes [100%]

Upload successful
Ubigate/file#
```



# Saving and Restoring configuration

## ● Saving the configuration to local file system

### ● Saved as system.cfg

```
Ubigate# save local

WARNING :
Do not reboot during this process
Saving current system configuration.
Please wait... (up to a minute)
3944 bytes written
Done.
Ubigate#
```

### ● Saved as backup.cfg

```
Ubigate# save local file /cf0/backup.cfg

WARNING :
Do not reboot during this process
Saving current system configuration.
Please wait... (up to a minute)
3944 bytes written
Done.
Ubigate#
```

# Saving and Restoring configuration



## ● Saving the configuration to a tftp server

```
Ubigate# save network 90.90.1.155 backup.cfg ?
  type                                file transfer protocol type
  tftp                                Trivial File Transfer Protocol (default)
  ftp                                 File Transfer Protocol
  sftp                                secure File Transfer Protocol

<cr>
Ubigate# save network 20.0.0.203 backup.cfg tftp
Please wait... (up to a minute)
Done.
```

## ● Restoring the configuration from flash.

```
Ubigate# configure flash
  fileName : backup.cfg
configuring from local file....
configuring from file '/cf0/backup.cfg' ...
  1 : # SAMSUNG ELECTRONICS CO., LTD. system configuration file (.CFG).
  2 : #
  3 : # SAMSUNG ELECTRONICS CO., LTD. assumes no responsibility for product
reliability,
  4 : # performance, or both if the user modifies the .CFG file. Full
  5 : # responsibility for any modification made to the .CFG file, by
  6 : # the user, is assumed by the user.
```

# Saving and Restoring configuration



- Restoring the configuration from remote tftp server.

```
Ubigate# configure network
host(ip) : 90.90.1.155
fileName : backup.cfg
type(ftp, tftp, sftp) : tftp

1 : # SAMSUNG ELECTRONICS CO., LTD. system configuration file (.CFG).
2 : #
3 : # SAMSUNG ELECTRONICS CO., LTD. assumes no responsibility for
product reliability,
4 : # performance, or both if the user modifies the .CFG file. Full
5 : # responsibility for any modification made to the .CFG file, by
6 : # the user, is assumed by the user.
7 : #
8 : # Model: iBG1000
```

- Removing the contents of the configuration file(system.cfg)

```
Ubigate# clear cfg_file
removing contents of '/cf0/system.cfg' ...done.
Ubigate#
```



## ● Adding second T1 link remotely

- Concern: Might lose connection itself while modifying multi-link bundle
- Solution: Make configuration file (script) and run in a batch mode
- What to be done
  - Generate configuration file using 'append' command
  - Verify configuration file using 'config\_check' command
  - Execute configuration file using 'configure flash' command

# Generate configuration file



- Use 'append' command → append each command line to a file in flash

```
Ubigate/file# append /cf0/temp.cfg "no interface bundle test"
WARNING :
Do not remove Compact Flash or reboot during this process.
File does not exist, Create? (y/n) : y

Ubigate/file# append /cf0/temp.cfg "interface bundle test"
WARNING :
Do not remove Compact Flash or reboot during this process.

Ubigate/file# append /cf0/temp.cfg "link t1 0/0"
WARNING :
Do not remove Compact Flash or reboot during this process.

Ubigate/file# append /cf0/temp.cfg "link t1 0/1"
WARNING :
Do not remove Compact Flash or reboot during this process.

Ubigate/file# append /cf0/temp.cfg "encapsulation ppp"
WARNING :
Do not remove Compact Flash or reboot during this process.

Ubigate/file# append /cf0/temp.cfg "ip address 3.3.3.1/24"
WARNING :
Do not remove Compact Flash or reboot during this process.

Ubigate/file#
```

# Verifying the Configuration file



- Displaying the contents of the configuration file

```
Ubigate/file# show startup-config /cf0/temp.cfg
no interface bundle test
interface bundle test
link t1 0/0
link t1 0/1
encapsulation ppp
ip address 3.3.3.1/24
```

- Use 'config\_check' command to check the syntax

```
Ubigate/file# config_check /cf0/temp.cfg

WARNING :
Do not remove Compact Flash or reboot during this process.

