Remote Access Via Remote Desktop

Remotely connecting to your office desktop requires a client-server interface using Remote Desktop.

The following page describes the procedures for establishing a SSH Tunnel and connecting the client (home) machine to your office machine.

I. On the ENCS machine in your office

To allow remote access to an ENCS machine in your office, this option has be enable on the machine.

In Windows 7

- Right click on My Computer and choose Properties
- Select Remote settings
- On the System properties, choose the Remote tab.
 - o Check: Allow remote assistance connections to this computero Choose: Allow connections from computers running any version
 - of Remote Desktop (less secure)
 - o Click the "Select Users"
 - The procedure is same as windows 10, see below

In Windows 10

- Right click on This PC and choose Properties
- Select Remote settings
- On the System properties, choose the Remote tab.
 - o Check: Allow remote assistance connections to this computer
 - o Choose: Allow remote connections to this computer

System Propertie	s					×
Computer Name	Hardware	Advanced	System Pro	tection	Remote	
Remote Assist	ance					
Allow Rem	ote Assistanc	ce connection	ns to this cor	nputer		
What happens	when I ena	ble Remote /	Assistance?			
				Adv	anced	
Remote Deskt	ор					
Choose an opt	ion, and the	n specify who	o can conne	ct.		
◯ <u>D</u> on't allow	remote con	nections to th	nis computer			
Allow remo	Allow remote connections to this computer					
Allow co Desktop	onnections o with <u>N</u> etwo	nly from com ork Level Auth	puters runnin nentication (r	ng Remote recommen	e ided)	
Help me choo	<u>se</u>			Selec	ct Users	
		OK	(Cancel	Арр	bly

o Click the "Select Users"

(emote Deskto	op Users		?	×
The users listed the Administrato	below can connect to this one group can connect even	omputer, and a f they are not li	iny memb sted.	pers of
umroot already l	las access.			
umroot already Add	Remove			
Add Add To create new Panel and oper	Remove ser accounts or add users to <u>User Accounts</u> .	o other groups,	go to Co	ontrol

Click "Add"

Select Users	×
Select this object type:	
Users or Built-in security principals	Object Types
From this location:	
PISTOL	Locations
1	Check Names
Advanced	Cancel
/ dvdi/ccd	Cancer

Click "Advanced"

elect Users	×
Select this object type: Users or Built-in security principals	Object Types
From this location: PISTOL	Locations
Common Queries	
Name: Starts with $$	Columns
Description: Starts with \vee	Find Now
Disabled accounts	Stop
Non expiring password	
Days since last logon:	× 74
earch results:	OK Cancel
ame In Folder	

Click "Find Now"

Select Users	×
Select this object type:	
Users or Built-in security principals	Object Types
From this location:	
PISTOL	Locations
Common Queries	
Name: Starts with V	Columns
Description: Starts with \vee	Find Now
Disabled accounts	Stop
Non expiring password	
Days since last logon: 🗸 🗸	<i>>></i>
Search results:	OK Cancel
Name In Folder	^
OWNER RIG REMOTE INT Service assert	
SophosSAUC PISTOL SYSTEM	
A This Organiza	
umroot PISTOL	
WDAGUtilityA PISTOL	×

Select the user you want to log in "Remote Desktop", example: umroot Then click ok, ok, ok, ok to close those windows.

II. On your client (home) machine

Establish SSH Tunnel with Putty - Windows

A SSH tunnel is necessary to ensure secure communication between the two machines. Putty can be used as the SSH client software to establish the SSH tunnel. Putty is available for download from https://www.putty.org/. Once installed, follow these steps to connect to the ENCS machine.

- 1. Double-click the Putty icon on your client (home) machine.
- 2. In the **Category** pane of the application window, select the **Tunnels** option found under **Connection** → **SSH**
- 3. On the main pane, in the **Port Forwarding** section, do the following:
 - Check: Local ports connections from other hosts
 - Check: Remote ports do the same (SSH2-only)

RuTTY Configuration	?	×
Category:		
Bell 🔺	Options controlling SSH port forwarding	
Features Features Features Features	Port forwarding ✓ Local ports accept connections from other hosts ✓ Remote ports do the same (SSH-2 only) Forwarded ports: <u>Remove</u> Add new forwarded port: Source port <u>Add</u> Destination © Local ○ Remote ○ Dynamic ⓒ Auto ○ IPv4 ○ IPv6	
<u>A</u> bout <u>H</u> elp	<u>O</u> pen <u>C</u> ancel	

- Source port: 3391
- Destination: hostname.encs.concordia.ca:3389 Where hostname is your office machines name. For Example: test.encs.concordia.ca
- Click the **Add** button

RuTTY Configuration				? ×
Category:				
Bell	Options	s controlling SSH p	ort forwarding	
Features Features Features Window Appearance Behaviour Translation Selection Colours Colours Oata Proxy Telnet Rlogin FSH Kex Cipher Auth TTY X11 Turnels	Port forwarding ✓ Local ports ✓ Local ports ✓ Remote port Forwarded ports L3391 test. Add new forwar Source port Destination ⓒ Local ⓒ Auto	accept connections is do the same (SS accept connections is do the same (SS accept connections encs.concordia.ca ded port: 3391 [test.encs.concordia.ca C Remote C IPv4	s from other hosts H-2 only) <u>R</u> emove 3389 <u>Add</u> ordia.ca:3389 <u>Dynamic</u> <u>IPv6</u>	
Bugs				
i i i More bugs				
<u>A</u> bout <u>H</u> elp		Open	<u>C</u> ancel	

