

# SwyxWare configuration guide for BT HSIPT trunk

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# 1 Introduction

## 1.1 General

This guide should be used when configuring the SwyxWare with the following BT SIP Services:

- BT HSIPT

#### 1.2 Network considerations

The BT HSIPT is a SIP trunk with registration and digest authorization. Additionally, BT also checks the public IP address, from where SIP packets are sent from. Therefore, a static public IP address from the ISP is necessary.



# 2 Configuration guide

For the BT HSIPT, each customer has to configure some individual customer data, which cannot be preset with the provider profile.

#### Individual Configuration data:

Item	Example for this document	comment
SIP Registrar	siptswyx.com	
SIP Proxy	siptswyx.com	
SIP Realm	siptswyx.com	
Pilotnumber	445600653841	Also used for registration
Username	swyxswyxware	
Password	XXXXX	
Number range	+44 5600653842 - 846	

From SwyxWare 11.00 on, the profile for BT HSIPT will be available in the integrated list of provider profile. For earlier versions, it is necessary to import the profile via CustomProviderProfile.config as described in chapter <u>Provider profile</u>.

### The provider profile:

```
<sp:SIPProviderProfile
    id="bt_hsipt"
    name="British Telecom HSIPT (UK)"
    outboundProxy="sipt-dynamic-bslnws09.yourwhc.co.uk"
    registrar="Enter Server"
    Proxy="Enter Server"
    realm="Enter Realm"
    DtmfMode="Rfc2833_Event">
        <sp:NumberFormats
            outbound_called="National"
            outbound_calling="CanonicalWithoutPlus"
            inbound_called="CanonicalWithoutPlus"
            inbound_calling="National"/>
</sp:SIPProviderProfile>
```

#### 2.1 Location

As a first step, a new location has to be created. Open the SwyxWare Admin tool, navigate to the locations folder, start the "Add Location" wizard, by opening the context menu in the right, larger area and selecting "Add Location ...".



DipPbx - [Console Root\	SwyxWare Administrati	on\SwyxServer STAP-VMSRV1-	1\Locations]	_	D X
IpPbx - [Console Root\]         File       Action       View       Window       Help         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Supplementation       Image: Supplementation       Image: Supplementation         Image: Supplementation       Image: Su	SwyxWare Administrati	On\SwyxServer STAP-VMSRV1-         Description         Add Location         Refresh         Export List         View         Arrange lcons         Line up lcons         Help	1\Locations]	Area Code	Internatic
Adds a new Location to this SwyxServer.					

## Figure 1: Start the "Add Location" wizard

The following screenshots are showing the configuration dialogs from the wizard.

Provide a meaningful name for the new location.

Add new Location						
Location Name Enter the name and description of the new Location.						
A Location defines a site and its specific parameters. In a multi site SwyxWare installation, the definition of several locations is required. SwyxWare Users and Trunk Groups are being assigned to Locations.						
Name: BTLocation						
Description:						
Set this Location as the default Location. All new users will be assigned to this Location unless explicitly changed.						
< <u>B</u> ack <u>N</u> ext >	Cancel					

Figure 2: Location name



## Configure country code, etc.

Add new Location X				
Location specific codes and prefixes Specify the codes and prefixes which are rel	ated to this Location.			
The prompted parameters determine how the destination number of a call, originated by a SwyxWare User or a Trunk, is interpreted by the system. This is in particular needed to identify calls that remain in the same area or county. A typical German Location in Berlin would have a Country Code set to '49', Area Code to '30', International Prefix to '00' and Long Distance Prefix to '0'.				
Own <u>C</u> ountry Code:	44			
Own <u>A</u> rea Code:	5			
Prefix for International Calls:	00			
Prefix for <u>L</u> ong Distance Calls:	0			
	< <u>B</u> ack <u>N</u> ext > Cancel			

Figure 3: Country code, area code etc.