Checking the contents of /cf0/temp.cfg:

1 : no interface bundle test
2 : interface bundle test
3 : link t1 0/0
4 : link t1 0/1
5 : encapsulation ppp
6 : ip address 3.3.3.1/24

In /cf0/temp.cfg, Total commands executed: 6, Total errors: 0
Ubigate/file#
```



# Execute configuration file



- Use 'configure flash' command to run commands in configuration file in batch mode

```
Ubigate# configure flash
  fileName : temp.cfg
configuring from local file....
configuring from file '/cf0/temp.cfg' ...
  1 : no interface bundle test
  2 : interface bundle test
configuring new WAN bundle interface test.
  3 : link t1 0/0
  4 : link t1 0/1
  5 : encapsulation ppp
  6 : ip address 3.3.3.1/24
In temp.cfg, Total commands executed: 6, Total errors: 0

Ubigate#
```

# SNOS Image Naming Rule

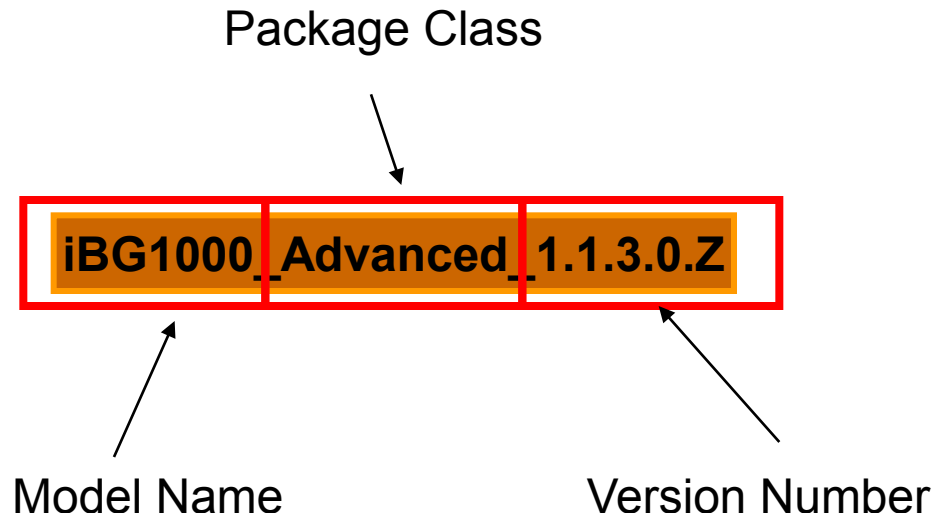


## ● The SNOS name consists of three parts

- Model name
- Package class
- Version number

## ● Package Class

- Basic
- Advanced
  - Security+Voice



# Enabling iBG-DM

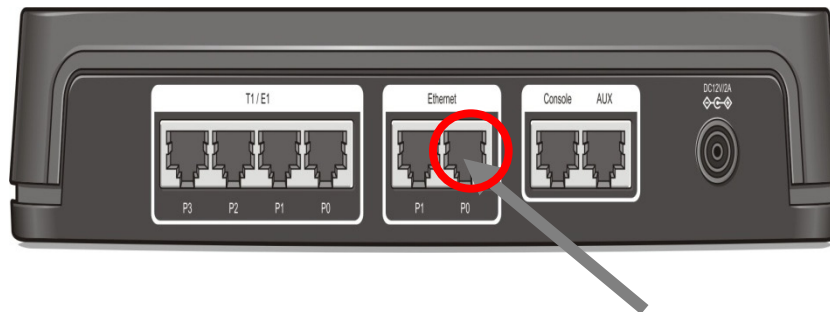
# Managing iBG via iBG-DM



## Steps

- Step 1 : connect iBG to the network
- Step 2 : setup PC, and connect it to iBG through the network
- Step 3 : logon to iBG from the PC

## Connecting iBG to Networking



Ethernet 0/0

# 1. Connecting iBG to the Network (1/4)



## ● IP address setting for management interface (any int)

