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Flying Guns

A Java™ Technology Game and more

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Distributed Simulations and Games

How networked, 3D action games can be made using Java™ Technology.

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Speaker's Qualifications

- Longtime Java technology professionals
- History in gaming industry
- Experience with similar projects
- 3D, network
- C++, Direct3D, DirectPlay

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You cannot make 3D action games using Java Technology....

... we'll see!

Agenda

- Java technology for games
- 3D
- FlyingGuns
- HeadQuarter: network backbone

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A Realtime, Distributed Simulation Framework ... and a Game



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Java Technology Gaming, Goals

- Buy once, play everywhere, any time
- Multiplayer
- Technical framework
- Release early, release often
- Dynamic content
- Features for free!

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Java Technology feature checklist

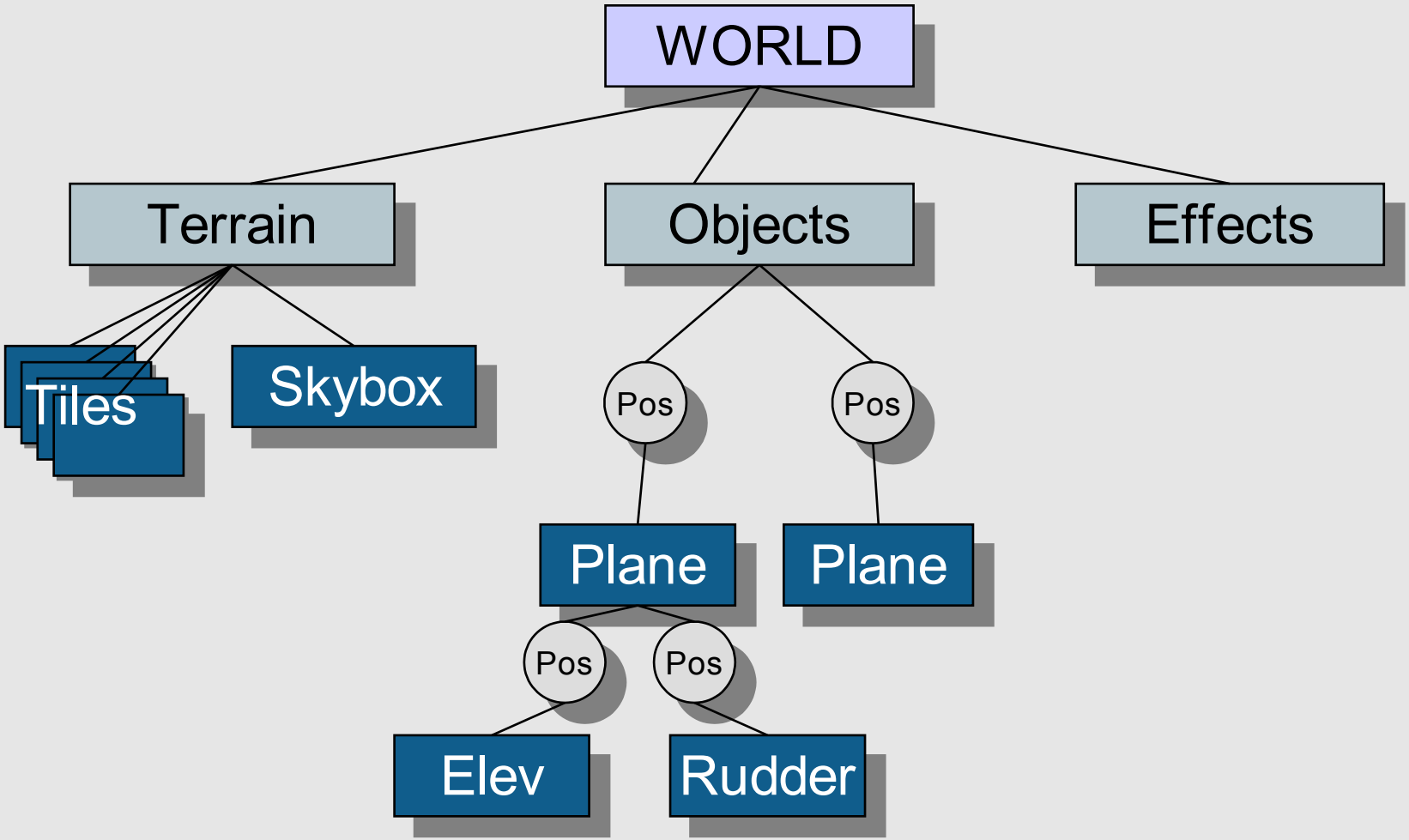
- 3D ✓
- network ✓
- libraries usable/available ✓
- deployment ✓
- tools ✓
- free! ✓

3D

- Java™ 3D API
- GL4Java
- LWJGL
- Anfy3D
- idx3d
- ...

