

# Syntensity

A New Open Source Platform for  
3D Games and Virtual Worlds

**Open Beta - October 2009**

# Capture-the-flag example game



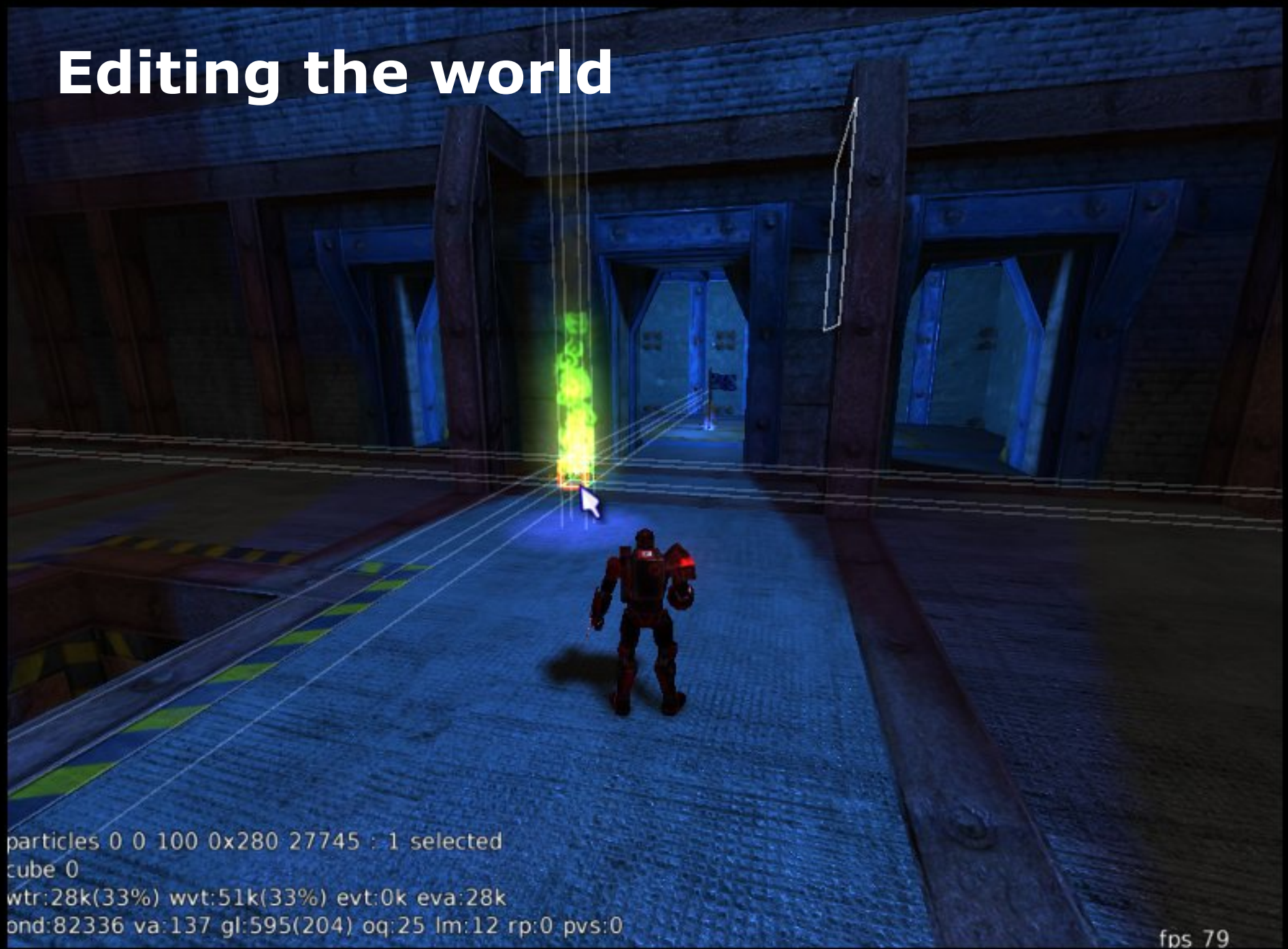
# Overview - Main Features

- **Create all sorts of 3D games and activities:**
  - First/third person shooter, platform, etc.
  - Virtual worlds
- **Can mod any existing game**
- **Play new games without (manual) downloads**
- **Free, open source, and cross-platform**
- **Technology summary:** 40,000 new lines of code +  
Cube 2 + Google V8 + Python

# In More Detail: **Modding/Editing**

- **Powerful, flexible scripting**
  - Pretty much everything (game rules, weapons, objects, etc.) is scriptable
  - Control events and behavior on both client *and* server
  - Clean, extensible API in JavaScript, running on Google V8
- **Multiplayer in-world 3D editor (Cube 2)**
  - Can also import meshes from external tools

# Editing the world



particles 0 0 100 0x280 27745 : 1 selected  
cube 0  
wtr:28k(33%) wvt:51k(33%) evt:0k eva:28k  
ond:82336 va:137 gl:595(204) oq:25 lm:12 rp:0 pvs:0

fps 79

# In More Detail: **Content**

- **On-demand automatic content distribution**
  - Always play the latest version of the game and its assets
  - No need for manual downloading, compiling, or waiting for new releases
  - Upload content and immediately play it with other people
  - Asset system supports features like dependencies, triggers, etc.