```
Ubigate# conf t
Ubigate/configure# interface ethernet 0/0
Configuring existing Ethernet interface
Ubigate/configure/interface/ethernet (0/0)# ip address 165.213.164.20 24
Ubigate/configure/interface/ethernet (0/0)# end
Ubigate# show interface ethernet 0/0

ethernet0/0
ipaddr      165.213.164.20
netmask     255.255.255.0
description -
status      up
configured  auto
  speed     100
  mode      full_duplex
  mtu       1500

ethernet0/0 (unit number 0)
Type: ETHERNET (802.3), Media Type: RJ45
Flags: (0xa078243)  UP, RUNNING, MULTICAST-ROUTE
Internet Address: 165.213.164.20
Internet Netmask: 255.255.255.0
Internet Broadcast: 165.213.164.255
Interface RED is disabled
Maximum Transfer Unit: 1500 bytes
Mac Address: 00:16:32:80:28:80
Press any key to continue (q : quit) :
```

# 1. Connecting iBG to the Network (2/4)



## ● SNMPv2 setup for insecure mode

```
Ubigate# configure terminal
Ubigate/configure# snmp-server
Ubigate/configure/snmp-server# community samsung access_privilege ro
Ubigate/configure/snmp-server# *Mar 24 00:46:24: #PARSER-warning: samsung changed
configuration FROM CONSOLE

Ubigate/configure/snmp-server# community samsung1 access_privilege rw
Ubigate/configure/snmp-server# end
Ubigate#
```



# 1. Connecting iBG to the Network (3/4)



## ● SNMPv3 setup for secure mode

- For secure access to Ubigate iBG, iBG-DM uses SSH and SNMPv3 protocol.
- So user must configure SNMP agent with SNMPv3 functionality of your Ubigate iBG.

```
Ubigate# configure terminal
Ubigate/configure# snmp-server
Ubigate/configure/snmp-server# view all 1 1
Ubigate/configure/snmp-server# view one 1.3 1
Ubigate/configure/snmp-server# view two 1.3.6.1.4.1.1 1
Ubigate/configure/snmp-server# group grp v3 noauth readview one writeview two
Ubigate/configure/snmp-server# group grp v3 auth readview all writeview one
notifyview all
Ubigate/configure/snmp-server# group grp v3 priv readview all writeview all
notifyview all
Ubigate/configure/snmp-server# user authUser grp v3 authProtocol md5 authKey
test1234
Ubigate/configure/snmp-server# user privUser grp v3 authProtocol md5 authKey
test1234 privProtocol des privKey test1234
Ubigate/configure/snmp-server# user noAuthUser grp v3
```

# 1. Connecting iBG to the Network (4/4)



## ● SSH setup (for secure mode only)

- For secure access to Ubigate iBG, iBG-DM uses SSH and SNMPv3 protocol.
- So user must configure and enable SSH server.

```
Ubigate# configure terminal
Ubigate/configure# ssh_keygen
Ubigate/configure/ssh_keygen# generate dsa
Generating public/private dsa (1024) key pair
This may take several minutes depending on the key size and algorithm
.....
Saving the keys in flash
.
comment : admin@Ubigate
passphrase :
The private key is saved in '/cf0/shdsakey'
The public key is saved in '/cf0/shdsakey.pub'
The key fingerprint is:
a3:d9:7f:90:c5:3d:07:e1:00:86:4d:70:d3:ca:be:10
Ubigate/configure/ssh_keygen# exit
Ubigate/configure# ssh_server
Ubigate/configure/ssh_server# enable
SSHD : Secure shell server is enabled
```

# 2. Setup administrator's PC (1/2)



## LAN IP address setting

The screenshot shows the 'Network Connections' window. Under the 'LAN or High-Speed Internet' tab, 'Local Area Connection' is selected. A black arrow points from this connection to the 'Local Area Connection Properties' window.

The 'Local Area Connection Properties' window is open, showing the 'General' tab. Under 'This connection uses the following items:', 'Internet Protocol (TCP/IP)' is selected. A black arrow points from this selection to the 'Internet Protocol (TCP/IP) Properties' window.

The 'Internet Protocol (TCP/IP) Properties' window is open, showing the 'General' tab. The 'Use the following IP address:' radio button is selected. The IP address is set to 5.5.5.44, the Subnet mask is 255.255.255.0, and the Default gateway is 5.5.5.55. The 'Use the following DNS server addresses:' radio button is also selected, with the Preferred DNS server set to 5.5.5.5. The 'Advanced...' button is visible at the bottom right.

## 2. Setup administrator's PC (2/2)



### ● JRE Installation

- CD or access to <http://java.sun.com/javase/downloads/index.jsp>
- iBG-DM is recommended to be used with JRE 1.5.x
- iBG-DM does not support secure mode with JRE 1.6.x

# 3. Login (1/6)



## ● Launching iBG-DM

- Verify HTTP and HTTPS server activation