Provide public access numbe
-----------------------------

Add new Location	x			
Private Branch Exchange related properties Specify the PBX settings which are related to this Location.	<b>ૢ</b> ૢૢૢૺૢ			
The Public Line Access prefix defines which number has to be dialed to obtain access to the public network.				
It is possible to define multiple Public Access Prefixes, separated by a semicolon.				
The Internal Number for undeliverable calls defines where incoming calls will be transferred when the called public number is not assigned to a SwyxWare User or Group.				
Public Line Access Prefixes: 9				
Route undeliverable calls to Internal Number:				
< <u>B</u> ack <u>N</u> ext > Ca	ancel			

## Figure 4: Public access number



#### Finally, set the correct time zone for the location

Add new Location	x
<b>Time Zone</b> Select a time zone for this Location.	Ś
Specify the time zone which is applicable for this Location. This information is used for instance to interprete Routing Records of a Trunk Grou which contain timely restrictions.	p
<u>T</u> ime Zone: [(UTC+00:00) Dublin, Edinburgh, Lisbon, London	
< <u>B</u> ack Finish	Cancel

Figure 5: Time zone

The newly created location is displayed in the administration and can be modified if necessary.



Figure 6: Overview of all existing locations



## 2.2 SIP Trunk group

#### 2.2.1 Creation

After creating the location, a new SIP trunk group has to be created. In the SwyxWare Admin tool, navigate to the Trunk Groups folder, start the creation wizard by opening the context menu in the right, larger area and selecting "Add Trunk group ...".

DipPbx - [Console Root\Sv	yxWare Administratior	SwyxServer STA	P-VMSRV1-1\Trunk Gr	oups] 🗕 🗖 🗙
File       Action       View       Window       Help         Image: Second se				_ <i>8</i> ×
Console Root Console Root SwyxWare Administration SwyxServer STAP-VMSRV1-1 Users Groups Conson Conson Conson Trunk Groups Trunks Number Mappings Routing Table Calling Rights Calling Rights Administration Profiles SwyxFax Phonebook Calling Rights Relations Services (Local)	Name	Description	Type Add Trunk Group Refresh Export List View Arrange Icons Line up Icons Help	Profile
Adds a new Trunk Group to this SwyxServer.				

Figure 7: Start the "Add Trunk Group" wizard

The following screenshots are showing the configuration dialogs from the wizard.

Provide a meaningful name for the new SIP Trunk group.



Add new Trunk Group						
Trunk Group Name and Description Specify Trunk Group name and description.						
Enter a unique Trunk Group name, i.e. not used otherwise as Trunk name, User name, Group name or Phonebook entry.						
Enter the optional descriptio	n that will later on help you identifying this Trunk Group					
<u>T</u> runk Group Name:	BTTrunkGroup					
Description:						
	< <u>B</u> ack <u>N</u> ext >	Cancel				

#### Figure 8: Trunk Group Name

Select "SIP" as Trunk Group Type and select "British Telecom HSIPT (UK)" from the dropdown list as Profile.

In case, that a SwyxWare 2015 R40.3.0 or earlier is used, the profile for "British Telecom HSIPT (UK)" first has to be imported using the CustomProviderProfiles.config file. Please read chapter <u>Provider profile</u> for the necessary instructions. Later SwyxWare versions have the profile integrated already.



Add	new Trunk Group	x				
Trunk Group Type Specify the type of the Trunk Group and select the appropriate profile.						
Select the Type of Trunk Group to be added from the first list and choose the applicable profile from the second list. If you are uncertain, which profile is applicable for your installation, consult the SwyxWare Administration documentation. If you want to add a Trunk Group for a non-listed SIP service provider, select the Profile "Custom". This will allow enetering all required parameters in subsequent steps.						
<u>T</u> runk Group Type:	SIP	•				
<u>P</u> rofile:	<ul> <li><customized sip=""></customized></li> <li>AXS SIP-Trunk (DE)</li> <li>Blue SIP (DE)</li> <li>Breezz (NL)</li> <li>Bretagne Telecom (FR)</li> <li>British Telecom (UK)</li> <li>British Telecom HSIPT (UK)</li> <li>Broadnet AG</li> <li>Call UK (UK)</li> <li>Comendo Network (DK)</li> </ul>	▼ ^ Cancel				

## Figure 9: Choose provider profile

Accept the default settings from the next dialog.

