

# Re-Lion SUIT



Virtual Reality voor training

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# Universiteit Twente Spinoff

# Hoofdkantoor Enschede



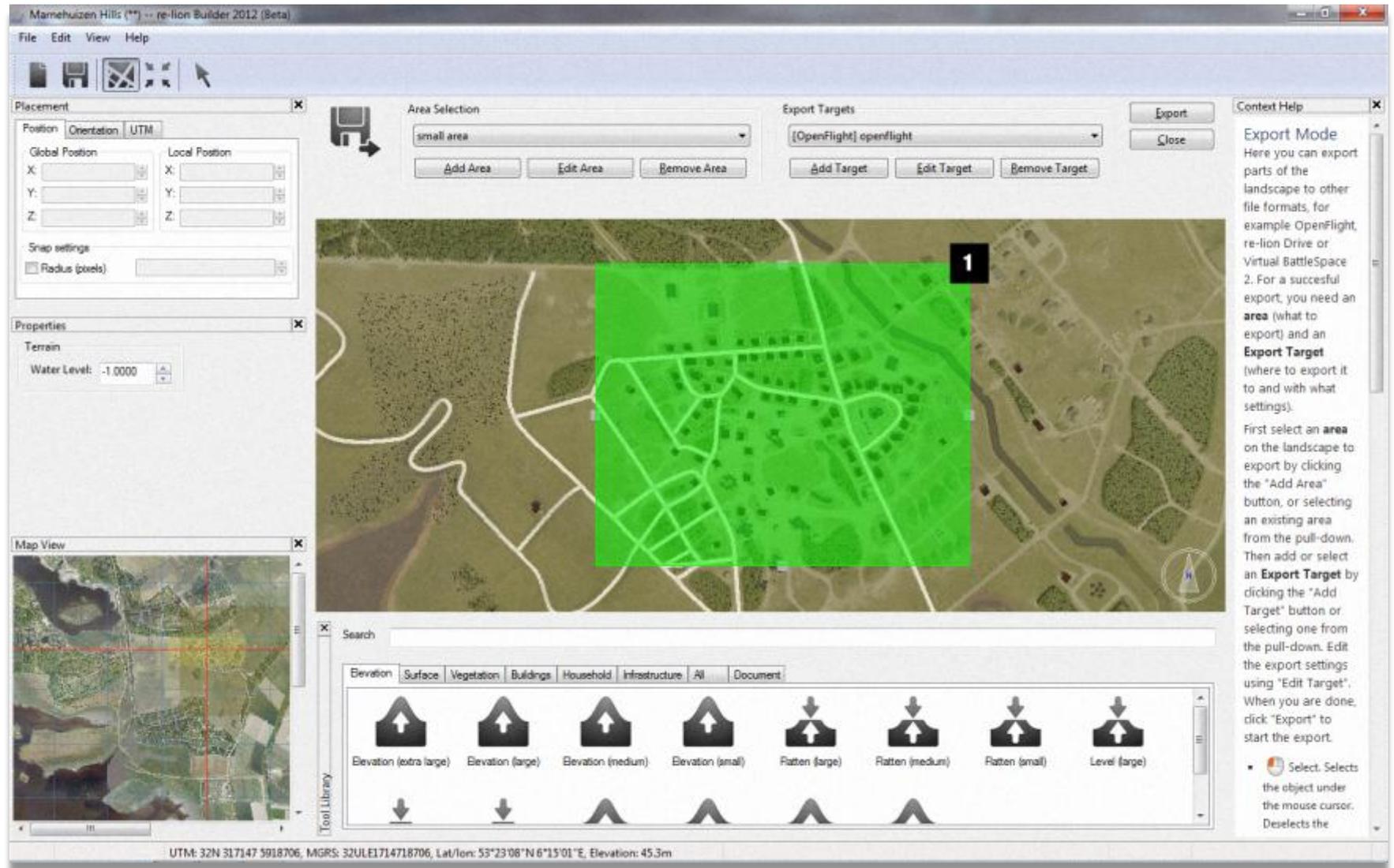


Re-lion Drive



# Re-lion SUIT

# Re-lion Builder





smartvest:  
sensing & computing device

headset: audio & video

weapon: your choice



headset: audio & video

fire hose











# SUIT Hardware

- Custom backtop



# SUIT Hardware

- Custom backtop
- Full-body motion sensors



# SUIT Hardware

- Custom backtop
- Full-body motion sensors
- Verschillende HMDs



# SUIT Hardware

- Custom backtop
- Full-body motion sensors
- Verschillende HMDs
- Draadloze wapens