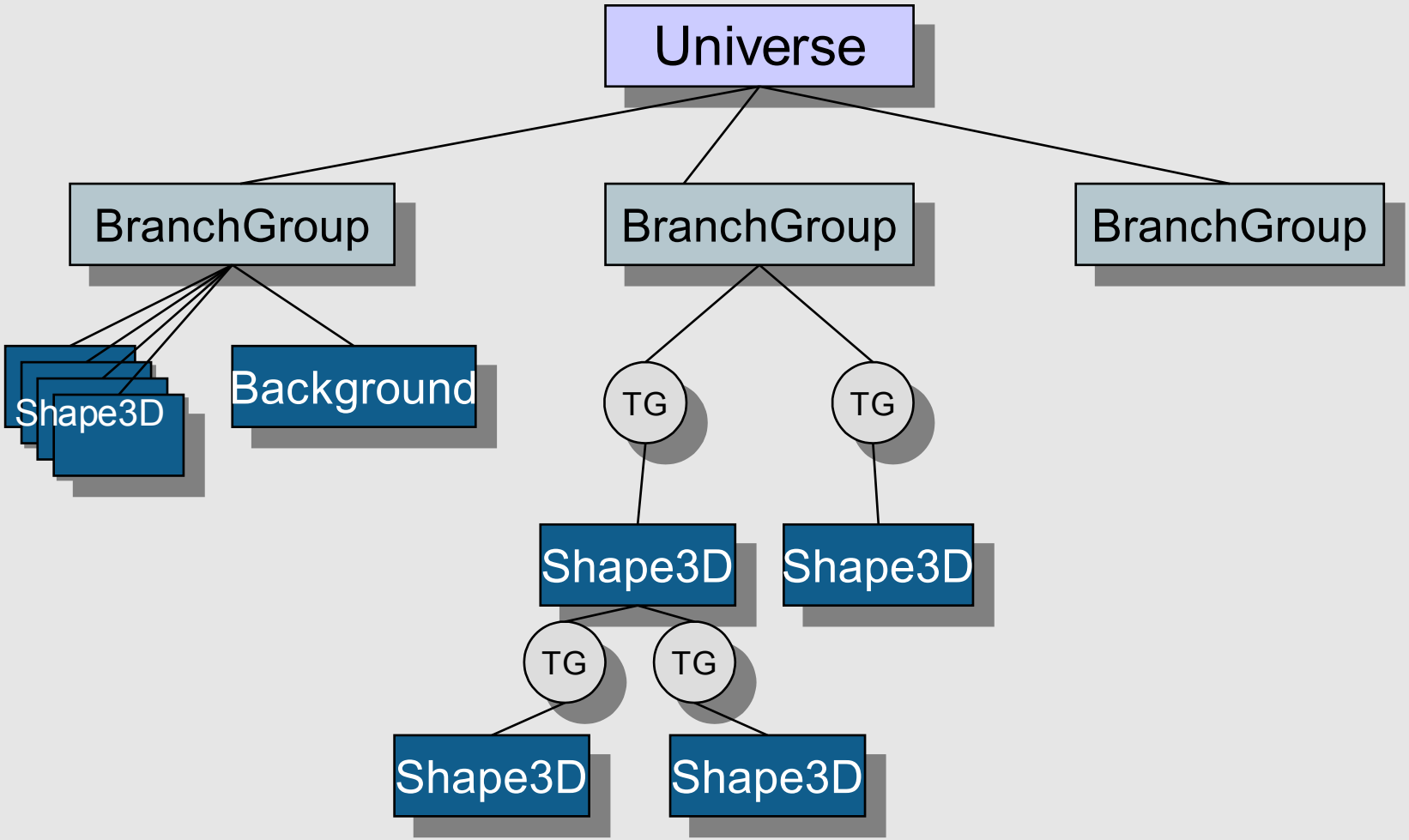
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FlyingGuns 3D