Add new Trunk Group
Definition of Routing Specify for what calls this Trunk Group is supposed to be used.
Depending on your choice, initial Routing Records will be created. Public Numbers should be added in canonical format (e.g. "+4930123456"), "*" can be used as a wildcard. Use Trunks of this Trunk Group
<ul> <li>I and of this fidal cloup</li> <li>I and cloup</li> </ul>
C for all external calls to the following Called Party Number or SIP URI only:
O for all external calls and all <u>u</u> nassigned Internal Numbers
C for Internal Numbers:
O Do not create initial Routing Records.
< <u>B</u> ack <u>N</u> ext > Cancel

## Figure 10: Initial routing records



#### Assign the previously created location to the SIP Trunk Group.

Add new Trunk Group	x
Location Profile Select the applicable Location Profile for this Trunk Group.	\$ <u>0</u>
A Location within SwyxWare defines all location specific settings like the time zone, the required public access code, the country and area codes. Please select one of the listed Locations which will be assigned to this Trunk Group.	
Location: ETLocation	
< <u>B</u> ack <u>N</u> ext > Can	cel

Figure 11: Assign location

The newly created trunk group is displayed in the administration and can be modified if necessary.



Figure 12: Overview of all existing trunk groups



### 2.2.2 Additional configuration

After creating the SIP Trunk Group, a few settings need to be adjusted. Navigate to the Trunk Groups folder, select the created SIP Trunk Group. Open the Trunk Group properties through the context menu.

IpPbx - [Console Root\SwyxWare Adm	inistration\SwyxServer	STAP-VMSRV1-1\Trunk	Groups\BTTrunkGrou	p] 🗕 🗖 🗙
File Action View Window Help				_ 8 ×
🗢 🔿 🛅 📰 🙆 😖 🖬 🗛 🚜	ļ			
Console Root	Name	Desc Type	Host	Trunk Group R
<ul> <li>▲ SwyxWare Administration</li> <li>▲ SwyxServer STAP-VMSRV1-1</li> <li>④ Users</li> <li>▷ Groups</li> <li>▷ Locations</li> <li>▲ Trunk Groups</li> <li>Start BTTrunkGroup</li> <li>42 Trunks</li> </ul>		There are no items to Add Trunk	show in this view.	
• <sup>#</sup> Number Mappings (] Routing Table		Refresh	-	
Calling Rights Calling Rights Calling Administration Profiles SwyxFax Calling		Arrange Icons	-	
C <sup>6</sup> Active Calls		Properties		
ुईँद्र Relations þ 🧠 Services (Local)	Ţ	Help		
Opens the properties dialog box for the current selection.				

### Figure 13: Properties of the Trunk Group

Select the tab "SIP" of the properties dialog.

BTTru	InkGroup Properties
Routing Records General Profi	Rights Location
Specify the SIP settings w	which are applicable for this Trunk Group.
I he settings are prefilled v on the "Profile" tab of the	with the default values of the Profile, defined Trunk Group.
Profile:	British Telecom HSIPT (UK)
Enable SIP Registratio	Dn
<u>R</u> egistrar:	Enter Server Port:
Re-registration Interval:	120 🛨 Seconds
Enable STUN Suppor	t
STUN Server:	Port: 3478
<u>P</u> roxy:	Enter Server Port:
Realm:	Enter Realm
DTMF Mode:	RFC 2833 Event
ОК	Cancel Apply Help

Figure 14: The original "SIP" Tab



		BTTrunkGro	oup Propertie	s X	
	Routing Rec	ords	Rights	Location	
	General	Profile	SIP	Encryption	
	Specify the SIP	settings which ar	e applicable for thi	s Trunk Group.	
	The settings are on the "Profile"	prefilled with the tab of the Trunk I	default values of t Group.	he Profile, defined	
	Profile:	Britis	h Telecom HSIPT	(UK) (Customized)	
	Enable SIP	Registration			
	<u>R</u> egistrar:	siptsv	wyx.com	Fort:	STUN server
	Re-registration <u>I</u>	ntervat. 120	🗧 Seconds		
	Enable STU	N Support			
	STUN Server:	stun.	internetcalls.com	Fort: 3478	
Individual for	<u>P</u> roxy:	sipts	wyx.com	Port:	
each customer	Realm:	siptsv	wyx.com		
	DTMF Mode:	RFC	2833 Event	•	
		DK Ca	ancel Ap	ply Help	

Figure 15: The configured "SIP" tab

In the fields "Registrar", "Proxy" and "Realm", the individual settings from BT have to be entered. The "Port" fields have to be left empty.

It is also necessary to configure a STUN server in order to signal public IP address and port in the SIP messages. Mark the "Enable STUN Support" checkbox and enter an IP address or FQDN of a STUN server. A list of available public STUN servers can be found <u>here</u>.

