



TILA – CHECKLIST TO CONNECT THE SCHOOL TO TILA OPENSIM GRID

This document will help you to setup a working OpenSim connection from school to the TILA OpenSim server.

Your computer *must* meet these **REQUIREMENTS**, or you may *not* be able to successfully participate in the TILA virtual environment.

Windows	Minimum Requirements	Recommended
Internet Connection:	Cable or DSL	Cable or DSL
Operating System:	XP, Vista, Windows 7 or Windows 8	Vista, Windows 7 or Windows 8.1
Computer Processor:	CPU with SSE2 support, including Intel Pentium 4, Pentium M, Core or Atom, AMD Athlon 64 or later.	2-GHz (Vista) 32-bit (x86) or better
Computer Memory:	1 GB or more	3 GB or more
Screen Resolution:	1024x768 pixels	1024x768 pixels or higher
Graphics Card for Vista Windows 7 or Windows 8 (requires latest drivers):	<ul style="list-style-type: none"> • NVIDIA GeForce 6600 or better • OR ATI Radeon 9500 or better • OR Intel 945 chipset 	NVIDIA Graphics cards 9000 Series: <ul style="list-style-type: none"> • 9600, 9800 200 Series: <ul style="list-style-type: none"> • 275 GTX, 295 GTX ATI Graphics Cards 4000 Series: <ul style="list-style-type: none"> • 4850, 4870, 4890 5000 Series: <ul style="list-style-type: none"> • 5850, 5870, 5970

Mac OS X	Minimum Requirements	Recommended
Internet Connection:	Cable or DSL	Cable or DSL
Operating System:	Mac OS X 10.7 or better	the latest release of 10.9
Computer Processor:	1.5 GHz Intel based Mac	2 GHz Intel Core 2 Duo or above
Computer Memory:	1 GB or more	3 GB or more
Screen Resolution:	1024x768 pixels	1024x768 pixels or higher
Graphics Card:	<ul style="list-style-type: none"> • ATI Radeon 9200 and above • OR NVIDIA GeForce 2, GeForce 4 	<ul style="list-style-type: none"> • ATI: 4850, 4870 • OR NVIDIA: 9800

To be able to connect to the OpenSim server you have to do the following steps:

1. Download the 3D viewer for your computers at school
2. Install the viewer on one computer (to do the testing)
3. Set the viewer to the TILA project grid
4. Try to log in (failure is possible)
5. Set IP and ports of the network (only if it fails to connect)
6. Set up and test voice
7. Install the viewer on all computers

1. DOWNLOAD THE 3D VIEWER

To enter the 3D environment you need a 3D viewer. This viewer has to be downloaded and installed. We suggest to use the Singularity viewer.

Download the viewer here: <http://www.singularityviewer.org/downloads>

note: Always do a clean install, so if there is an update, first uninstall the old version.