- 4. In the **category** pane, click on **Session** and enter the following information:
 - In Hostname: enter the hostname of the machine through which you want to establish your tunnel (use **tunnel.encs.concordia.ca**)
 - In connection type: select **SSH** as your protocol, set the port number to **22**
 - In Saved Sessions: Remote Desktop
 - Click the **Save** button

🕵 PuTTY Configuration		? ×
Wurtty Configuration Category: □- Session □- Logging □- Terminal □- Keyboard □- Bell □- Features □- Window □- Appearance □- Behaviour □- Translation □- Colours □- Colours □- Data □- Proxy □- Telnet □- Rlogin □- SSH □- Serial	Basic options for your PuTTY set Specify the destination you want to conner Host Name (or IP address) tunnel.encs.concordia.ca Connection type: Raw Telnet Raw Telnet Raw Telnet Raw Telnet Raw Coad, save or delete a stored session Saved Sessions Remote Desktop Default Settings Arena Remote Desktop computation evservice2 frostbite login Close window on exit: Always Never Only on close	<pre>? × ssion ct to Port 22</pre>
About Help	Open	Cancel

• Click open, a window will show up

Plogin.encs.concordia.ca - PuTTY	-	Х
🔏 login as:		\sim
		\sim

• Enter your ENCS username, then Enter,



• Enter your ENCS password, then Enter,



The tunnel has been established

Note: Next time you do this, you can simply launch Putty, click the session name **Remote Desktop**, then click **Open** button to establish the SSH tunnel.

Connecting via Remote Desktop

Once you have established the Tunnel, you are ready to establish the remote desktop connection.

In Windows 7

1. Click Start >> All Programs >> Accessories >> Remote Desktop Connection or Click Start >> type mstsc in search field, then press "Enter"

In Windows 10

1. In the search field type **mstsc**, then press "Enter"



- 2. In Computer field: localhost:3391
- 3. Click the Connect button



4. Click Use another account

Windows Securi	ty	×
Enter your cre These credentia	edentials Is will be used to connect to localhost.	_
	wmp	
	User name Password	
Reme	mber my credentials	1
	OK Cancel	

- If the machine in your office is **ENCS-managed** machine: Enter **encs\ENCS-username** and **password**
- If the machine in your office is a **User-managed** machine: Enter the **local** username and password of the machine. For Example: **umroot** and the password

Remote Desktop Connection	×			
The identity of the remote computer cannot be verified. Do you want to connect anyway?	>			
The remote computer could not be authenticated due to problems with its security certificate. It may be unsafe to proceed.				
Certificate name	1			
Name in the certificate from the remote computer:				
EV-SERVICE-DESK.encs.concordia.ca				
Certificate errors	1			
The following errors were encountered while validating the remote computer's certificate:				
1 The certificate is not from a trusted certifying authority.				
Do you want to connect despite these certificate errors?				
Don't ask me again for connections to this computer				
View certificate Yes No]			

• Click "Yes"

Now the desktop screen of your office machine will show up.

III. On your home MAC machine

1. First download Microsoft Remote Desktop Client for MAC from the App Store in your MAC machine and install it.

The Apple ID and its password may be required to be entered

2. Establish SSH Tunnel

Open terminal in MAC and type the following command. ssh -L 3391:hostname.encs.concordia.ca:3389 encsusernanme@tunnel.encs.concordia.ca hostname is the machine name in your office

	🏠 encs — -bash — 80×24	
Last login: Fri Apr	9 12:31:51 on ttys004	B
The default interact To update your accou For more details, pl ENCSs-iMac:∼ encs\$ s .concordia.ca	ive shell is now zsh. nt to use zsh, please run `chsh -s /bin/zsh`. ease visit https://support.apple.com/kb/HT208050. sh -L 3391:evservice2.encs.concordia.ca:3389 wmp@tunne	l.encs

.



• Enter your ENCS password



The SSH tunnel has been established

3. Launch Microsoft Remote Desktop for MAC







• Click the "Add desktop"

Add Desk	ctop	
	PC Name:	localhost:3391
Use	r Account:	umroot
Show Mc	ire	Cancel Save
Show Mo	re	Cancel Save
Show Mc	re	Cancel Save
Show Mc	vre vdd your fil	Cancel Save

In PC name field: localhost:3391

In User Account field:

If the machine in your office is **ENCS-managed** machine: Enter **encs\ENCS-username**

If the machine in your office is **User-managed** machine: Enter the local username. For Example: **umroot**

• Click Save

•••	Microsoft Rem	ote Desktop	
# ■ ★ • + •	Desktops	Feeds	Q Search
✓ Saved Desktops			
localhost:3391	O		

• Right click the image

• • •	Microsoft R	emote Desktop		
:: ≡ * · +	- V Desktops	Feeds	Q Search	
✓ Saved Desktops				
	Disconnect			
localhost:3391	Edit Duplicate			
	Export			
	Delete			

• Select Connect



• Click Continue

Enter your user acc	ount
This user account wil (remote PC).	ll be used to connect to localhost:3391
User Name:	umroot
Password:	
	Cancel Done

• Enter your account's password, then click Done

S	You are connecting to the RDP host "localhost". The certificate couldn't be verified back to a root certificate. Your connection may not be secure. Do you want to continue?	
	Show Certificate	Cancel Continue

• Click the **Continue**



• Click **Continue**

The Desktop screen of your ENCS office machine will be displayed.