Networking in Unity

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Unity Technologies

Networking in Unity

- HTTP and browser interface

- End to end connections

HTTP

- WWW

- WWWForm

- Yield to pause coroutine

- WebPlayer WWW security

WebPlayer WWW security

- www.a.com/my/webplayer.unity3d tries to access www.b.com/the/groovy/highscore.php

- Security requires crossdomain file at

  - http://www.b.com/crossdomain.xml

- Details in documentation:

  - http://unity3d.com/support/documentation/Manual/Security%20Sandbox.html

Browser interface

- Application.OpenURL

- Application.ExternalCall

- Application.ExternalEval

Check out WebPlayerTemplates

End to end connections

End to end connections

- Network view

- Sockets

- Session traffic

- Middleware

Network view

- NAT punch-through

- MasterServer

- Synchronization

- RPC

Sockets

- Built into .net

- Completely standard

  - Listener / outgoing

  - TCP / UDP

  - Port bind

- WebPlayer security

Socket WebPlayer security

- Requests cross-domain policy over port 843

- No listening sockets in the WebPlayer, so no WebPlayer P2P

- Same XML syntax as the WWW cross-domain policy

- Details in documentation:

  - http://unity3d.com/support/documentation/Manual/Security%20Sandbox.html

Session traffic

- Client / server - owner

- Seed distribution

- Probability evaluation

Middleware

- SmartFoxServer

  - Simple setup, lobby system, server backend, nice license for small setups/ startups

- Exit Games Photon

  - MMO solution, high performance, more complex setup - designed for heavy traffic

Resources

- http://unity3d.com/support

- http://angryant.com