## From within the University network (desktop machines in the computer room).

Use a Postgres client and connect with: *host* **biber.cosy.sbg.ac.at**, *port* **5432**, *database* **postgres**, your database username. The example uses the *psql* command line client. Replace YOURDBUSERNAME with your database username.

psql -h biber.cosy.sbg.ac.at -p 5432 -d postgres -U YOURDBUSERNAME

You will be asked for your database password. After entering the password, you will see the interactive terminal:

postgres=>

## From outside the University network.

First, set up an SSH tunnel using the **sshstud.cosy.sbg.ac.at** server. On Windows, you can use Putty to create the tunnel (details with screenshots shown below). On Linux/OS X, an ssh client is already installed.

## SSH Tunnel on Linux/OS X.

Use the following command for the initial connection. Replace COSY-USERID with the username of your Cosy-Account.

ssh -L 10000:biber:5432 COSY-USERID@sshstud.cosy.sbg.ac.at

You will be asked for the password of your Cosy-Account. This sets up a tunnel from your local pc to the database server **biber.cosy.sbg.ac.at** via **sshstud.cosy.sbg.ac.at**. Now you can connect to the database using your Postgres client (*host localhost, port* is *10000, database postgres*, your database username). The example uses the *psql* command line client. Replace YOURDBUSERNAME with your database username.

psql -h localhost -p 10000 -U YOURDBUSERNAME -d postgres

You will be asked for your database password. After entering the password, you will see the interactive terminal:

postgres=>

## SSH Tunnel using Putty on Windows.

For Putty, here is a step-by-step instruction on how to create an SSH tunnel. After connecting with Putty, the settings for connecting to the database are:

Host: localhost Port: 10000 Database: postgres

and your username+password.

<b>S</b> O	PuTTY Configuration		$\odot$ $\otimes$ $\otimes$		
Category:	Basic options for	your PuTTY session			
✓ Session	Specify the destination you want to connect	to			
Logging	Host <u>N</u> ame (or IP address)		Port		
⊽ Terminal	sshstud.cosy.sbg.ac.at		22		
Keyboard	Connection type:	-			
Bell	O Raw O Telnet O Rlogii	n OSSH	🔾 Serial		
Features	Load, save or delete a stored session				
▼ Window	Saved Sessions				
Appearance	Tunnel				
Behaviour	Default Settings	<u> </u>	Load		
Translation			Save		
Selection			Delete		
Colours			Delete		
Fonts					
		7			
Data	Close window on exit:				
Proxy	● Always ○ Never	🔘 Only on clean exit			
Telnet			/ :		
Rlogin					
▼ SSH					
Kex					
▶ Auth					
ΠΥ					
X11					
Tunnels					
Bugs					
Serial					
About		Open	Cancel		

First, you have to enter your SSH server. In our case this is **sshstud.cosy.sbg.ac.at**. Give the session a name ("Tunnel" in the example) to save it later.

<b>S</b> •	PuTT	( Configuration		$\odot$ $\odot$
Category:	Ор	tions controlling	SSH port forwarding	
	Port forwarding			
Logging	Local ports accept conne	ections from oth	er hosts	
⊽ Terminal	🗌 Remote ports do the sar	ne (SSH-2 only)		
Keyboard	Forwarded ports:			Remove
Bell				
Features				
▼ Window				<b>X</b>
Appearance	Add new forwarded port:			
Behaviour	Source port	10000		Add
Translation	Destination	biber:5432		
Selection	⊙ Local	🔘 Remote	🔿 Dyna	amic
Colours	<ul> <li>Auto</li> </ul>	O IP∨4	O IP∨6	
Fonts	<u></u>			
Data				
Proxy				
Telnet				
Rlogin				
▼ SSH				
Kex				
▶ Auth				
ТТΥ				
X11				
Tunnels				
Bugs				
Serial				
About			Open	Cancel

Then go to **Connection -> SSH -> Tunnels** and enter the *source port* **10000**. The *destination* has to be set to **biber:5432** (Hostname:Port). Leave everything else on the default settings.

<b>R</b> O	PuTTY	Configuration		$\sim$ $\sim$
Category:	Opt	ions controlling	3 SSH port forwarding	
<ul> <li>✓ Session</li> <li>Logging</li> <li>✓ Terminal</li> <li>Keyboard</li> <li>Bell</li> <li>Features</li> <li>✓ Window</li> <li>Appearance</li> <li>Behaviour</li> </ul>	Port forwarding Determined ports accept connel Remote ports do the same Forwarded ports: L10000 biber:5432 Add new forwarded port: Source port	ctions from oth	er hosts	Remove
Translation	Destination	, 		<u></u>
Selection	⊙ Local	) O Remote	() Dyn	amic
Colours	<ul> <li>Auto</li> </ul>	O IPv4		i
<ul> <li>✓ Connection</li> <li>Data</li> <li>Proxy</li> <li>Telnet</li> <li>Rlogin</li> <li>✓ SSH</li> <li>Kex</li> <li>Auth</li> <li>TTY</li> <li>X11</li> </ul> Tunnels Bugs Serial				
About			Open	Cancel

Then click the "Add" button to save the forwarded port.

80	PuTTY Configuration	$\odot \odot \otimes$
Category:	Basic options for your PuTTY session	
✓ Session	Specify the destination you want to connect to	
Logging	Host <u>N</u> ame (or IP address) <u>P</u> ort	
⊽ Terminal	sshstud.cosy.sbg.ac.at 22	
Keyboard	Connection type:	
Bell	O Raw O Teinet O Riogin O SSH O Serial	
Features	Load, save or delete a stored session	
▼ Window	Saved Sessions	
Appearance		
Behaviour	Default Settings	
Translation	Tunnel Save	
Selection	Delete	
Colours		
Fonts		
Data	Close window on exit:	
Proxy	Always     O Never     O Only on clean exit	
Telnet		
Rlogin		
▼ SSH		
Kex		
▶ Auth		
TTΥ		
×11		
Tunnels		
Bugs		
Serial		
About	Open	<u> </u>
About	Cance	

Go back to Session and click "Save". In the future you can simply click "Load" to load all the settings for the Session and then click "Open". The tunnel should be set up now. The Putty window must stay open for the tunnel to work.