



OVERTE

A Technical Introduction

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About the project

- See the previous talk

What is Overte?

- A 3D environment with VR support
- Runs on Linux, Windows, Mac
- Multiuser
- Modifiable at run time
- Scriptable
- Web-like architecture
- You can do anything you want with it
- Apache 2.0 License
- Similar examples: Second Life, VR Chat

About This Talk

- Covers several subjects quickly
- Introduces many concepts
- Takes some shortcuts
- Is intended to get people interested
- Or be a starting point for existing users
- Come to our Matrix/Discord for any help or qu

Watch the previous version!

- <https://www.youtube.com/watch?v=1aow0FXHLNw>



Today's Topics

1. Architecture
2. Compiling
3. Getting around
4. Content creation
5. Making a simple script
6. Running a server
7. Questions

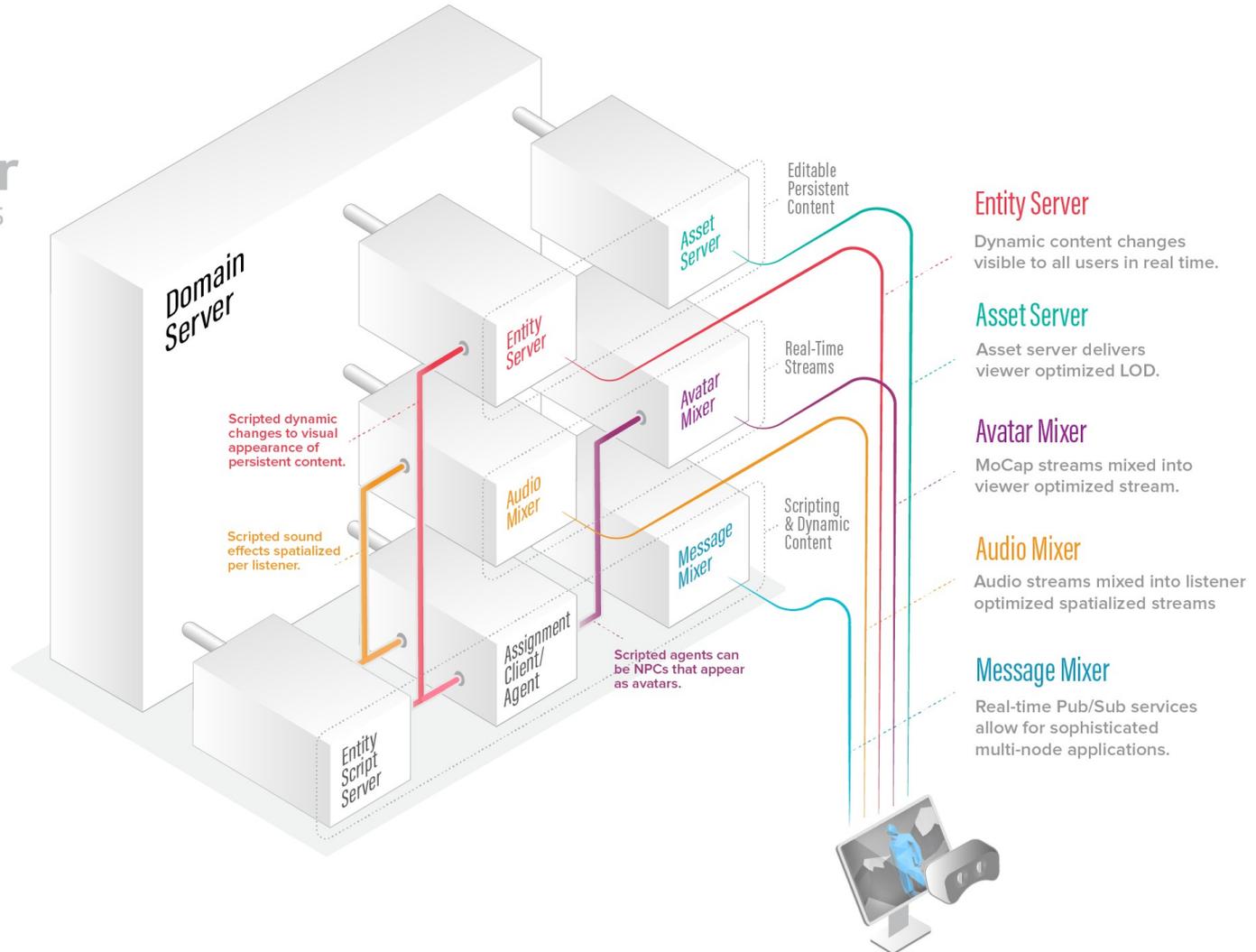
Architecture

Server COMPONENTS

Domain Server

Access Control,
Security, &
Configuration.

The domain
server scales
individual services
based on load.



Compiling

Compiling

- We have an AppImage and a Windows installer at:
<https://overte.org/#downloads>
- We have a build script:
<https://github.com/overte-org/overte-builder>
- It's also easy to build from source by hand

overt-builder

- User-friendly build script
- Supports many Linux distributions
- Downloads the source code (master branch by default)
- Builds Qt if necessary
- Uses multiple cores automatically

Compiling from source

- `$ git clone https://github.com/overte-org/overte`
- `$ mkdir build && cd build`
- `$ cmake ../overte`
- `$ make -j32`

Getting Around

Content Creation

Making a Script

Modifying the C++ code

What We Learned

- The basics of scripting
- The basics of modifying the source code
- The basics of how to extend the scripting API
- It wasn't that hard

Running a Server

Installing a Server

- Packages and documentation available at:
<https://docs.overtel.org/en/latest/host.html>

- Build with overte-builder:

```
$ ./overte-builder --build=server
```

Running a Server From Source

- From the build tree:
 - Terminal 1: `$ domain-server/domain-server`
 - Terminal 2: `$ assignment-client/assignment-client -n 6`
- Starting individual assignment clients:
 - `$ assignment-client/assignment-client`
- Go to <http://localhost:40100/settings> to configure

Individual Assignment Clients

- Start like this:

```
$ assignment-client/assignment-client -t $TYPE -p $PORT
```

- Types:

- 0: audio mixer (mixes audio)
- 1: avatar mixer (avatar presence)
- 2: unused
- 3: asset server (serves assets)
- 4: message mixer (communication between scripts)
- 5: entity script server (server-side scripting)
- 6: entity server (objects)

Questions?

Contact:

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<https://discordapp.com/invite/Pvx2vke>