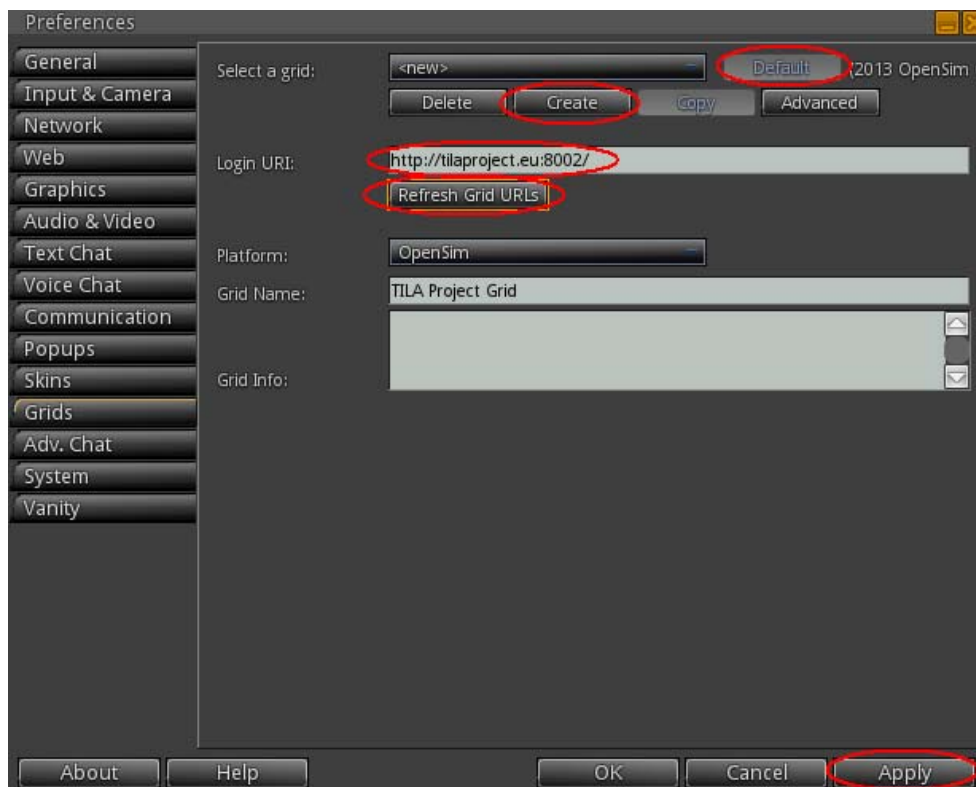
2. INSTALL THE VIEWER ON ONE COMPUTER

A normal installer is in the software.

3. VIEWER SETTINGS (viewer version 1.4.0)

To log in at the TILA Project grid you have to set the Singularity viewer to this grid.

- Start the viewer, click on the **GRID MANAGER** button at the bottom, see --->
- Click on the **CREATE** button (see below picture)



- Fill in the field **LOGIN URI** with: **tilaproject.eu:8002** or **http://tilaproject.eu:8002/**
- Click on **REFRESH GRID URLS**
- Click on **APPLY** at the right bottom
- Click on **DEFAULT** at the top (this sets the TILA grid as default grid)
- Finally click on **OK** at the bottom

4. LOGGIN IN ON THE TILA PROJECT GRID

- Fill in the **Username** (first and last name with a space between it) and **Password** fields with your personal data.
- For IT testing use **Name: Test User** and **Password: (please send an email request to tila@3dles.com for the password)**
- (optional) Choose the **TILA Project grid** from the GRID list
- Click on **Log In**



The screenshot shows a login form with the following fields and elements:

- Name or Username:** A text input field containing "fist last".
- Password:** A password input field.
- Grid:** A dropdown menu showing "TILA Project Grid".
- Start Location:** A dropdown menu showing "My Home".
- Log In:** A button to submit the login information.
- Remember name
- Remember password
- Grid Manager

- You will now enter the Welcome area of the TILA project area.

5. IT FAILS? ALLOW IP AND PORTS IN YOUR NETWORK

If you can not log in there is a problem with the network of the institute.

The following IP and ports are used to connect to the 3DLES OpenSim server:

- OpenSim IP: **178.32.217.205**
- OpenSim Ports: **80, 8002-8004, 9000-9200, 20800 - TCP & UDP**

