

### TRANSITION

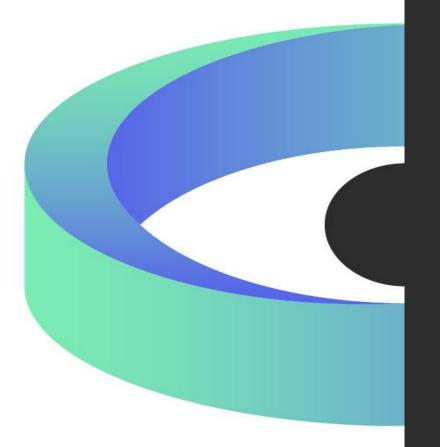
### EXPLORE & SUPPORT ALTERNATIVE XR



### WHAT IS REALITIES IN TRANSITION ?







**RiT** is an international community that aims at both exploring and supporting alternative Extended Reality (XR) productions, and experiment new narratives and creative processes.

**RiT** aims at building a strong, independent European XR creative and activist community, a think tank to tackle current and future challenges in the digital sector.



### THE EUROPEAN XR COMMUNITY

**RiT** aims at building an European XR community, composed of emerging artists, experts and mentors who want to reflect on and promote a sustainable, open and inclusive XR.



## WHO ARE WE?





#### Bruxelles (BE)



Art, Technology & Society

Linz (AT)



Marseille (FR)

CHRONIQUES

Marseille (FR)



V2\_\_\_ Rotterdam (NL)

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LABORATORIO DE ELECTRÓNICA VISUAL

Gijón (ES)



## WHAT DO WE DO?



# Establishing XR as a sustainable, inclusive tool for the common good.

"The Distraction 5" by Studio Comrades, V2, Test\_LAB: Realities in Transition 2023, Rotterdam



RiT wants to consolidate and share XR related knowledge, tools and methodologies.

RiT takes a **critical look at XR**, bringing together creation, curation and dissemination practices with education methods, privacy, ethics and sustainability issues.

# Supporting alternative XR creation to explore new narratives.

"The Collective Algorithm of Care" by Leo Scarin & Marlot Meyer, V2 Test\_LAB; Realities in Transition 2023, Rotterdamc



RiT wants to be a major actor in the XR sector, exploring new narratives and creative processes and inspiring the whole community.

Realities in Transition supports emerging XR creatives, artists and projects to incorporate common and open source methodologies as well as inclusive and sustainable practices into experimental XR creations.



### Consolidating the existing XR creative community.

minin

"Binary Deconstruction" by InDialog Studio, V2, Test\_LAB: Realities in Transition 2023, Rotterdam



RiT creates opportunities for networking and peer-to-peer learning between independent and activist XR initiatives, XR artists and researches, decision-makers, and the general public.

RiT wants to bring together these stakeholders on topics such as how to use XR as a common, open and sustainable tool in their work.

RiT is also a hub for existing independent and activist XR initiatives and promotes them, giving artists recognition at European level.



## XREXHIBITIONS





The Entropy Gardens, by collective Depart. Exhibition VRTX. LEV Festival 2020

To show the latest XR related art pieces developed by the international community of artists.

To ease the access to this works of art to a wider audience by sharing the technology required for them.

### Researching about XR cultural, social and ethical impact.





## XR LABS & WORKSHOPS





### WHY?

To transmit open source technical, cultural and critical thinking tools for XR.

To engage members of the Creative and Activist European XR community, at a European level.

### FOR WHOM?

Local students and young creators.



## RESIDENCIES





For 22 weeks, 17 emerging creators are supported by the RiT project during their artistic process. Through 3 international calls, RiT encourages inclusive and sustainable projects.

The artworks are then showcased in different exhibitions, fairs and festival supported by RiT.



## EUROPEAN XR CAMPS





Through networking activities, peer-to-peer learning workshops, conferences and hackathons, the XR Camps bring together the Creative and Activist European XR community every year.

The Camps are also the occasion to gather the community around artistic exhibition and performances of XR projects.



### EUROPEAN XR MANIFESTO



The European XR manifesto is a statement of the values, principles, beliefs and mission of the Creative and Activist European XR community.