```
Ubigate# show ip http config
HTTP and HTTP secure server status for Web-based Device Management

HTTP server status: Enabled
HTTP server port: 80
HTTP server authentication method: local only
HTTP server base path(fixed): /cf0/
Maximum number of concurrent connections(fixed): 10
Client session idle time-out(fixed): 60 seconds
HTTP secure server status: Enabled
HTTP secure server port: 443
HTTP secure server ciphersuite: RSA with MD5 or SHA1, 512 or 1024 bits
Ubigate#
```

# 3. Login (2/6)



- Enable HTTP or HTTPS server (for secure mode)

```
Ubigate/configure# ip http server
Ubigate/configure# *Mar 24 01:44:31: #PARSER-warning: samsung changed
configuration FROM CONSOLE

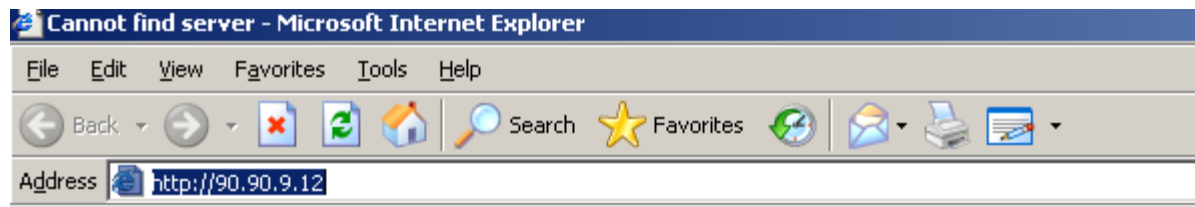
Ubigate/configure# ip http secure-server
Ubigate/configure# *Mar 24 01:44:46: #PARSER-warning: samsung changed
configuration FROM CONSOLE