Usually, it is not necessary to configure any additional parameter in the other tabs but are depicted in the following figures. More information about the configuration parameters in these dialogs can be found in the SwyxWare manual.



	BTTrunkGroup Properties					
Routing Rec General	ords Profile	Rights SIP	Location Encryption			
All Trunks of a 1	runk Group shar	e the same prope	erties.			
Trunk Group Inf	ormation					
<u>T</u> runk Group Na	ime:	BTTrunkGr	oup			
<u>D</u> escription:						
Trunk Group Se	lection <u>P</u> refix:					
Trunk Group Ty	pe:	SIP				
Enable Trun	k Recording					
(	OK Ca	ancel A	pply Help			

## Figure 16: The "General" tab

In this tab, the Trunk Group Name can be changed and a description can be provided. It is also possible to define a Trunk Group Selection Prefix if a call has explicitly to be routed through this trunk group. Additionally, trunk recording can be enabled.



	BTTrunkGroup Properties							
Routing Rec	Routing Records Rights Location							
General	Profile		SI	P	Enc	ryption		
The selected P	rofile specifie:	s the ty	pe of co	onnection	i this Trunk	is using.		
Profile								
British Telecon	HSIPT (UK)	)				•		
 _− Number Formatt	ing							
Conversion for (	- outbound Cal	ls:						
Calling Party	Number:			Canonic	al without p	olus 💌		
Called Party Number: National						-		
Conversion for i	nbound Calls	if num	ber type	is Unkno	wn:			
Calling Party	<u>N</u> umber:			National		•		
Called Party	N <u>u</u> mber:			Canonic	al without p:	olus 🔻		
<u>M</u> aster PBX Pul	blic Line Acc	ess Pro	efix:					
Special Number	r Replacemer	nt:		<u>(</u>	Configure			
	ОК	Can	cel	Арр	ly	Help		

Figure 17: The "Profile" tab

In the "Profile" tab, the provider profile can be set and the number formats for inbound and outbound calls for calling and called party are defined. Currently, for the British Telecom HSPIT trunk, there is no need to configure a special number replacement.



	BTTrunkGroup Properties						
Routing Rec	Routing Records Rights Location						
General	Profile	51	r	Encryption			
Specify the SIP	settings which	ch are applical	ole for this Tru	nk Group.			
The settings are on the "Profile"	e prefilled with tab of the Tr	n the default v unk Group.	alues of the P	rofile, defined			
<u>I</u> ransport Proto	col:	Automatic		•			
Encryption Mod	le:	No encryption		<b>v</b>			
	ОК	Cancel	Apply	Help			

## Figure 18: The "Encryption" tab

If the Transport Protocol is set to "Automatic", the actual transport protocol and the encryption mode are detected through DNS SRV queries. Currently the transport protocoli s set to UDP and encryption is disabled.



	BTTrunkGroup Properties							
General Routing Re	Profile	Bight	IP s	Encry	ption			
The list shows outgoing call S Routing Recor	Routing Records         Rights         Location           The list shows all routing records defined for this Trunk Group. For each outgoing call SwyxServer will select a Trunk Group based on the Routing Records of all Trunk Groups.							
Priority 4	Positive / Nega Allow	ative Flag	Called Pa +*	arty Number	Day Mon			
<	III				>			
<u>A</u> dd		<u>E</u> dit		<u>D</u> elete				
	ОК	Cancel	App	bly	Help			

Figure 19: The "Routing Records" tab

In this dialog, new routing records can be created. Existing records can be modified or deleted. With the routing records, it is possible to allow or deny usage of this trunk group by different criteria (User, group membership, ...) and to set the routing priority.



BTTrunkGroup Properties								
General	General Profile SIP Encryption							
Routing Rec	ords	Rights	Location					
Sen The Call calls from	The Calling Right of a Trunk Group determines, where incoming calls from this Trunk Group are allowed to be routed to.							
<u>C</u> alling Right:								
Internal destina	tions							
Junction								
Description Default profile allowing calls only to internal destinations.								
	DK Car	icel Ap	ply <b>Help</b>					

## Figure 20: The "Rights" tab

In this dialog, it is possible to define where inbound calls can be routed to if no internal destination can be found.



