Quake II .NET Demo Script

The following are steps to demo the Quake II .NET application. The radar extension only works in windowed mode, so you should not run Quake in full-screen mode.

Install

You need to install two items. The first one is the Quake II .NET runtime:

1. Run the **Quake II .NET runtime MSI** to install Quake II .NET.

The second piece is the Quake data file. The GNU public license states that the Quake data files cannot be redistributed, so you need to download the Quake II demo and manually copy the data file to the Quake II .NET installation:

2. Download and open the Quake II demo from ftp://ftp.idsoftware.com/idstuff/quake2/q2-314-demo-x86.exe. This unpacks files to your system (default folder is c:\windows\desktop\Quake2 Demo).

3. Copy the **pak0.pak** file from the **Quake2 Demo\Install\Data\baseq2** folder to the **%ProgramFiles%\Quake II .NET\managed\baseq2** and **%ProgramFiles%\Quake II.NET\native\baseq2** folders. This file is big - about 48MB and you're making two copies. If you uninstall Quake II .NET, you have to remove these two copies by hand.

Run the native version

Run the native version of Quake II .NET. The main points are:

- This is the native version of the port.
- The Quake C code was ported to C++ using Microsoft® Visual C++® .NET 2003.
- It took around 4 days to port.

Steps:

1. Run **Quake II (native)** from the Start menu. Quake starts and runs in demo mode.
2. Press **~ (tilde)** to display the command window.
3. Type **timedemo 1** and press Enter. Quake runs the demo as fast as possible, while calculating the average frame rate. Let the demo finish (the player gets killed).
4. Press **~ (tilde)** again. The frame rate is displayed.
5. Type **quit** and press Enter to exit the game.

Run the managed version

Run the managed version of Quake II .NET. The main points are:

- This is the managed version of the port; this version runs in the .NET Framework.
- Now have the flexibility to mix native and managed code: use garbage collection, .NET Framework classes, etc.

- It took around 2 days to port the native version to the managed version.

Steps:

1. Run **Quake II (managed)** from the Start menu.
2. Repeat steps 2 – 4 from the native version. You should see roughly a 15% performance drop, which is less than one might expect. The game is still completely playable.
3. After looking at the frame rate, type **timedemo 0** and Enter. This sets up the next demo.

Show the radar extension

Show how Quake code was extended. The main points are:

- Used Visual Studio 2003 to create a managed C++ class.
- Used new C++ Forms Designer in Visual Studio to create the window.
- Used .NET Framework features such as: gradient brushes, antialiasing, and window transparency and opacity.
- Use STL vector class to store the radar items.
- Took around 4 days (2 days to implement, 2 days to figure out the Quake code to integrate the radar).

Steps:

1. Type **radar** and Enter. The Quake radar is displayed in a separate window. This is a new command that was added to the Quake vocabulary.
2. Press **Esc** to display the Quake menu.
3. Select a single player game by selecting **Game** and then **easy**.
4. Move around and show how the radar is updated.

Optional steps:

1. Press **~ (tilde)** to pause the game.
2. Right click on the radar to display the context menu. You can hide or show visual elements of the radar.
3. Select **Overlay on Quake**. The radar is displayed on top of the Quake window.
4. Go back to the Quake window and press **~ (tilde)** to un-pause the game.
5. Move around and show the radar updating.
6. To quit, press **Esc** to display the menu. Select **Quit**.

Uninstall

There are two items to uninstall: the Quake 2 demo files and the Quake II .NET application.

1. Delete the folder **c:\windows\desktop\Quake2 Demo** to delete the unpacked demo files.
2. Uninstall Quake II .NET by running **Control Panel**, then **Add and Remove Programs**, and then **Quake II .NET** in the list of installed programs.
3. Delete the folder **%ProgramFiles%\Quake II .NET**. The uninstaller does not remove the two PAK files that were manually copied earlier.

Links

The following are links associated with the Quake II .NET project.

Vertigo Software – Quake II .NET
http://www.vertigoprojects.com/quake2

Id Software - original code
ftp://ftp.idsoftware.com/idstuff/source/quake2.zip

Id Software - Quake II demo (the PAK data file)
ftp://ftp.idsoftware.com/idstuff/quake2/q2-314-demo-x86.exe

Alternative download sites for the Quake II demo
http://www.fileaholic.com/cgi-sql/file-download.sql/12433