### **OVERTE** An open-sourced, truly decentralised Metaverse





During the past event Betacamp: a streaming Party. The RiT project hosted a virtual space "We are the AI Resinthesizers" on the platform Overte.org



### What is Overte.org?

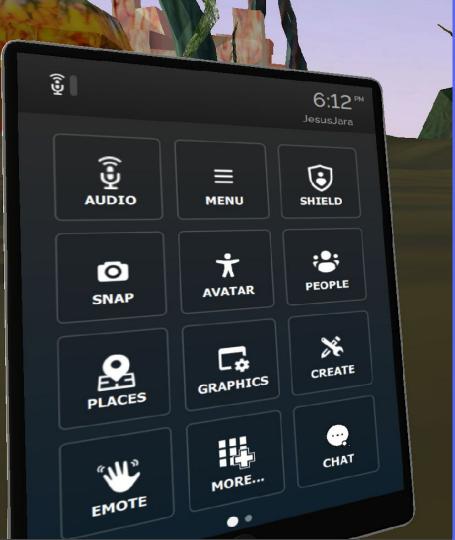
Overte is an open source virtual worlds and social VR software which enables you to create and share virtual worlds as virtual reality (VR) and desktop experiences. You can create and host your own virtual world, explore other worlds, meet and connect with other users, attend or host live VR events, and much more.

Overte.org



#### It provides:

- Collaborative world creation and editing
- VR support, including body tracking
- Scalability for up to 500 users in a single world
- Scripting in JavaScript, which allows creation of games, interactables, UI elements, and custom applications
- High quality low latency spatial audio
- Powerful physics through Bullet physics engine
- Fully open-source under the permissive Apache 2.0 license
- No central authority. You can run your own server from home.
- No user account required
- Supported by a democratic non-profit organization



We would like to share the wonderful experience of hosting a virtual space using the Overte platform.



## What will you need?

We are going to show how to run a local instance of a virtual space on a PC running Windows 10 or 11 (64-bit). Alternatively, there are documentation on how to install the software on a Linux Machine.



## What will you need?

During the process you will also need an account on Overte.org

Although it is not required for using it, it is needed to host a virtual space.



### Watch out!

We are going to show how to host a virtual space with already existing 3D models.

3D Modelling a virtual space falls outside the scope of this guide.



### This tutorial has three parts:

### Set up a Domain server

Configure your Domain settings Upload content to your Domain



### 1) Setup a Domain Server



#### **Domain Server**

Select the appropriate package for your distribution and architecture f

There are also Docker images available on hub.docker.com Ø. These i

### Windows

The Windows installer contains both Interface and the Domain Server. always rerun the installer later to install the server software afterward:

Windows Installer for x86\_64 😫

#### Note

Windows Defender might display a warning about the Windows i

#### Source

Our source code is available on our GitHub repository **@**. If you intend improvements.

Go to Overte.org >> Downloads and download the overte installer for Windows Operating System.



**Choose Installation Type** Express or Custom Install

 Express Install (Recommended) Custom Install (Advanced)

( Instalación de Overte



Selección de componentes Seleccione qué características de Overte desea instalar. X

Marque los componentes que desee instalar y desmarque los componentes que no desee instalar. Presione Siguiente para continuar.

Seleccione los componentes a instalar:

Voverte Interface V Overte Server

Espacio reguerido: 1.0 GB

< Atrás Siguiente > Cancelar

Run the installer, choose the path to install, the "Custom Install" check and then make sure you install both the interface and the **Overte Server.** 



Server - Started Version - 2024.11.1

Visit Local Server

Restart Server Stop Server Settings

View Logs

Share

GoTo

People

Quit

Inventory

Show Notifications

Once it is installed, you can go to the Windows System Tray and right click on the Overte green icon. In order to proceed, click "Settings"

#### Step 1 of 4

Connect your Directory Services to be able to make your domain discoverable and add account based authentication. You can always do this later.

Connect your Directory Services account

Skip

This will open a localhost domain-server window on your browser, asking to connect to your Services Account. Click on that.

