

SIP Trunking using the Optimum Business Sip Trunk Adaptor and the Samsung OfficeServ 7100 IP-PBX

Table of Contents

1. Overview	3
2. Prerequisites	3
3. OfficeServ 7100 PBX Configuration	3
3.1 Network Settings	4
3.2 SIP Configuration	6
3.3 DID/Extensions	7
3.4 Backup/Restore	11

1 Overview

The purpose of this configuration guide is to describe the steps needed to configure the Samsung OfficeServ 7100 IP-PBX for proper operation with Optimum Business Sip Trunking.

2 Prerequisites

Please follow the instructions in the Optimum Business SIP Trunk Set-up Guide. The Set-up Guide was left by the Optimum Business technician at installation. If you do not have the Set-up Guide, go to www.optimumbusiness.com/SIP to download a copy.

This guide provides the configuration steps for both PBX registration and static or non-registration modes of PBX operation.

Table 1 – PBX Information

Manufacturer:	Samsung
Model:	OfficeServ 7100
Software Version:	4.82
Does the PBX send SIP Registration messages (Yes/No)?	Yes
Vendor Contact:	www.samsung.com

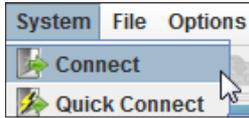
3 OfficeServ 7100 PBX Configuration

The steps below describe the minimum configuration required to enable the PBX to use Optimum Business Sip Trunking for inbound and outbound calling. Please refer to the OfficeServ 7100 product documentation for more information on advanced PBX features.

The configuration described here assumes that the PBX is already configured and operational with station side phones using assigned extensions or DIDs. This configuration is based on Samsung OfficeServ 7100 v4.82.

3.1 Network Settings

To connect to the PBX navigate to System from above and click **Connect**.



Enter the password and leave the **Encryption** box checked. Thereafter click **OK**.



Navigate to **2.1.0** to configure initial settings. Enter the PBX IP address next to **IP Address** and the Optimum Business Sip Trunk Adaptor's (Edgewater device) IP address next to **Gateway**.

2.1.0. System Selection	
Item	Value
System Country	USA
IP Version	IPv4
IP Address	10.10.159.11
Gateway	10.10.159.1
Subnet Mask	255.255.255.0
WBS Select	Dual

When done click Save.



Navigate to **2.1.5** and next to **DTMF Type** select **Inband (RFC2833)**. Also the **SIPT Ringback Message** should be **183**.

VoIP RTP Option	DTMF Type	Inband(RFC2833)
	MPS Service	On
	No MPS >> MGI	On
	SIPT >> SIPT MGI Use	Off
	SIPT Ringback Message	183

NOTE: Checking Convert Inband to DTMF is not required on the Optimum Business Sip Trunk Adaptor. Further DTMF tone duration cannot be modified on the GUI nor on the phones.

When done click Save.



3.2 SIP Configuration

To configure SIP navigate to **5.2.13**. Enter a name for the Optimum Business Sip Trunk Adaptor next to **SIP Carrier Name** (EM-4552 was entered for this example). Select **Enable** next to **SIP Server Enable**. Enter the address of the Optimum Business Sip Trunk Adaptor next to **Registrar Address** and **Outbound Proxy**. The **Registrar Port** should be **5060**. Enter necessary SIP credentials next to **User Name**, **Auth User Name**, and **Auth Password**. Change the **Supplementary Type** to **PBX Managed 1**. This should match the User name and Password entered in the Optimum Business Sip Trunk Adaptor.

5.2.13.SIP Carrier Options	
SIP Carrier 1 ▼	
Item	Value
SIP Carrier Name	EM-4552
SIP Server Enable	Enable
SIP Service Available	Yes
Registra Address	10.10.159.1
Registra Port	5060
Outbound Proxy	10.10.159.1
Alternative Outbound Proxy	0.0.0.0
Outbound Proxy Port	5060
Proxy Domain Name	
Local Domain Name	
DNS Server 1	0.0.0.0
DNS Server 2	0.0.0.0
User Name	4085555555
Auth User Name	4085555555
Auth Password	*****
Regist Per User	Disable
Session Timer	Re-Invite
Session Expire Time (sec)	1800
Trunk Reg Expire Time (sec)	1800
Alive Notify	Options
Alive Notify Time (sec)	1800
IMS Option	Disable
P Asserted ID Use	None
SIP Peering	Disable
Send CLI Table	1
Supplementary Type	PBX Managed 1

When done click Save.