	BTTrunkGroup Properties							
General Profile SIP Encryption								
Routing Rec	ords	Rights	Location					
A Location with the time zone, th codes.	A Location within SwyxWare defines all location specific settings like the time zone, the required public access code, the country and area codes.							
Location:								
BTLocation			-					
,								
- Description								
	OK Ca	ncel <u>A</u> p	ply Help					

#### Figure 21: The "Location" tab

In this dialog, the location can be selected.

#### 2.3 SIP trunk

#### 2.3.1 Creation

After creating and configuring the SIP Trunk Group, the actual SIP Trunk can be created. Navigate to the Trunk Groups folder, select the created SIP Trunk Group. Open the Trunk Group properties through the context menu and chose "Add Trunk ..." to start the SIP Trunk creation wizard.



IpPbx - [Console Root\SwyxWare Adm	inistration\SwyxServer	STAP-VMSRV1-1\Tru	unk Groups\BTTrunk	(Group] 🗕 🗖	x
😧 File Action View Window Help				- 5	×
🗢 🔿 📶 📰 🔍 🛋 🕷 🤽	ļ				
Console Root	Name	Desc Type	Host	Trunk Group	R
<ul> <li>▲ SwyxForcer STAP-VMSRV1-1</li> <li>▲ Groups</li> <li>▶ Cations</li> <li>▲ Trunk Groups</li> </ul>		There are no iten	ns to show in this view.		
St BTTrunkGroup		Add Trunk Refresh View	<b>]</b>		
<ul> <li>&gt; SwyxFax</li> <li>Phonebook</li> <li>(<sup>€</sup> Active Calls</li> <li>ฐ         <sup>§</sup> Relations</li> <li>&gt; Services (Local)</li> </ul>		Line up Icons Properties Help			
Opens the properties dialog box for the current selection.					

Figure 22: Adding a SIP Trunk to the SIP Trunk Group

The following screenshots are showing the configuration dialogs from the wizard.

Provide a meaningful name for the new SIP Trunk. It is useful to choose a name which reflects the dependency to the Trunk Group.

Add new Trunk					
Trunk Name Choose an unique name for	rthe new Trunk.	ζζ <sup>ζ</sup>			
Enter a unique Trunk name Group name or Phonebook	Enter a unique Trunk name, i.e. not used otherwise as Trunk Group name, User name, Group name or Phonebook entry.				
Enter the optional description	on that will later on help you identifying this Trunk.				
<u>T</u> runk Name:	BTTrunk				
Description:					
	< <u>B</u> ack <u>N</u> ext >	Cancel			

#### Figure 23: Trunk name

In the following dialog, the SIP user credentials have to be configured.



	Add new Trunk	x	
SIP Trunk Provider / User Dat Specify your account data.	a	<b>ૢ</b> ૢૢૢૺ	
Enter the user identification data will be used to compose your SI for authentification.	as provided by your SIP service provider. The user P address while user name and password will be user	ID d	DT Dilatameter
<u>S</u> IP Provider:	British Telecom HSIPT (UK) (Customized)	-	BT Pilotnumbe
<u>U</u> ser ID:	445600653841		
User <u>N</u> ame:	swyxswyxware		
<u>P</u> assword:	*******		BT Username
Repeat Password:	******		
	< <u>B</u> ack <u>N</u> ext > C	ancel	

## Figure 24: User credentials

In the next dialog, the available number range is specified. Use the number range that BT has assigned.



	Add new Trunk				
Subscriber Num Specify Subsc	<b>ibers</b> riber Numbers	5.			
Enter the subs Trunk. If your set of s and add the o If this Trunk d click 'Next'. Note: Country location. Country	scriber number ubscriber num ther subscribe oes not add ar Code and Are Area	part of the Public Numbers the bers is incoherent enter only the r numbers later via the Trunk's ny Public Numbers to the syste a Code have been pre-determ First	at are terminated by this ne first subscriber number properties. em, leave all fields empty and ined by the Trunk Group's Last		
Code	Code	Subscriber Number	- 600653846		
		< <u>B</u> ack	Next > Cancel		

Figure 25: Number range

To accept incoming calls from BT, it is necessary to configure a SIP URI with wildcarding. The wildcarding in the user part of the SIP URI has to consider the assigned number range.