# SUIT Hardware

- Maatwerk textiel



# SUIT Hardware

- Maatwerk textiel
- Verwisselbaar batterijsysteem



# SUIT Hardware

- Maatwerk textiel
- Verwisselbaar batterijsysteem
- Globale positionering



# SUIT Hardware

- Maatwerk textiel
- Verwisselbaar batterijsysteem
- Globale positionering
- Modulair besturingsstation



# SUIT Hardware

- Maatwerk textiel
- Verwisselbaar batterijsysteem
- Globale positionering
- Modulair besturingsstation
- Spectator/Review station



# SUIT Software

- Gedistribueerde simulatie



# SUIT Software

- Gedistribueerde simulatie
- Custom engine



# SUIT Software

- Gedistribueerde simulatie
- Custom engine
  - C++ met lua



# SUIT Software

- Gedistribueerde simulatie
- Custom engine
  - C++ met lua
  - Custom 3D graphics



# SUIT Software

- Gedistribueerde simulatie
- Custom engine
  - C++ met lua
  - Custom 3D graphics
  - Custom GUI



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- Gedistribueerde simulatie
- Custom engine
  - C++ met lua
  - Custom 3D graphics
  - Custom GUI
  - Bullet physics



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- Gedistribueerde simulatie
- Custom engine
  - C++ met lua
  - Custom 3D graphics
  - Custom GUI
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  - Custom network



# SUIT Software

- Gedistribueerde simulatie
- Custom engine
  - C++ met lua
  - Custom 3D graphics
  - Custom GUI
  - Bullet physics
  - Custom network
- Server/client architectuur



# SUIT Software

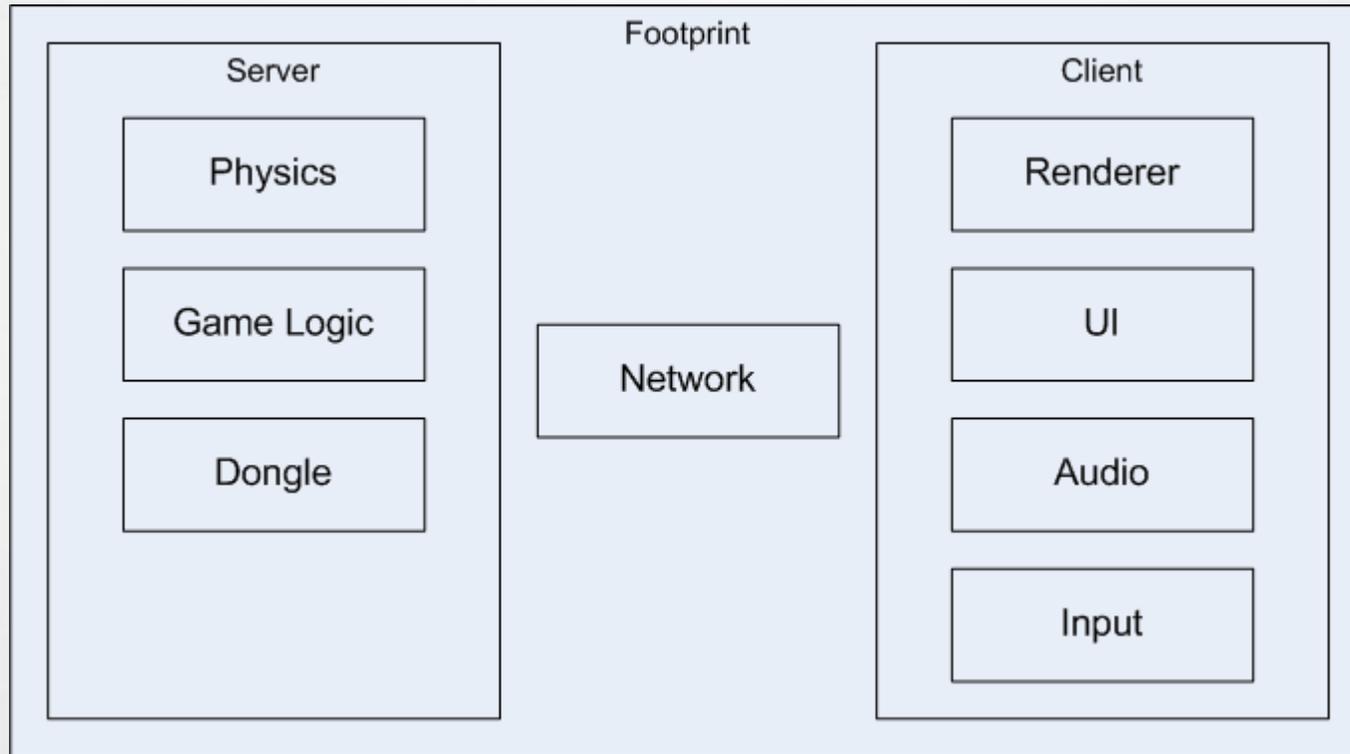
- Gedistribueerde simulatie
- Custom engine
  - C++ met lua
  - Custom 3D graphics
  - Custom GUI
  - Bullet physics
  - Custom network
- Server/client architectuur
- Verschillende type clients