Ubigate/configure#
```

# 3. Login (3/6)



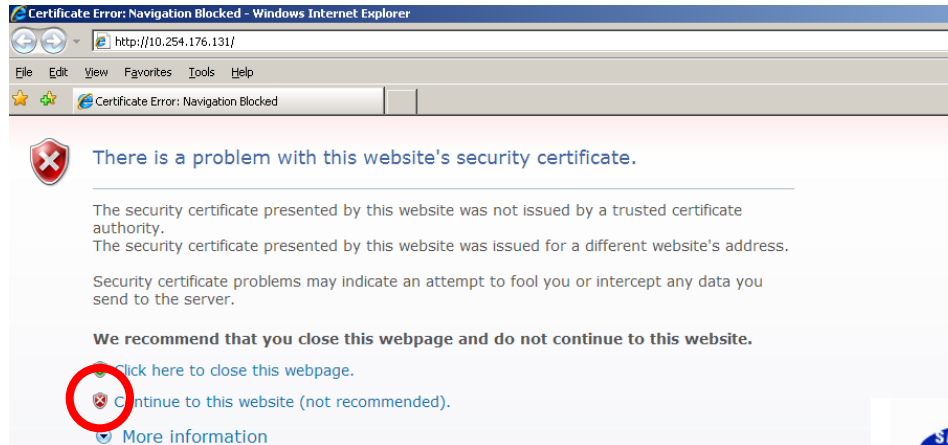
## ● Launching(IE6)



# 3. Login (4/6)



## ● Launching(IE7)

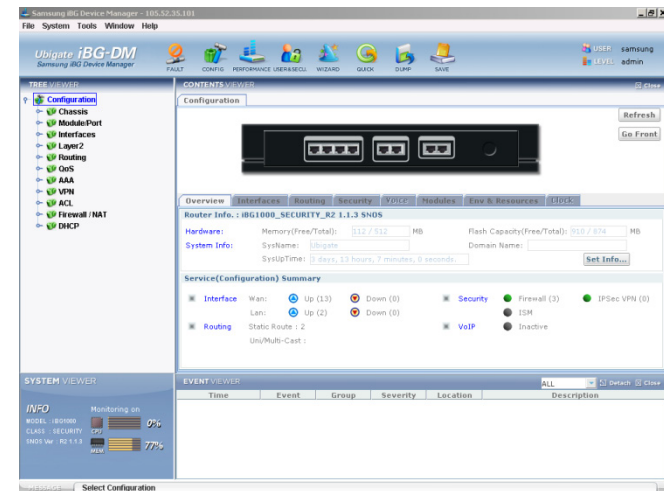
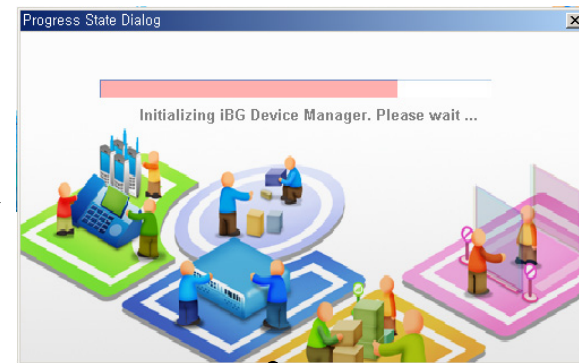




# 3. Login (5/6)



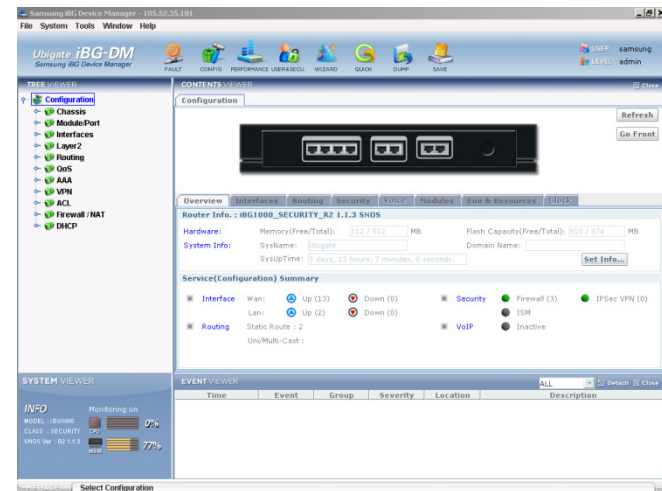
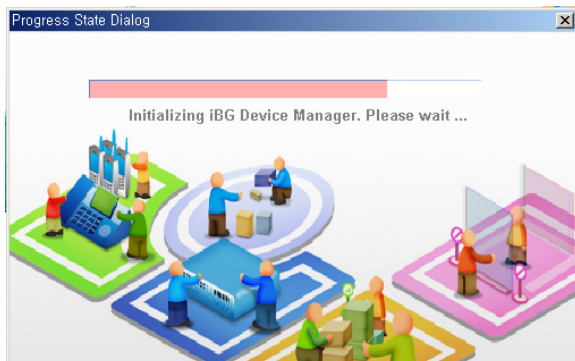
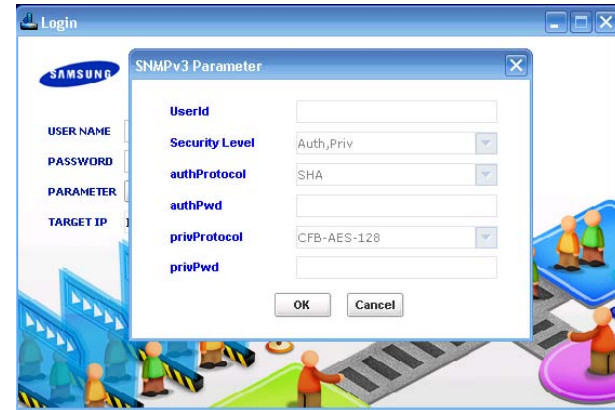
## Login and Main window (Normal Mode)



# 3. Login (6/6)



## Login and Main window (Secure Mode)



# 3. Login (4/4)

Samsung iBG Device Manager - 105.52.35.101

File System Tools Window Help

Ubigate iBG-DM  
Samsung iBG Device Manager

FAULT CONFIG PERFORMANCE USER&SECU WIZARD QUICK DUMP SAVE

USER: samsung  
LEVEL: admin

**TREE VIEWER**

- Configuration
  - Chassis
  - Module/Port
  - Interfaces
  - Layer2
  - Routing
  - QoS
  - AAA
  - VPN
  - ACL
  - Firewall / NAT
  - DHCP

**CONTENTS VIEWER**

Configuration

Refresh  
Go Front

Router Info.: iBG1000\_SECURITY\_R2 1.1.3 SNOS

Hardware: Memory(Free/Total): 112 / 512 MB Flash Capacity(Free/Total): 910 / 874 MB

System Info: SysName: Ubigate Domain Name:   
SysUpTime: 3 days, 13 hours, 7 minutes, 0 seconds. Set Info...

**Service(Configuration) Summary**

Category	Item	Status	Count
Interface	Wan:	Up (13)	Down (0)
	Lan:	Up (2)	Down (0)
	Static Route	2	
	Uni/Multi-Cast		
Security	Firewall	Active	3
	IPSec VPN	Active	0
VoIP	ISM	Inactive	
	VoIP	Inactive	

**SYSTEM VIEWER**

INFO

MODEL : iBG1000  
CLASS : SECURITY  
SNOS Ver : R2 1.1.3

Monitoring on

CPU 0%

MEM 77%

**EVENT VIEWER**

ALL

Time	Event	Group	Severity	Location	Description
------	-------	-------	----------	----------	-------------

MESSAGE Select Configuration

# License Key Installation

- 53-byte License Key Format

- YCNYRC06-NK0A00UD-GEHKDJSB-XXXXXXXX-Q07Z5SBG-XXXXXXXX

- Features to be enabled through licensing

- VQM
- ICM

- Single Key enables multiple features

- License Keys

- Official Key: permanent license obtained through the license server
- Temporary Key: can be used for a limited period



# How to get license



## ● Display License Key Information