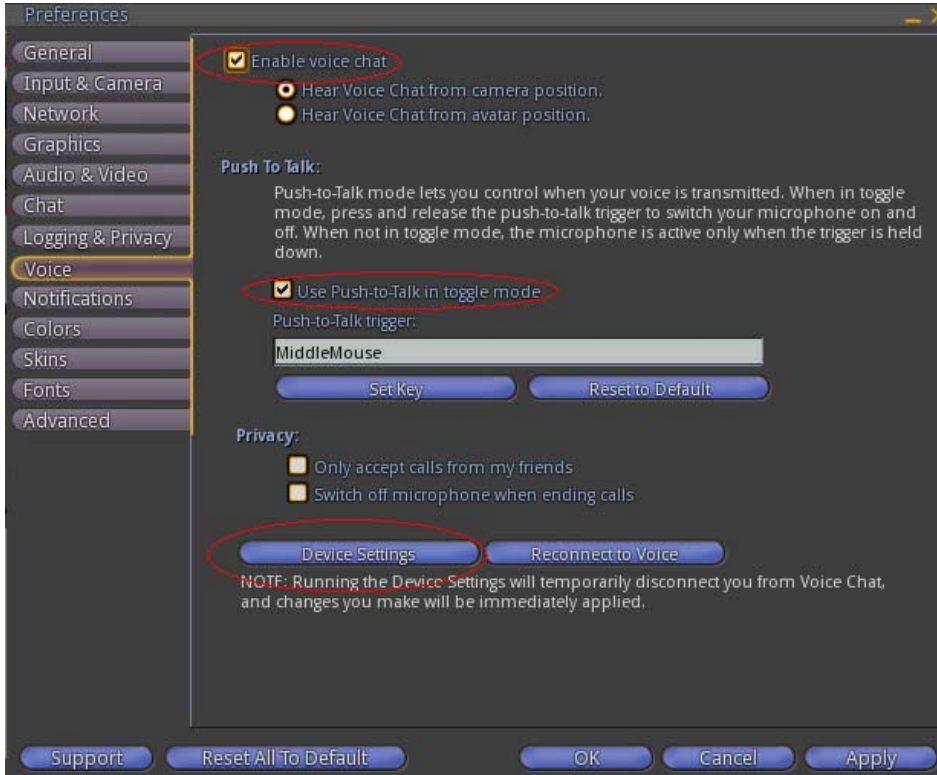
TIPS & TRICKS

- To be sure that no other grid can be selected, delete all other grids in the GRID MANAGER.
- Do **not select** the **REMEMBER PASSWORD** at the logging screen. Or else others can use your account
- If someone forgot their name or password: <http://tilaproject.eu:8002/wifi/forgotpassword>
- If textures are not showing and objects stay grey, go to **PREFERENCES -> NETWORK** then click the **CLEAR CACHE** button, and restart the viewer.

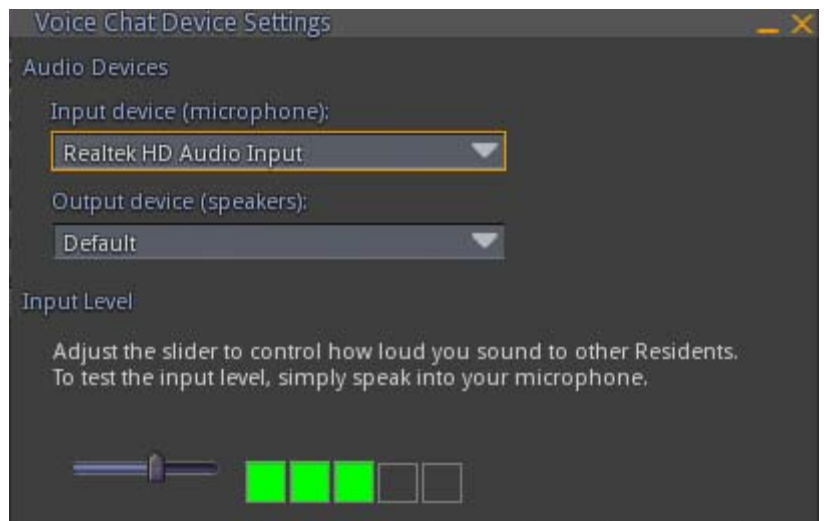
6. VOICE SETTINGS & USING VOICE

Using voice needs to be set in the viewer.

- After installing the viewer click in the viewer top left corner on **Edit -> Preferences...**
- Select the tab **Voice** (see below)
- The settings should be like in the picture.
So **Enable voice chat** and **Use Push-to-Talk in toggle mode** have to be on.
- Then select the **Device settings button**



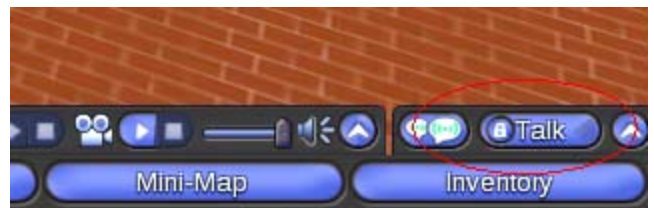
- After selecting the **Device settings** an extra window will appear.
- Check if talking through the microphone will show in the green blocks meter. Talking on a normal level must give three green blocks. Use the **Input Level Slider** to adjust the volume.
- If you cannot reach the right volume you may have to check the audio settings of your computer.
- When finished click on **OK**



PLEASE USE A HEADSET!

Our advice is to always use a headset. When this is connected the speakers of the computer will be turned off and the chat can only be heard on the headset. (If you do not use a headset the sound of the speakers will feedback into the microphone again.)

After login in it is possible to talk to other avatars through voice. At the right bottom of the screen you can click on the **TALK** button to turn your microphone on and off. **It is also possible to use the middle mouse button for switching microphone on and off.**



IS MY VOICE WORKING NOW, AM I TALKING?

An avatar that has voice enabled should have a white dot over his head. When the microphone is switched on others (that have voice enabled) can hear you talking in the environment. When someone speaks, or when you speak, you can see green audio waves over the head of the avatar.



VOICE NOT WORKING? PORTS AND IP'S for the voice server.

It could happen that the voice server is not connecting. The voice server is on a different server than OpenSim because that is a separate service of Vivox.com. The network should be open to data to and from the following server...

- Ports 80 & 443** - TCP - for Web server
- Ports 3478 & 3479** - UDP - to aid in setting up voice with NAT
- Ports 5060-5062** - UDP - for voice control signals
- Ports 12000-32000** - UDP - for voice media

And all of those to all of the following three IP Ranges:

- 70.42.62.0/24**
- 64.94.252.0/23**
- 74.201.98.0/23**