# In More Detail: **Open Source**

- **Everything - both client *and* server code - is open source**
  - AGPL (but doesn't apply to your content)
  - Project name: The Intensity Engine
- **Some of the benefits:**
  - No-risk development: Can run your content on our servers or entirely on your own
  - Can mod the engine for your specific needs, and can use it for purposes entirely separate from Syntensity

# In More Detail: **Collaboration**

- **All content in Syntensity is moddable**

- Whatever you play, you can improve upon
- Whatever you create, others can improve upon
- Approach inspired by Wikipedia, open source

- **Licensing**

- You retain sole copyright of your content, and give people a license to use it on Syntensity
- Can have whatever additional licenses you want (for example, creative commons)
- Free to use engine separately from Syntensity, with **no** licensing requirements (except for engine itself, as mentioned before)

# Motto: **Participatory Gaming**

- Anyone can play, anyone can mod
- Make it as easy as possible for people to build upon each others' content



**A world of games built from the ground up by  
the community**

# Not Just For Games!

- **Scripting API allows all sorts of virtual worlds**
  - Generic component-based entity system for easy extensibility
  - Generic event system, action system, etc.
  - Nothing gaming-specific in the API
- **Benefits of Syntensity as a virtual world:**
  - Client-side physics and scripting minimize lag
  - Low CPU and RAM requirements (e.g., <100MB for a loaded, long-running server)
  - Clean, modern API



Hi!

**Collaborative sketch world, in  
165 lines of script**

# Credit Where Credit is Due

We couldn't have done it without a lot of existing high-quality open source code:

- Cube 2/Sauerbraten (+personal thanks to eihrul)
- Google V8 despite - or because of - philosophical differences ;)
- SDL
- Python
- MochiKit
- Django
- Boost
- zlib

Thank you!

# Summary of 1st Year

- **Codebase**

- 40,000 new lines of code (not including other open source libraries and changes to Cube 2)
- Platforms: Windows and Linux (OS X soon)
- Beta: Usable, but expect rough edges

- **Documentation**

- Working code examples, tutorials, etc.

- **Games**

- Launching with 1 complete working game (multiplayer insta ctf) + some smaller activities

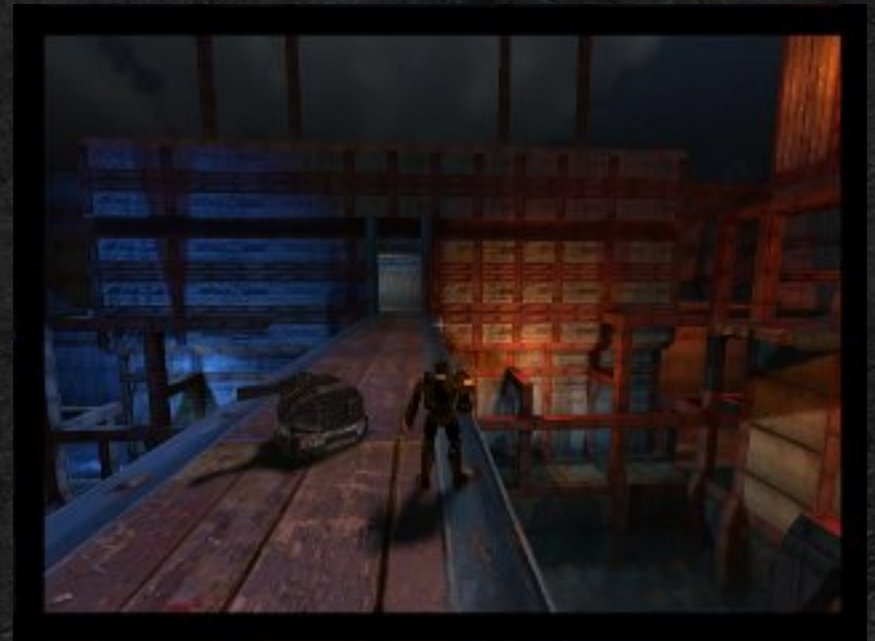
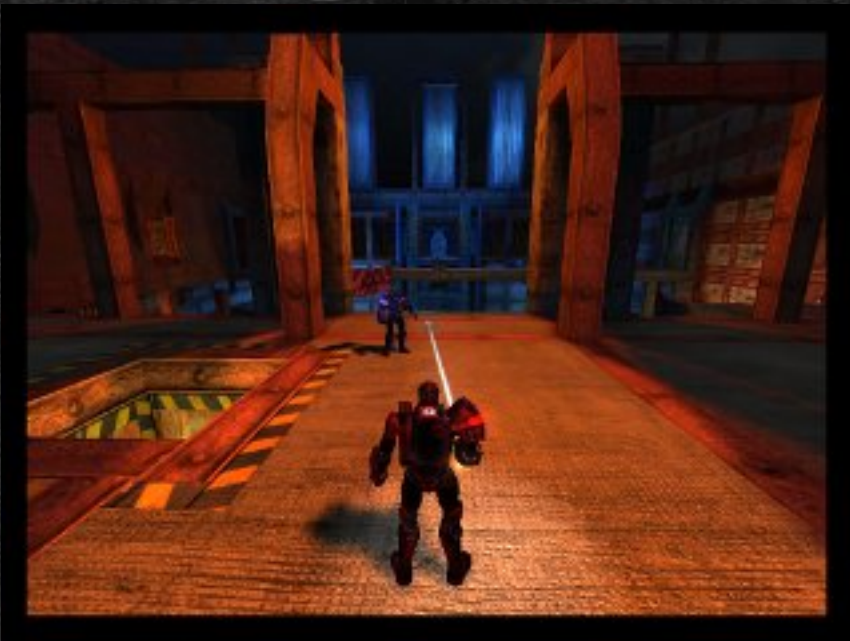
# Status & Future Plans

- **Current focus**

- Help people get started with the platform
- Make new content ourselves
- Stability and polish

- **Roadmap**

- Web browser integration
- Lots more engine features
- Hosting and other premium services (normal usage will always remain free, and the engine will of course always be open source)



<http://www.syntensity.com>