### Get Domain Token

Generate a domain token to link your domain to your account by logging in below.

If you do not have an account yet then use the Create Account option instead.

After you press the "Get Token" button, copy the resulting token string and paste it into the domain registration page.

GET TOKEN C	REATE ACCOUNT
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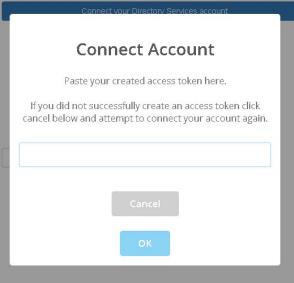
PASSWORD

GET TOKEN

This will open the server login account, where you can do two things: 1) Create your own Overte account. 2) Use your credentials to get a token, copy it and come back to the previous page.

#### Step 1 of 4

Connect your Directory Services to be able to make your domain discoverable and add account based authentication. You can always do this later.



Use your recently generated token to create a Domain in Overte by pasting it on the pop up window and give a describing and unique name for it on the following pop up window.

#### Step 2 of 4

You have been assigned administrator privileges to this domain.

Add more Directory Services usernames to grant administrator privileges

separate by commas (user1, user2,..)

Grant basic permissions to other users. You can change these later.

 Who can connect to your domain? Image: O None
 O Friends
 O Users logged into the Directory Services
 Image: Everyone

 Who can rezitems in your domain? Image: O Users logged into the Directory Services
 Image: Everyone
 Image: Everyone

 None
 Image: Everyone
 Image: Everyone
 Image: Everyone
 Image: Everyone

Back

Next

#### Step 3 of 4

Your server settings are currently accessible without a username and password. Adding credentials will ensure that only authorized users have access to modify the settings.

Create a username and password to secure the access to your domain server settings.

Username

This does not have to be your Directory Services username

Enter password

This should not be the same as your Directory Services password

Re-enter password

Steps 2 and 3 are all about granting privileges to users: Step 2 allows you con configure who can access to your world and is also able to edit content.

#### Step 2 of 4

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 Who can connect to your domain?
 Image: Construction of the connect to your domain?

 Image: Connect to your domain?
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Back

Next

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Enter password

This should not be the same as your Directory Services password

Re-enter password

While Step 3 allows you to configure who access these server settings. For a public Domain, it is very advisable to create a user and a strong password.



After that you will be asked for that user/password to enter the settings every time you open your local server settings.

#### Step 4 of 4

Would you like use automatic threading for your server's avatars and audio? If you are hosting this server on your local computer and have limited resources, consider turning this off or the server may slow down your computer when the server is used extensively. If you are running this server on a powerful system, or cloud server, and intend to have a large audience keep this setting turned on.

#### Enable Automatic Threading

	Back							Finish	
Nodes	Assignment	Content 🗸	Settings 🗸			C	O Visit in VR	Save	<b>G</b> Re
Your o	domain content s	ettings are now	available in Co	ontent					
Netwo	orking / Directo	ry Services							
Dir	ectory S	Services	Accou	nt Connec	ted Di	sconnect			
	natic Networkii								
Ful	I: update both th	e IP address ar	d port to reach	i my server					~
				ur domain-server. se full automatic netw	rorking.				
Adv	anced Settings •	•							
Place									

Last step allows you configure automatic threading for avatars or not. It is safe to leave it checked, but on slow computers might be wise to uncheck it. You will be now redirected to the administration panel of your local Overte Domain.



# 2) Configure your Domain Settings



#### Nodes Assignment Content - Settings -

Save 🛛 🗯 Restart

~

Networking / Directory Services

#### Directory Services Account Connected

Disconnect

CO Visit in VR

#### Automatic Networking

Full: update both the IP address and port to reach my server

This defines how other users will be able to reach your domain-server. If you don't want to deal with any network settings, use full automatic networking.

Advanced Settings 🗸

#### Access Token

0181257f-efb2-438b-b779-a4d9bb78c3f0

This is your OAuth access token to connect this domain-server with your Directory Services account. It can be generated by clicking the 'Connect Account' button above. You can also go to the Security page of your account on your Directory Server and generate a token with the

'domains' scope and paste it here.

