How to connect to **ORALE databases** from clients outside ELTE domain.

ELTE has a firewall, so you cannot directly connect to the database servers from outside ELTE domain. You need an ssh connection to caesar.elte.hu with proper port forward (ssh tunnel) configuration.



1. You can use a command line ssh client program with the following parameters: ssh -L 2000:ullman.inf.elte.hu:1521 username@caesar.elte.hu or you can forward two local ports with one ssh connection: ssh -L 2000:ullman.inf.elte.hu:1521 -L 2001:aramis.inf.elte.hu:1521 username@caesar.elte.hu (username above is your **caesar username**)

Alternatively you can can use a putty program with the following settings.

E-Features	^	Option	s controlling SSH p	ort forwarding	
 Window Appearance Behaviour Translation Selection 		Port forwarding Image: Construction of the second connections from other hosts Image: Construction of the second connection of the second connecond conneconnection of the second connecond connecond			
Colours Connection Data Proxy Telnet Rlogin SSH Kex Host keys Cipher Cipher TTY X11 Tunnels Bugs		Add new forwa Source port Destination Local Auto	rded port: 2001 aramis.inf.elte.h O Remote O IPv4	Add nu:1521 O Dynamic O IPv6	

Write 2000 in 'Source port' field, ullman.inf.elte.hu:1521 in 'Destination' field then click Add button. Write 2001 in 'Source port' field, aramis.inf.elte.hu:1521 in 'Destination' field then click Add button.

With the above settings your ssh connection will forward your local 2000 port to ullman.inf.elte.hu:1521 and your local 2001 port to aramis.inf.elte.hu:1521. The result looks like this:

8	PuTTY Configuration	×
Category: Bell Features Window Appearance Behaviour Translation Selection Colours Colours Colours Colours Colours SSH Rlogin SSH Kex Cipher Auth TTY X11 Tunnels Bugs More bugs	Options controlling SSH port forwarding Port forwarding ✓ Local ports accept connections from other hosts ✓ Remote ports do the same (SSH-2 only) Forwarded ports: Remove L2000 ullman.inf.elte.hu:1521 L2001 aramis.inf.elte.hu:1521 Add new forwarded port: Source port Add Destination ● Local Remote Dynamic ● Auto IPv4 IPv6	
About	Open Cancel	

Save the configuration as a new session (e.g. caesar_tunnel) and login to caesar.elte.hu with the above settings.

⊡- Session	~	Basic options for your PuTTY session		
E Teminal		Specify the destination you want to con Host Name (or IP address)	inect to Port	
Bell	5	caesar.elte.hu	22	
Features Window Appearance Behaviour	=	Connection type: Raw Telnet Rlogin SSH Seri Load, save or delete a stored session Saved Sessions		
Selection		caesar_tunnel		
Connection Data Proxy Telnet Rlogin SSH Kex Cipher		Default Settings	Load	
		caesar turinel pandora	Save D/ete	
		Close window on exit: Always Never Only or	n clean exit	

2. Connect to the database using SqlDeveloper with the following settings: Take care about hostname and port!

Connection Name	Connection Details	Connection Name ara	mis_tunnel			
Aramis_pf2	nikovits@null	Username niko	ovits			
aramis_system	system@null	Password				
aramis_tunnel	system@//localhost:200					
tream2_ordpdb	nikovits@//stream2.inf svs@//stream2.inf.elte	Save Password	Connecti	on Color		
tream2_system	System@//stream2.inf.e	Oracle				
ilman system	system@pull	Connection Type	Baeir V	Role de	fault 🔻	
illman tunnel	nikovits@//localhost:200	Connection (The F	Jasic	Inoic (uc	riduit	
E_nikovits	nikovite@//localitostu152	Hostname	alhost			
E_SYSTEM	system@//localhost:152	Port 20	01			
		Service name ara	amis			
		OS Authenticatio	n 🗌 Kerberos Au	thentication	n Advanced	
au water to						

(ssh connection should be open during the whole database connection time)

If you don't have a Caesar account or you don't remember your Caesar account: Go to <u>https://ugykezelo.elte.hu/</u> and create a new one. (Use Google Translate, there is no english version.)

If you have a Caesar account, but you cannot log in when opening the ssh connection:

Go to <u>https://info.caesar.elte.hu/</u>, log in (with Caesar account), then go to "**Alapadatok**" menu, and check the text after "**Interaktív belépés (ssh)**". If it shows "Nincs", then your ssh is disabled. Try to enable it by clicking on the shopping cart icon next to it. In 1-2 minutes it will be green. The green "Van" means, your ssh connection is enabled.

← → C	lte.hu		
Caesar Infopanel			
📕 Kezdőlap	Caesar azonosító	nikovits	(i)
Alapadatok	AFS tárhely	86 KB / 5242880 KB	- Q. (i)
Levelezés	Interaktív belépes (ssh	0% I) Van	<i>i</i>
🚯 Virtuális webszerverek	Személyes honlap	Van Julu	i
Dokumentációk	PostgreSQL adatbázis	Van 🔯o	i
🚔 Kapcsolat	MySQL adatbázis	Van 🗛 🛲	<i>i</i>
💥 Beta hozzáférés	HPC azonosító	Nincs	(i)

Sometimes your caesar connection will be closed after a short time, because your session is idle. Then do the following.

- 1. Create a script which regularly (every 5 seconds) prints something to the screen, so your caesar connection stays alive, and it will not be closed.
- 2. Give 'execute' permission to the script.
- 3. Run the script.
- 4. Press ctrl-c at the end, when you want to stop your script.

1. keep alive.sh

```
#!/bin/bash
declare -i x=0
while true
do
    echo $x
    sleep 5
    x=$((x+5))
done
2. chmod +x keep_alive.sh
3. ./keep_alive.sh
4. ctrl-c
```