Subject: Re: TT 4.0 FULL source code Posted by StealthEye on Sat, 24 Sep 2011 21:59:59 GMT View Forum Message <> Reply to Message

Security through obscurity is the highest possible level client-side anti-cheat can achieve. For the same reason, no software license manager is ever open source, and yes, a lot of software gets cracked anyway, but usually it takes a while depending on the amount of crackers interested in it and the level of obscurity.

To give you an idea of the anti-cheat, but not going in too much details for the same reasons:

Some things can be checked from the server side; those are mostly the things BIATCH already did, and which are now indeed included in TT. It is undesirable to release this source code because it means that cheaters can find the boundaries of what -is- possible much easier with the code, although it would not likely be such a big deal.

Another category are things that can theoretically be checked (or maybe only checked to some extent considering lag and such), but are too far off the Renegade netcode to develop. For example, other games run damage detection on the server with a lot of code and specially designed netcode to extrapolate client behavior and latency and such to make it work without noticing too much lag. Doing this in Renegade (try setting UseLagReduction=0 on a Renegade FDS) just makes the game unplayably laggy, and is not a possibility.

The final category are things you cannot detect on the server full stop. Think of visibility hacks (stealth reveal, radar hack and wall hack to some extent, amongst others). The server has to send this information to the client in order for the client to know where players are, so that they won't appear out of nowhere when you suddenly turn around or pass some corner. We can only block this on a best-effort basis: there is no guarantee that noone will break these measures. I am certain however that if we -would- release the code, it would be broken within days. Since we don't, the skills needed to bypass the anti-cheat is significantly increased (you definitely need quite some reverse engineering experience), and the list of possible cheat-makers becomes very short. And it is time-consuming even for those who can.

In the field of encryption, there are better solutions than security through obscurity. In those fields, it is therefore considered unnecessary to obscure and therefore frowned upon. In this case, security through obscurity isn't as bad as you think, since it's the best that can be achieved, and it's certainly better than nothing. Renguard lasted quite a while based on the same principle, and we're hoping to get a similar result with TT.