#### Domain ID

a9536684-89a2-4f63-a208-6c624310fdef

create new domain ID Choose from

This is your Directory Services domain ID. If you do not want your domain to be registered in the Directory Services you can leave this blank.

#### Local UDP Port

40102

This is the local port your domain-server binds to for UDP connections

Depending on your router, this may need to be changed to unique values for each domain-server in order to run multiple full automatic networking domain-servers in the same network. You can use the value 0 to have the domainserver select a random port, which will help in preventing port collisions.

#### **Enable Packet Verification**



Enable secure checksums on communication that uses the Directory Services protocol. Increases security with possibly a small performance penalty.

Now it is time to configure our Domain. Networking / Directory Services allows you to check that you have an Access Token and a Domain ID ready for use. Other configuration settings can be evaluated on Overte Documentation.

Nodes Assignment Content - Settings

Settings 👻

Save

C Restart

CO Visit in VR

Places

#### Places

To point places to this domain, go to the Places page in your Directory Services account.

Networking / Crash Reporting

Advanced Settings 🗸

Networking / WebRTC

Advanced Settings 🗸

Places 🧧	Show Only Mine	Search		<b>9</b> .		
Thumbnail	Place Name	Users	Maturity	Actions		
	RITplace	1	unrated	Ð		
	Rows per page	: <u>10 <del>•</del></u>	1-1 of 1	< >		

Let's now check that we have a Place pointing to your domain. Check the Places link to access the Overte.org dashboard page and check under Places menu. If there is no place, you can create one and select your already existing Domain to point to it.

Nodes Assignment Content - Se

Settings 🕧 👻

😎 Visit in VR 🛛 Save 🛛 🕄 Restart

Security 🕧

#### HTTP Username

RIT

Username used for basic HTTP authentication.

#### **HTTP Password**

.....

Password used for basic HTTP authentication. Leave this alone if you do not want to change it

#### Verify HTTP Password

Must match the password entered above for change to be saved.

Approved Script and QML URLs (Not Enabled)

#### **Domain-Wide User Permissions**

Indicate which types of users can have which domain-wide permissions.

#### Standard Permissions

Type of User	Permissions ?										
	Connec t	Avatar Entities	Lock / Unlock	Rez	Rez Tempor ary	Write Assets	lgnore Max Capacit Y	Kick Users	Replac e Content	Get and Set Private User Data	View Asset URLs
anonym ous											
friends											
localho st							•				
logged- in											

You can double checked the specific account that can access the local hosted **Overte configuration**, and make sure you allow rights to localhost account. Setting specific permissions to other types of accounts: friends, logged-in or anonymous.



English 💌

Search Overte Docs

Looking for API Reference Documentation?

HOME EXPLORE CREATE SCRIPT HOST

Get Started with Hosting

Set Up a Domain Server

🖯 Configure Your Domain Settings

Set Up a Place Name

Assign User Permissions

Secure Your Domain Settings

Define Your Network Settings

Protect Your Domain's Content

Define Your Audio Environment

Add Content to Your Domain

Bring Visitors to Your Domain

Maintain Your Domain

#### CONTRIBUTE

DEVELOP

SECURITY FAQ

# Configure Your Domain Settings

You are here: **\*** » Host » Configure Your Domain Settings

Your domain comes with a comprehensive set of configuration options that let you customize its networking properties, security, behavior, and more. To access your domain settings:

- For cloud hosted domains: Open a browser and enter the URL http://<insert your server's IP address here>:40100/settings. Log in when prompted.
- For local servers on Windows: Click on the Overte icon in the system tray, then click 'Settings'.
- For local servers running on any OS, go to http://localhost:40100/settings.

#### In This Section

- Define Your Network Settings
- Set Up a Place Name
- Assign User Permissions
- Secure Your Domain Settings
- Protect Your Domain's Content
- Define Your Audio Environment

#### O Previous

Next O

O Edit on GitHub

© Copyright 2019, High Fidelity. © Copyright 2021, Vircadia. Copyright 2022-2024, Overte e.V..