For Static mode simply leave the **Registrar Address** and SIP credential fields empty and click Save.

Registra Address	
Registra Port	5060
Outbound Proxy	10.10.159.1
Alternative Outbound Proxy	0.0.0.0
Outbound Proxy Port	5060
Proxy Domain Name	
Local Domain Name	
DNS Server 1	0.0.0.0
DNS Server 2	0.0.0.0
User Name	
Auth User Name	
Auth Password	

3.3 DID/Extensions

To begin by assigning names to extensions, navigate to **2.4.2** and scroll to the extensions being used. In this example extensions **3201** and **3202** are being used. Enter appropriate names.

2.4.2.Port Common Data	
Tel Number	Name
3416	
3201	UserA
3202	UserB

When done click Save.



To match the above extensions to DIDs navigate to **3.2.3** and enter each corresponding DID under **Incoming Digits**.

3.2.3.DID Ringing		
Entry No	Incoming Digits	Ring
		Ring Port
1	4085555556	3201
2	4085555557	3202

To configure Auto Attendant simply enter **519** under **Ring Port** and enter again a corresponding DID in the same row and that would be the DID of the Auto Attendant. The number **519** is entered because it is the default IVR number.

3.2.3.DID Ringing		
Entry No	Incoming Digits	Ring
		Ring Port
1	4085555556	3201
2	4085555557	3202
3	4085555558	519

When done click Save.



Navigate to **2.7.1** and next to each extension select **Disable** under **Use IP White List**.

2.7.1.ITP Information										
Tel Number	Password	DSP Type	Time Zone	Signal Type	Video Codec	Video Size	QoS Enable	Multicast Page	Use IP White List	
3201	*	G.711	+00/00	UDP	H.263	CIF	Disable	Auto	Disable	
3202	*	G.711	+00/00	UDP	H.263	CIF	Disable	Auto	Disable	

When done click Save.



To enter the DID for each extension's Caller ID, navigate to **2.4.3** and enter each DID next to its corresponding extension.

3201	4085555556
3202	4085555557

When done click Save.



Navigate to **3.2.3** and under **Call Wait** for each extension, make sure **Yes** is selected. This will allow multiple calls to same extension.

Call Wait
Yes
Yes

When done click Save.



To configure Call Forward navigate to **2.5.4**. Find the extension to be configured and under **External Forward** enter **1**.

External Forward
Delay (sec)
1

Thereafter navigate to **5.15.6**. Call Forwarding has several options but in this example All will be used. Next to the same extension change the **Forward Type** to **All** and under **All Forward** enter **9** under **T/S No**. Enter the DID destination under **Outgoing Digit**.

3201	All
3202	Forward Cancel
3203	All
3204	Busy
3205	No Answer
3206	Follow Me set to

All Forward	
T/S No	Outgoing Digit
9	408555559

When done click Save.



To configure Call Park navigate to **4.9.2**. First select the appropriate extension next to **Tel Number**. Select **PARK** twice next to two keys under **Feature**. Then enter **1** and **2** under **Extension** and these numbers will be used for park and retrieve. This process needs to be repeated for other extensions as well for retrieving the parked call.

4.9.2.Station Key			
Tel Number <input type="text" value="3201"/>			
Key No	Feature	Extension	Name
1	DT	8501	
2	DT	8502	
3			
4	PARK	1	
5	PARK	2	
6	CALL	1	
7	MSG		

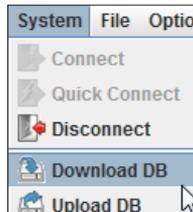
When done click Save.



NOTE: By default general Dial Plan numbers are all allowed unless specifically denied under Toll Restriction.

3.4 Backup/Restore

To backup the current configuration file navigate to **System→Download DB**.



To restore a previously saved configuration file navigate to **System**→Upload DB.