# SUIT Software

- 1 Server
- Max 16 Soldiers/Instructors
- Max 32 Draadloze wapens
- 1 Besturingsstation
- N spectator clients

# SUIT Software





# SUIT Software (Client)

- Input devices



# SUIT Software (Client)

- Input devices
  - Normale FPS controls



# SUIT Software (Client)

- Input devices
  - Normale FPS controls
  - Touchscreen controls



# SUIT Software (Client)

- Input devices
  - Normale FPS controls
  - Touchscreen controls
  - Motion sensors



# SUIT Software (Client)

- Input devices
  - Normale FPS controls
  - Touchscreen controls
  - Motion sensors
  - ‘lokaal’ wapen



# SUIT Software (Client)

- User Interface



# SUIT Software (Client)

- User Interface
  - Custom Widgets



# SUIT Software (Client)

- User Interface
  - Custom Widgets
  - Cairo



# SUIT Software (Client)

- User Interface
  - Custom Widgets
  - Cairo
  - Skinnable



# SUIT Software (Client)

- User Interface
  - Custom Widgets
  - Cairo
  - Skinnable
  - Coroutine-gebaseerd



# SUIT Software (Client)

- Audio



# SUIT Software (Client)

- Audio
  - OpenAL



# SUIT Software (Client)

- Audio
  - OpenAL
  - Speex



# SUIT Software (Client)

- Audio
  - OpenAL
  - Speex
  - Push-to-talk



# SUIT Software (Client)

- Renderer



# SUIT Software (Client)

- Renderer
  - Custom Renderer



# SUIT Software (Client)

- Renderer
  - Custom Renderer
  - DirectX



# SUIT Software (Client)

- Renderer
  - Custom Renderer
  - DirectX
  - Special Projection Modes



# SUIT Future Development

- Impact feedback



# SUIT Future Development

- Impact feedback
- Graphics



# SUIT Future Development

- Impact feedback
- Graphics
- Scenario development



# SUIT Future Development

- Impact feedback
- Graphics
- Scenario development
- Meer consumables



# SUIT Future Development

- Impact feedback
- Graphics
- Scenario development
- Meer consumables
- Meer clients, wapens



# SUIT Future Development

- Impact feedback
- Graphics
- Scenario development
- Meer consumables
- Meer clients, wapens
- Outdoor



# SUIT

- Vragen?

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