```
Ubigate/configure# system license analyze_key XDGBG70E-XXXXXXXX-XXXXXXXX-MQG97QOD-  
VFU979OE-U97YALMQ
```

```
License Key Value      : XDGBG70E-XXXXXXXX-XXXXXXXX-MQG97QOD-VFU979OE-  
U97YALMQ  
- Key Type             : 1  
- License Type         : Official License  
- Mac Address          : 00:16:32:FF:25:58  
- System Model         : iBG1004  
- Lifetime             : Permanent  
  
- Licensed Features  
  > ICM License        : 50 user(s)  
  > VQM License        : Enable
```

```
Ubigate/configure#
```

# Installing License Key



```
Ubigate/configure# system license install_key XDGBG70E-XXXXXXX-XXXXXXX-MQG97QOD-  
VFU979OE-U97YALMQ
```

This key installs an official license.

```
License Key Value      : XDGBG70E-XXXXXXX-XXXXXXX-MQG97QOD-VFU979OE-  
U97YALMQ  
- Key Type              : 1  
- License Type          : Official License  
- Mac Address           : 00:16:32:FF:25:58  
- System Model          : iBG1004  
- Lifetime              : Permanent  
  
- Licensed Features  
  > ICM License         : 50 user(s)  
  > VQM License         : Enable
```

```
The system will restart after the license key is installed. Continue?(y/n) : y  
License key is installed successfully.
```



# Verifying License Key

## ● Verify

```
Ubigate# show system license_key
```

```
  Type 1 License Key Info.
```

```
    - Official Key
```

```
      > Key Value           : XDGBG70E-XXXXXXXX-XXXXXXXX-MQG97QOD-VFU979OE-  
U97YALMQ
```

```
      > Mac Address         : 00:16:32:FF:25:58
```

```
      > System Model        : iBG1004
```

```
      > Lifetime            : Permanent
```

```
    - Licensed Features
```

```
      > ICM user            : 50 user - Disable
```

```
      > VQM                 : Enable
```

```
    - Temporary Key
```

```
      > Not present
```

```
      > Installation Times : 1
```

```
    - The Current System Status
```

```
      > ICM user            : 50 user - Disabled
```

```
      > VQM                 : Enabled
```

```
Ubigate#
```

***Thank you!***