Add new Trunk					
SIP URI Specify SIP URI.	ζÇ <sup>2</sup>				
If this Trunk is supposed to handle non-numeric SIP URIs (e.g. assigned by yo service provider) you can enter one of these bellow and add other URIs later v Trunk's properties.	ur SIP ria the				
SIP URIs have the following format:					
sip: <name1> @ <name2></name2></name1>	sip: <name1> @ <name2></name2></name1>				
with <name i=""> reflecting the user's name and <name2> the realm.</name2></name>					
For convenient input <sup>™</sup> can be used as wildcard so that <sup>*</sup> @company.com would address all users in the realm "company.com". The realm field shown below is pre-filled with the configured realm in the SIP properties but may be overwritten case by case.					
URI: sip: 44560065384* @ *	_				
< <u>B</u> ack <u>N</u> ext >	Cancel				

#### Figure 26: SIP URI

With the settings depicted in figure 19, all incoming calls to +445600653840 until +445600653849 are accepted. It is also possible to configure one single URI with wildcarding. In this case, it is necessary to add each single URI after the trunk was created.

The codecs are configured in the next dialog. The default settings can be accepted.



Add new Trunk	x
Codecs Select the codecs to be used for data transmission.	<del>زې</del> ې
The selected codec preference and filter defines the type of compression for calls using this Trunk. Therefore the selected codec has an impact on the used bandwidth and the quality of the call.	
Prefer Quality     ✓     G.722 (approx. 84 kBit/s per call)     ✓     G.711a (approx. 84 kBit/s per call)     ✓     G.711µ (approx. 84 kBit/s per call)     ✓     G.729 (approx. 24 kBit/s per call)     ✓     Fax over IP (T.38, approx. 20 kBit/s per call)	
< <u>B</u> ack <u>N</u> ext > Ca	ncel

Figure 27: Codec settings

The last parameter is the number of parallel calls. This parameter depends on the installed channel licenses, the available bandwidth and possibly a specification from BT.

Add new Trunk	×
Number of Channels Select number of Channels to be used by this Trunk.	Ś
The number of concurrent calls via a specific Trunk is usually limited by the Trunk's physics, the available bandwidth or by a provider limitation. Furthermore the number of simultaneous calls can artificially be limited to reserve (e. <u>c</u> ISDN) channels or bandwidth for other applications. Usually ISDN BRI interfaces would allow to make up to 2 simultaneous calls, while	<b>]</b> .
ISDN PRI interfaces allow up to 30 calls.	
< <u>B</u> ack <u>N</u> ext > C	Cancel

#### Figure 28: Number of parallel calls



Finish the creation of the SIP trunk with the next dialog.

Afterwards, the trunk should be presented as active. This may take some seconds. Pressing F5 will update the window.

🖸 💿 IpPbx - [Console Root\SwyxWare Administration\SwyxServer STAP-VMSRV1-1\Trunk Groups\BTTrunkGroup] 👘 🗖 💌							
🔅 File Action View Window Help	🖸 File Action View Window Help 📃 🗗 🗙						
🗢 🔿 🙇 📰 🖾 🗟 🗟 🖬 👫 🍇	ł						
🧮 Console Root	Name 📩	Desc Type	Host	Trunk Group R			
SwyxWare Administration	SIP BTTrunk	SIP	STAP-VMSRV1-1	BTTrunkGroup			
⊿ SwyxServer STAP-VMSRV1-1							
🔝 Users							
Groups							
Locations							
🔺 🚞 Trunk Groups							
St BTTrunkGroup							
tzi Trunks							
* Number Mappings							
💼 Routing Table							
Calling Rights							
Administration Profiles							
⊳ 🎯 SwyxFax							
Dependence Phonebook							
C Active Calls							
2 Relations							
Services (Local)							
	۲ ا	II		>			
Opens the properties dialog box for the current selection.							

#### Figure 29: Active SIP trunk

#### 2.3.2 Additional configuration

After creating the actual SIP Trunk, some settings need to be adjusted. Navigate to the Trunk folder, select the created BT SIP Trunk. Open the SIP Trunk properties through the context menu.