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Java™ 3D API



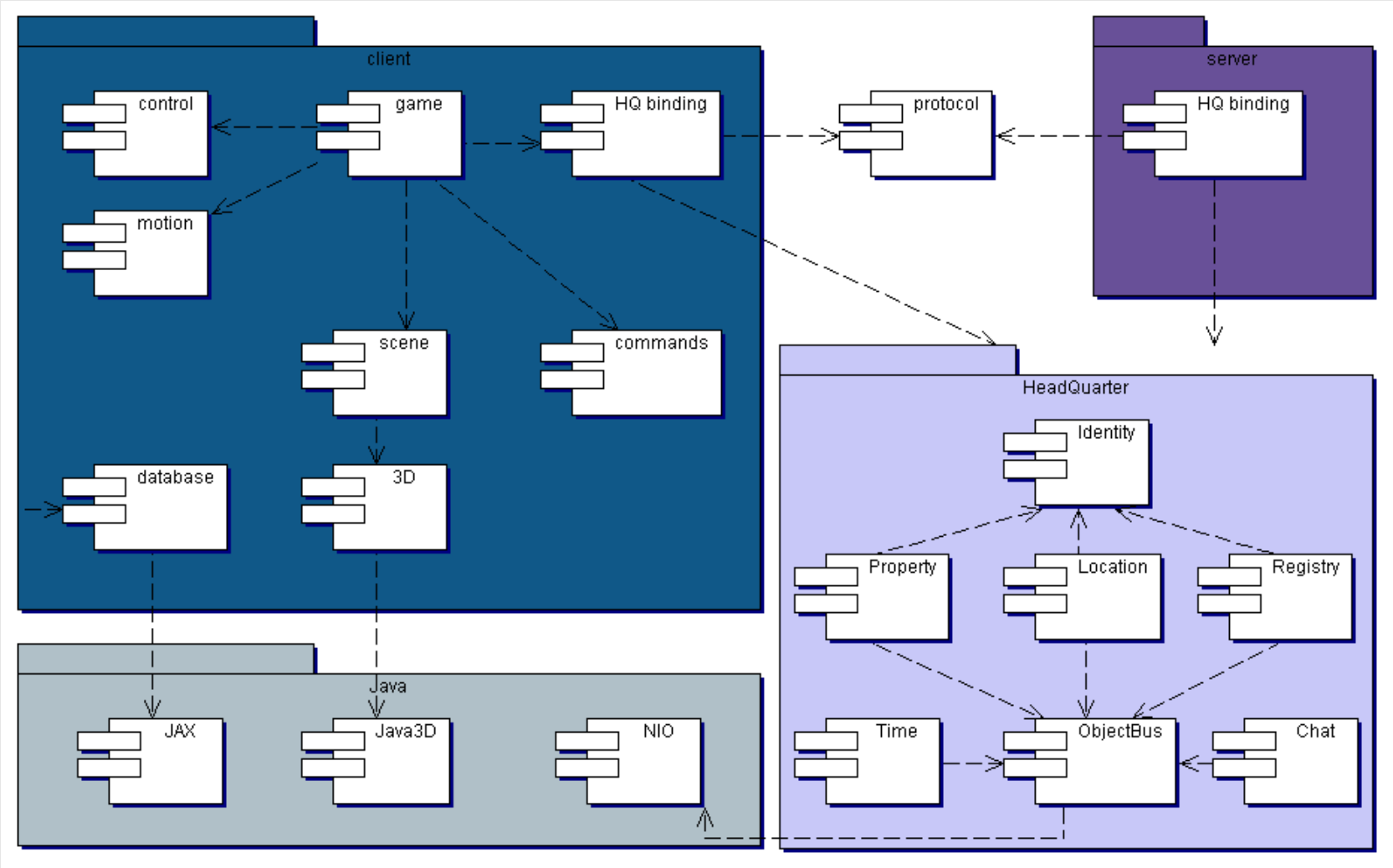
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Demo



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Architecture



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HeadQuarter

- Backbone
- Distribution framework
- Basis for Tools
  - Editors
  - Analysis
  - Admin

