

Using ODEON remotely with Windows Remote Desktop

License

The standard licenses for ODEON do not include licensing for remote usage of the ODEON software. As a license option, permission to use the ODEON software remotely can be added to the license – in which case ODEON can run on a Server and be accessed remotely. Please visit the [price list](#) to see how much it costs to enable remote desktop for any ODEON license. Multiple clients can access the software on the server, but only one can be logged in at a time and thus be able to operate the ODEON software (input materials, source, receivers etc. and to view results, do measurements and listening to auralisations).

Setting up the remote desktop

Setting up a server to run remote desktop is a bit tricky, in particular if the server should be well secured. This setup should preferably be handled by an IT department. Once you have a server that allows Windows Remote Desktop, or if you already had it in the first place, then using Odeon remotely should be fairly simple.

The requirements involving both the server and client sides are as follows:

- The interconnection should be fast enough
- Windows Pro required in both the server and client ends

The requirements on the server side are as follows:

- The internet connection on server side should have a static IP address
- The IP address on the server PC must be set to be static
- The router (the box that receives the internet connection and redistributes it to your network) must be configured – you or somebody must be allowed to log into the router and set up port forwarding
- The server PC should be fast enough to carry out calculations for the desired number of clients – for a low number of clients, the CPU could be an Intel i7 with 4 cores, but for a higher workload, it should be more along the lines of an Intel XEON with, say, 2 x 14 cores.
- For extra safety, the port number on the server PC should be changed, and encryption enabled.
- User accounts should be set up in the server PC for the each user that will be using the server remotely (instructions further below). E.g.:
 - a) Paul Smith Remote
 - b) Jens Jensen Remote
- The user accounts should be standard accounts, not administrator accounts, and they should have long, strong passwords.

To add a user to Remote Desktop Users Group in Windows 10:

1. Open the Settings app and go to System -> Remote Desktop. ...
2. When the Remote Desktop Users dialog opens, click on Add.
3. Click on Advanced.
4. Click on Find Now and then select any user account you want to add to the "Remote Desktop Users" group, and click OK.
5. Click OK and you're done.

Local Area Network (Windows Pro 10)

The simplest way to access remotely is to set up a Local Area network (LAN), in which case you do not need to know the IP address assigned by your Service Provider.

On the server side (the PC you want to access remotely)

1. Go to Control Panel, then to "System and Security"
2. In the System section, click "Allow remote access" (administrator rights required)
3. In the "Remote Desktop" section (not the "Remote Assistance" section), click on the "Allow remote connections to this computer" radio button, and check the "Allow connections only from computers running..." checkbox right underneath. (If you only see the "Remote assistance" section but not the "Remote desktop" section, you might have Windows Home edition)

On the client side (the PC from which you wish to access remotely your server – running Odeon)

1. Using the Windows search bar, find and go to Remote Desktop Connection
2. Type name of computer you wish to connect to e.g. Antoine: DESKTOP-OP6H8SR, and type the password
3. If you need audio playback on the client PC (e.g. for streaming convolution and measurements):
 - a. Click on "Show options"
 - b. Go to "Local resources" > "Remote audio settings"
 - c. Click "Enable Play from this computer + Record from this computer"

Expected problems when using Odeon remotely

Different users having the same Odeon project open

Multiple users can have the same Odeon project open in their individual sessions on the server PC, and the project can be updated from different sessions simultaneously. Remember that a new client logging in to the server can 'kick out' a previous client, but this will not close their session.

This can cause inconsistencies for each user. For example, when a user updates sources or receivers this will not be immediately reflected on the other session, until the other user closes and re-opens the room. Or a user might have calculated a job, and a later user will have updated sources afterwards. Then, for this later user, Odeon will link the new setup with the results from a previous setup.

In general, it is highly recommended to not have multiple users working in the same project. If two users need to work on the same project, they should make sure to close Odeon (and preferably their whole session) before the next user accesses the server, or to make a copy of the project on a different folder, one for each user.

Opening the task manager on the server computer

If a client user presses Ctrl+Alt+Delete to access the task manager, this will open the task manager on their own PC, not the server PC.

In order to open the task manager on the server PC, the user should look up "task manager" on the Windows search bar.

Sound cards

There may be issues with some sound cards. For example, there may be issues trying to use a microphone through a Realtek sound card.

Resources

How to connect remotely in Windows 10 (web article): <https://www.dummies.com/computers/operating-systems/windows-10/how-to-connect-remotely-in-windows-10/>

How to connect to Windows Remote Desktop in Local Network or via the Internet (YouTube video): <https://www.youtube.com/watch?v=2-gFrpI0GxU>

Ultimate Guide to Secure Remote Desktop Connections To Safely Access Your PC over the Internet (YouTube Video, a good description on how to create a remote server on another LAN with high security): <https://www.youtube.com/watch?v=sax55mrOX54>

How to use Remote Desktop in Windows 10 (official Microsoft article): <https://support.microsoft.com/en-us/help/4028379/windows-10-how-to-use-remote-desktop>