For more information and for more specific configuration details and what are they used for, you can always refer to the Overte **Documentation or connect** to their Discord Server.



# 3) Upload content to your Domain





Server - Started Version - 2024.11.1

Visit Local Server

Restart Server Stop Server Settings View Logs

Share

GoTo

People

Quit

Inventory

Show Notifications

Go again, to your Windows System Tray and click over the green Overte server icon. Before continue, it might be wise to restart the Server and then choose "Visit Local Server" this time.



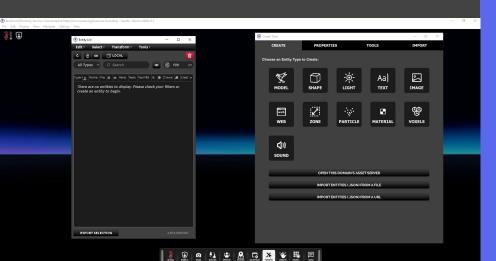
File Edit Display View Navigate Settings Help

Directory Service: Log In / Sign Up Quit Ctrl+Q



Then, the local Overte client would open and connect to your local hosted Domain. If logged out, you can log in with your same account at File > **Directory Service: Log in** / Sign Up

AUDIO SHIELD SNAP AVITAR PEORE PLACES GRAVHICS CREATE ENOTE MORE
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menu, click "Create" to open the panels for adding content and entities to your Domain. If unable to click on Create, check

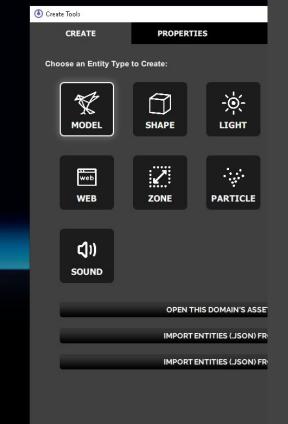
permissions on your

Under the bottom

## user.

Name
Center.gltf
Forest_2.gltf
🗅 H1.gitf
L Island_1.gltf
Island_2.gltf
🗅 MainIsland.gltf
D Mountains_1.gltf
D Mountains_2.gltf
C RIT_Logo.gltf
TheOctagon.gltf

The best way to add 3D entities to your world is by copy/pasting the url where they are hosted. Use web services like Github to host 3D models.



To link an online 3d model to your world, click on the "Create Tools" panel, under "Create" on the "Model" button.

SHIED SNAP AVATAR PEOPLE PLACE GRAPHICS CREATE EMOTE MORE... CHAT

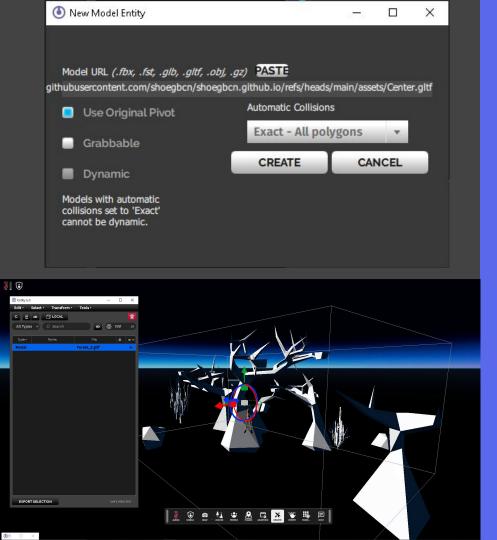
匬

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or

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selected



Paste the "raw" address of your model from Github or your web hosting service on the New Model Entity window, select if there will be collision to this object, and other properties like "grabbable". Then click on "Create". The object will be then imported to the scene. By selecting it on the left panel you can move, rotate and scale like in other 3D software platforms.





By repeating this process of pasting your 3D entities, you will see your world slowly getting into shape. The same method allows you to create and manage lighting, sound, shadows, avatars or animations.

This very same process on a public server would become accessible to other Overte users.



In case of problems or errors, the best way to get help is at the #help channel at Overte Discord server:

# https://discord.gg/4YuQvc8K2f