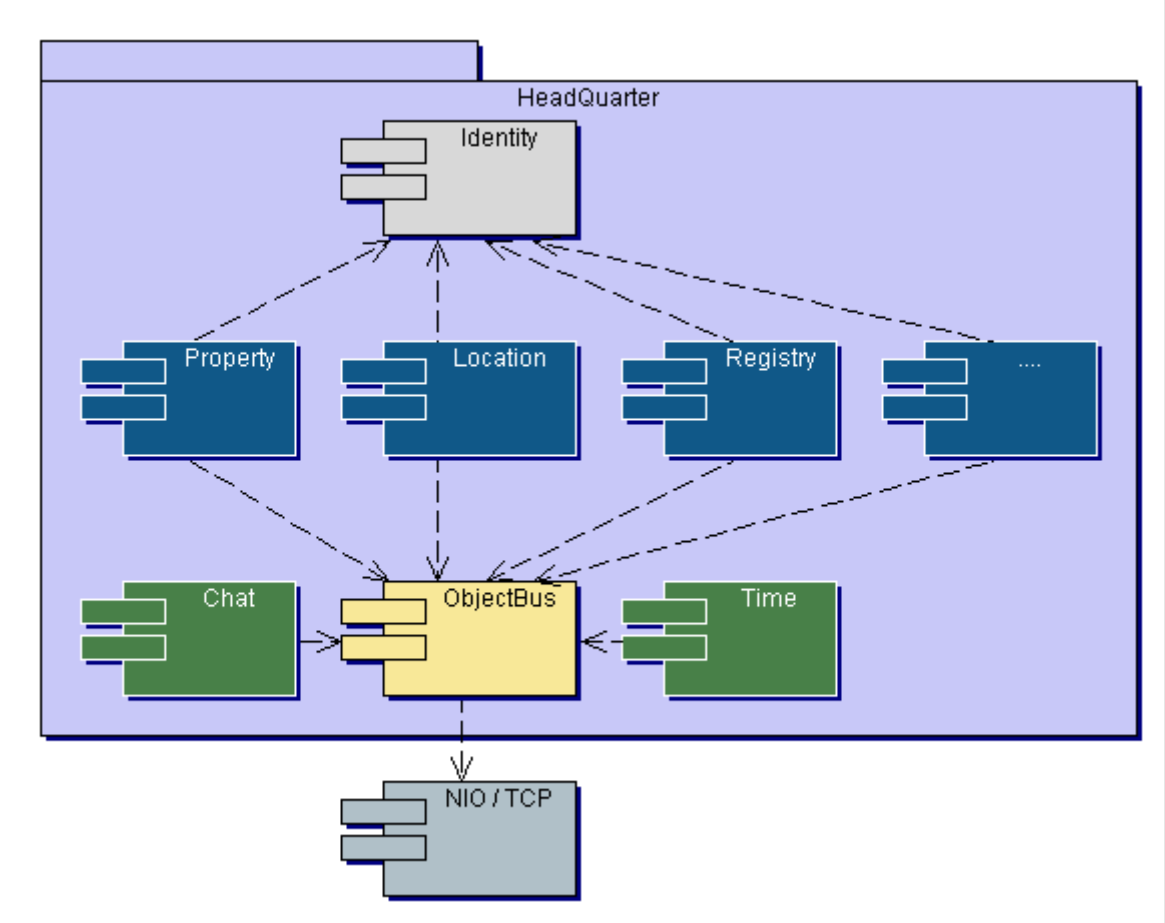
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HeadQuarter

- Collection of subsystems
- Strong notion of 'Identity'
- Network transparent distribution
- Protocol per subsystem
- TCP/IP with NIO

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HeadQuarter



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Problems

- Smoothness
- 3D sound
- Memory leaks
- Unexpected performance issues

What next?

- Add true gameplay
- Server persistance
- Release to public
- Other games/sims
  - Tanks, RC planes, car race, submarine
  - Real-world simulations
- Extend HeadQuarter to mobiles
- Turn it into a product

Advice

- Don't try to imitate mainstream games
- Choose the right game!!
  - Web enabled
  - Rich technology
  - Dynamic content
- Don't tweak if you don't have to
- Think multithreaded
- Latency hiding by gameplay

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finally....

- Questions?
- Suggestions?
- Volunteers?
- Business?
- Ideas?
- Want to fly yourself?

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http://www.flyingguns.com

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