

Madness on Demand: Future of TV

By Fritz Nelson

March 19, 2008

Today, CBSsports.com issued an additional 250,000 VIP passes for its exclusive [March Madness on Demand \(MMOD\)](#), a service that lets you watch every single game of the NCAA basketball tournament online, regardless of local blackouts. A VIP pass gives you priority access over others. The final VIP passes in the initial 500,000 allotment were claimed via registration earlier today and given what CBS Sports officials say is typical, the highest demand for access will take place the morning of the first games while worker productivity, at least for those companies not specifically blocking access, drops faster than a brokerage house market cap.

CBSsports.com monitors and throttles its system based on usage and historical data patterns. The VIP system uses a custom-built registration application (code-named Normandy) running on an Oracle database, but tied into every CBS Interactive site for a single sign-on experience, according to Tony Fernandes, VP of Technology.

The entire system is a well-orchestrated, mature system that involves a series of crucial partnerships and a heavy investment, and bet, on the future of online sports viewing.

For example, Major League Baseball's (MLB) Advanced Media Group provides MMOD's video processing and encoding services, CBS Interactive CTO Mark Kortekaas said. MLB streams hundreds of baseball games, sometimes as many as 15 at a time, so it has the infrastructure in place to handle MMOD which has, at most, four games going at a time at its peak. MLB takes feeds from the broadcast center to its office via a dedicated circuit, encodes it, inserts ads, then hands it all off to Akamai which provides content delivery services.

Fernandes told us that CBS Sports uses Business Objects to analyze data such as the number of streams, popularity of certain games, stream length, when people switch, and other interactions.

CBSsports and Akamai plan capacity scenarios for months. Fernandes pointed out that the biggest challenge here is that you only have one chance to get it right, whereas other applications (like fantasy football) can work out the kinks over time. CBS Sports has to model and predict the behavior of hundreds of thousands of users. Fernandes said that utilization is kept at about 75 percent but during peak times it can get as high as 90 or 95 percent where strict throttling is absolutely necessary. There is the opportunity for manual intervention when there's an extremely demanding scenario (say an upset is about to happen).

Much of the rest of the technology involves custom built applications, like the Waiting Room, where viewers get placed once they enter the system so that the company can

determine whether utilization rates are adequate enough to give the next viewer a good experience; an HTML page keeps track of every single user session. A favorite application among users has been the Boss Button, really just a static page that looks like a spreadsheet launched as needed at the click of a button. No technology magic there, but a clever and useful feature.

There is also the player (Windows Media Player, which Fernandes and team feel is better at live video than flash), the hosting of the site, list management, user navigation, advertising synchronization and serving; all custom. The video is already being captured since CBS is the exclusive broadcaster of March Madness. A team of 30 people run MMOD on average, and as many as 50 people actively work on MMOD during its maddening three weeks.

Ft. Lauderdale-based Sportsline started MMOD and became CBS Sportsline after an acquisition. Initially it was a paid service. The decision to go free wasn't easy, but CBS Sports had some experience with this and had seen traffic spike enormously when taking other services free. Revenue went from \$250,000 of subscription revenue in 2005 to \$4.5million in 2006, \$10million in 2007 and a projected forecast of \$21million for this year (this from CBS chief Les Moonves).

While the investment is certainly significant (custom applications, video bandwidth out the ying yang, satellite feeds), the company reuses that infrastructure for football and other sporting events. According to Kortekaas, the infrastructure is immensely scalable, meaning that there is little year-over-year investment, dropping that \$11million increase in revenue, for the most part, right to the bottom line.

Now CBSSports.com has begun spreading its footprint, offering one-click access to MMOD through ESPN.com, SI.com, Yahoo Sports, Sporting News, MySpace and [Facebook](#), according to Jason Kint, General Manager for CBSSports.com. It provided the other sites with access to its OpenDeveloper platform, Kint said, which allowed them to embed access on their sites. And clearly, from today's announcements, this strategy has already started to work.

For more coverage of the technology behind March Madness, [go here](#).