<ul> <li>Sile Action View Window Help</li> <li>■ Administration Profiles</li> <li>■ SwyxFax</li> <li>■ Phonebook</li> <li>(<sup>c</sup> Active Calls</li> <li>§ Relations</li> <li>■ Services (Local)</li> </ul>	IpPbx - [Console Root\SwyxWare Administration\SwyxServer STAP-VMSRV1-1\Trunks]						
Administration Profiles     SwyxFax     Descus Properties     SwyxFax     SwyxFax     Descus Properties     SwyxFax	Eile Action View Window Help		_ 8 ×				
Console Root Console Console Root Console Ro	🗢 🔿 📶 🗙 🖾 🍳 🗟 🖬 🗄 🛪	2					
SwyxWare Administration     SwyxWare Administration     SwyxServer STAP-VMSRV1-1     Oroups     Cations     Trunk Groups     The Extended Trunk Groups <	Console Root	Name Desc Type	Host Trunk Group R				
Image: Structure of the version of	SwyxWare Administration	SIP BTTrunk SID	STAP-VMSRV1-1 BTTrunkGroup				
> Groups   > Locations   > Trunk Groups   > Trunk Groups   > Trunks   > Number Mappings   ● Calling Rights   > Calling Rights   > Administration Profiles   > SwyxFax   Phonebook   (* Active Calls		Befresh					
<ul> <li>Locations</li> <li>Trunk Groups</li> <li>Trunks</li> <li>Mumber Mappings</li> <li>Routing Table</li> <li>Calling Rights</li> <li>Administration Profiles</li> <li>SwyxFax</li> <li>Phonebook</li> <li>(* Active Calls</li> <li>Relations</li> <li>Services (Local)</li> </ul>	Groups	Properties					
Image: Services (Local)	Locations	liele					
<ul> <li>* Number Mappings</li> <li>* Routing Table</li> <li>Calling Rights</li> <li>Administration Profiles</li> <li>* SwyxFax</li> <li>Phonebook</li> <li>* Active Calls</li> <li>* Relations</li> <li>\$ \$ \$ services (Local)</li> </ul>	Trunk Groups	Нер					
Image: Provide the state of the state	* Number Mappings						
<ul> <li>▷ Calling Rights</li> <li>○ Calling Rights</li></ul>	i Routing Table						
<ul> <li>▷ SwyxFax</li> <li>□ Phonebook</li> <li>(* Active Calls</li> <li>2 Relations</li> <li>▷ Services (Local)</li> </ul>	Calling Rights Administration Profiles						
Phonebook ( <sup>€</sup> Active Calls § Relations ▷  Services (Local)	b						
(° Active Calls g 2 Relations ▷ 🧠 Services (Local)	D Phonebook						
j ∰ Services (Local)	C Active Calls						
	≥ Services (Local)						
Name: BTTrunk, Type: SIP, Host: STAP-VMSRV1-1	Name: BTTrunk, Type: SIP, Host: STAP-VMSRV1-1						

Figure 30: Trunk properties



First, select the tab "Codecs/Channel".

	BTTrunk Properties				
General	SIP Registration		Numbers		
SIP URIs	Number Signalling		Codecs/Channels		
The selected cod compression for c has an impact on	ec preference and filter defin alls using this Trunk. Therefo the used bandwidth and the	ies th pre thi quali	e type of e selected codec ty of the call.		
Codec <u>P</u> reference				r	
Prefer Quality			-		
Allowed Codecs:					
<ul> <li>✓ G.711a (appre</li> <li>✓ G.711µ (appre</li> <li>✓ G.729 (appro</li> <li>✓ Fax over IP (</li> </ul>	<ul> <li>✓ G.722 (approx. 84 kBit/s per call)</li> <li>✓ G.711a (approx. 84 kBit/s per call)</li> <li>✓ G.711µ (approx. 84 kBit/s per call)</li> <li>✓ G.729 (approx. 24 kBit/s per call)</li> <li>✓ Fax over IP (T.38, approx. 20 kBit/s per call)</li> </ul>				
Behaviour on outgoing faxcalls					
Remove T.38 codec from initial invite					
Prohibit T.38 reinvite by sender					
Channels			<b>F</b>	ī	
Number of simultaneous Calls:					
Maximum Number of simultaneous outgoing Calls: 5					
Maximum Number	Maximum Number of simultaneous incoming Calls: 5				
OF	( Cancel	Ap	ply Help		

Figure 31: Additional T.38 configuration

In the section "Behaviour on outgoing faxcalls", both checkboxes "Remove T.38 codec from initial invite" and "Prohibit T.38 reinvite by sender" have to be selected.



Next, select the tab "Number Signalling".

