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Dealing with Multiple Truths in Online Virtual Worlds

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ABSTRACT

Virtual environments and online games are becoming a major market force. At the same time, the virtual property contained in these environments is being traded for real money and thus attains a real value. Although the legal issues involved with this virtual property have not yet been decided, they will have to be soon. It is foreseeable that the next generation of very large virtual worlds will carry the possibility of multiple truths existing at the same time. Under such circumstances, it will be impossible to physically protect virtual property. In order to protect virtual property, virtual environment systems will therefore have to conform to certain requirements. We analyze what these requirements are in order to either prevent cheating or at least prove a digital offence has transpired. Along with greater security, this will also simplify end user support, which is one of the major cost factors for online games. [Article copies are available for purchase from InfoSci-on-Demand.com]

Keywords: *Cheats; Fraud; Games; Security; Virtual Economy; Virtual Environments; Virtual Property; Virtual Worlds*

INTRODUCTION

User numbers in online computer gaming are rapidly increasing, turning over roughly US$5 billion per year and estimated to increase to US$10 billion per year in 2009 (IGN, 2005). The games themselves have transformed from simple adventures into complex online worlds with millions of users and sophisticated virtual economies. These economies have spawned a secondary market in the real world, trading in-game items and characters, or even allowing direct conversion between real and virtual money. This real money trade alone has an estimated volume of US$2 billion per year and rising (Lehtiniemi, 2007). As the real money value of virtual property increases, related crimes and illicit activities in various forms are also becoming a serious issue. On the one hand, in-game cheating allows some people to illegitimately aquire virtual property, which is later turned into real money. On the other hand, fraud in various forms is becoming a serious issue for both players (as they become victims

of such a fraud) and game providers (because of increased support requests). Also, lawsuits are being filed regarding virtual property. Decisions regarding cheating and fraud which used to be in-house to the game providers must become much more reproducible and provable. At the same time, user numbers and therefore cheating and fraud related support requests are expected to increase rapidly, therefore such decisions must become easier and faster to do in order to limit the cost of support. Our analysis of cheat and fraud prevention, detection, and proof pays special attention to these two factors.

Since virtual property is a relatively new phenomenon, there is as yet no common policy of dealing with it and the associated problems. We argue that soon most companies will accept virtual property to be equivalent to real property and will therefore be forced to protect it much better than it currently is.

We then consider other technical and social requirements on future virtual environments and games. The enhanced protection necessary for legal security does not come easy or cheap (which is one of the main reasons why many companies are reluctant to accept virtual property as having real value). We therefore analyse the necessary requirements, before concluding with a short summary.

THE REAL VALUE OF VIRTUAL PROPERTY

The question may come up how relevant the trade of virtual property really is. Does it pay off to invest real money and programmer time into the protection of non-real objects? Though we could also argue for the ideal value of virtual goods simply because many real persons have interest in them, we shall only argue here in terms of money.

Several efforts have been made recently by designers of virtual worlds to support the trade of virtual goods for real money. One extreme case is Sony's Station Exchange (http://eq2.stationexchange.com)[1]. Via this service, users exchange game items for US$ in a protected environment. US$1.87 million have been transacted there in the first year (Robischon, 2005). Users pay for the service – the provider retains a provision – demonstrating the demand for protection in virtual economies.

Another example is Second Life, where the virtual economy is backed by a bank of issues. The exchange rate between its virtual currency Linden Dollar appear similar to "real" exchange rates on the news posts of agencies like Reuters, where it is rated as a stable currency.

Also, disputes about virtual property begin to reach real world judiciary. Some cases on virtual property were already decided in China (CNN, 2003). In May 2006, the provider of Second Life, Linden Lab, rejected a claim by attorney M. Bragg for compensation of a loss of virtual property he had invested US$2000 in before a legal court of the United States. Interestingly, the accepted amount in dispute – US$8000 – was the estimated market value of the property (Craig, 2006). Though the heavy public discussion for the case in- and outside of the Second Life community saw much more sympathy for the party of Linden Lab in this case, Linden Lab eventually settled by fulfilling all demands (Reuters, 2007b). Appreciating the 17-month reasoning of some of the most influential experts in the field, the result can be read as: A priori, virtual property IS (natural) property in an economic and political sense.

The volume of the economies in virtual worlds is estimated from around US$500 million (IGN, 2005) to US$2 billion (Lehtiniemi, 2007) per year and thus already exceeds that of the smallest national economies. But this is only the "tip of the iceberg" of its potential, because most massively multiplayer online games (MMOs) not only do not support real money trade (RMT), but explicitly try to hinder it to a certain extent. For example an extra feature of the popular MMO World of Warcraft (WoW) and others is the so-called "bind on pickup", where "bind" means the invalidation of a virtual item for RMT. The object has the attribute that it can never be owned by another subject than the first owner, hence it cannot perform as counterpart of any other change of ownership, particularly