	BTTrunk Properties			
	General         SIP Registration         Numbers           SIP URIs         Number Signalling         Codecs/Channels			
	Define how the calling party number is signaled for outgoing calls via this trunk.			
	<ul> <li>Always suppress number</li> <li>Always use:</li> </ul>			
	C Always use originator's number			
	<ul> <li>Originator's number</li> </ul>			
BT Pilotnumbe <u>r</u>	if assigned to this trunk, otherwise use the following number			
	if assigned to this trunk, otherwise			
	445600653841			
	OK Cancel Apply Help			

#### Figure 32: Number signalling configuration

The configuration for the number signalling is depicted in figure 25. Since CLIP No Screening is not supported, it is mandatory to signal the pilot number in case that an outgoing call is initiated from a user with a number which is not assigned to the SIP trunk and for forwarded calls.

Usually, it is not necessary to configure any additional parameter in the other tabs but are depicted in the following figures. More information about the configuration parameters in these dialogs can be found in the SwyxWare manual.



BTTr	BTTrunk Properties ×				
SIP URIs Numbe	er Signalling	Codecs/Channels			
General         SIP Registration         Numbers           Name and identify Trunk and enable or disable its use (e.g. for maintenance).         Figure 1         Figure 2					
Trunk Information					
Trunk Name:	BTTrunk				
Description:					
Computer Name: STAP-VMSRV1-1					
Type: SIP					
Assigned to Trunk Group:	Assigned to Trunk Group: BTnewTG				
	<u>I</u> runk Gro	pup Properties			
Trunk Status Trunk enabled					
ОК	Cancel	Apply Help			

## Figure 33: The "General" tab

In the "General" tab, the name of the actual SIP Trunk can be modified. It is also possible to access properties of the trunk group that the SIP trunk is attached to.

Most important is the possibility to activate/deactivate the SIP trunk by the checkbox "Trunk enabled" in the section "Trunk Status".



	BTTrunk Properties X				
SIP URIs General	Number Signalling SIP Registrat	ion Code	cs/Channels Numbers		
Enter your user ac	count information sup	plied by the servio	ce provider .		
SIP Provider:	British	Telecom HSIPT (	UK) (Customi		
SIP <u>U</u> ser ID:	44560	0653841			
SIP User <u>N</u> ame:	SWYXS	vyxware			
SIP User <u>P</u> assword	d: *****				
R <u>e</u> peat SIP User F	Password:				
ОК	Cancel	Apply	Help		

# Figure 34: The "SIP Registration" tab

In this tab, the registration information can be modified if necessary.



BTTrunk Properties				
SIP URIs General	Number Signalling	Codecs/Channels Numbers		
Public Numbers as	Public Numbers assigned to this Trunk.			
Country Code 44	Area Code Subscri 5 600653	ber N Extension N 841		
Add <u>E</u> dit <u>D</u> elete				
OK Cancel Apply Help				

## Figure 35: The "Numbers" tab

In this dialog, a new number or a new number range can be added. Existing numbers or number ranges can be modified or deleted.



BTTrunk Properties			
General SIP URIs	SIP Registration Number Signalling	Numbers Codecs/Channels	
SIP URIs assigned to this Trunk.			
User Name 44560065384*	Realm *		
<u>A</u> dd	<u>E</u> dit	<u>D</u> elete	
ОК	Cancel	Apply Help	

#### Figure 36: The "SIP URIs" tab

In this dialog, new SIP URIs can be added. This is necessary if the SIP URI, that was configured during creation, did not use any wildcards to cover a URI range. Existing SIP URIs can be modified or deleted.

#### 2.4 User

Finally, the public numbers from the BT trunk can be assigned to existing or new SwyxWare users, enabling them to make outbound, public calls and receiving public calls. Please consult the SwyxWare manual for further details if necessary.



# 3 Provider profile

If the SwyxWare installation does not contain the provider profile for British Telecom HSIPT, as with SwyxWare 11.0 or newer, it is necessary to import the profile through the CustomProviderProfile.config.

Please follow these installation steps:

- 1. Close the SwyxWare Administration (if opened)
- 2. Copy the file CustomProviderProfiles.config into the SwyxWare installation folder e.g. C:\Program Files\SwyxWare
- 3. Open the SwyxWare Administration.
- 4. The newly added SIP Provider profile should appear in the list of available profiles for SIP trunks.

Further information about the CustomProviderProfiles.config file can be taken from the following Knowledgebase article: <u>http://www.swyx.com/support/ssdb.html?kbid=kb3436</u>