

MusicNet Response to the Joint Committee's Request for Information

1 Submission Requirements

1.1 Technology/Introduction

MusicNet is a leading digital music company providing customized music subscription services as well as download store functionality—with songs and albums available for purchase on an a la carte basis. We are a business-to-business service provider, offering a comprehensive content library and technology platform to potential distribution partners looking to offer a private-labeled, customized experience to their customers. The most widely distributed service for streaming, downloading and burning music online, MusicNet offers the music catalogs of all the major label groups including BMG, EMI, Sony, Universal and WMG, as well as many of the top independent record labels such as Ritmoteca, Sanctuary, Fantasy, Maverick, and others. Our catalog today has approximately 710,000 songs across all musical genres, with thousands of new songs added each week.

MusicNet, as implemented by our distribution partners, is an entertaining, easy-to-use, and comprehensive on-demand music service that supports both music subscriptions and download purchases. The result is an active and passive entertainment experience that blends personal collection use and new music discovery. We offer a highly reliable product with superior navigation, guaranteed sound quality, and high-speed delivery in a secure, virus-free environment.

1.1.1 Network architecture

The service is a stateless architecture which can be load balanced very easily. The protocol is HTTP. Each server that comprises the architecture can be load balanced and thus provide extreme scalability.

The physical two-tier approach for the back-end is as follows:

- **Front-end network:** This is the public network segment that is accessible from the Internet. The front-end network consists of connections of the following servers and services: middle tier business logic servers, file servers, and streaming servers. We provide a stateless load balancing solution for the front-end servers.
- **Back-end network:** The back-end network is the internal private network segment that allows secured communication between the front-end servers and the back-end database servers. This network is not directly accessible from the Internet, so no one or nothing can connect to our database servers except through front-end servers.

1.1.2 Scalability

MusicNet's infrastructure is built to scale massively, and built to support millions of users. We are currently launched on AOL, and have the greatest number of subscribers of any on-demand digital music subscription service.

The service could be deployed in two ways: the university could host the content library (MusicNet technically offers this ability but requires label approval), or MusicNet can deliver the service from our servers. Exact throughput will depend upon whether the University provides the service or MusicNet does. If MusicNet is to host the service, MusicNet will provide sufficient hardware to maintain 100% overhead of baseline traffic.

Scalability is achieved by linear throughput growth for additional resources. Throughput refers to the amount of work measured in transactions an application can perform in a given period of time (usually seconds), and is typically expressed in terms of transactions per second (tps). Scalability is the key ingredient for a high performance service, because predicting capacity requirements under load is difficult. The service scales both up (achieved by adding more resources, such as memory, extra processors, or faster disk drives to a system) and out (allows for distributing heavy load across multiple, inexpensive servers).

1.1.3 Testing and installed base

Standard software industry controls are followed and third part load and performance measuring tools are used to validate the technologies robustness.

1.1.4 Competitive approaches

Unlike other business-to-consumer offerings in the market, MusicNet is a business-to-business service provider: we power a service and/or store presented to consumers by distribution partners. In this way, distributors are able to create a private label music experience for consumers that is deeply integrated and customized whether in a site or standalone application. MusicNet has a fully documented SDK, for partners that require extensive customization their own interface and user experience, as well as a turnkey web-based solution for those partners looking for a less resource-intensive, faster time-to-market launch. For an example of one implementation of our SDK, visit MusicNet@AOL on America Online (Keyword: MusicNet) (Note: the service currently has only a subset of our full suite of features). Once established, MusicNet is responsible for the license servers and all back-end fulfillment of music.

As stated, MusicNet provides the software and backend required for a subscription service and/or a download store. We recommend implementing both. In addition to software, partner integration and development support, MusicNet does the following: provide subscriber management, secure label/artist rights and content, clear publishing

rights, report and pay label and publishing royalties, license 3rd party software, administer DRM (digital rights management) royalties, encode and host the content, and provide bandwidth.

MusicNet can provide as much or as little programming and editorial, music search and discovery as a partner requires. Among the features one will find on a MusicNet powered service are: extensive programming (e.g., New Releases, Featured Artists, Playlists, Exclusives, etc...), album downloads, playlist-based radio, shared playlists, tiered-track and album pricing, artist and album discographies, and recommendations.

1.15 Technology/Service Characteristics

MusicNet supports multiple CODEC formats, including RealNetworks and Windows Media (and might add more file formats in the future as appropriate). Files are encoded at multiple bit rates for CD-quality sound. There are three possible methods of consuming music on the service: streaming, downloads, and permanent downloads.

Streaming enables a user to listen to a file remotely over the network without a local resident copy. Downloads in a subscription environment may be accumulated in a personal library, for as long as the subscription remains current. Subscription downloads are not portable (i.e., they cannot be burned to disk) and should a subscriber cease to pay for the service, will time out in 30 days. A user can, however, play all subscription downloads accumulated in one's library while off-line as well. Permanent downloads, which must be purchased for an additional fee, enable a user to purchase legal permanent copies of songs that are burnable to disc, and are able to be transferred to portable devices.

Our music is delivered, whether via streaming or download, in DRM-encrypted compressed-audio files that have identification in each content header. Each file streamed or downloaded from the service is encrypted using DRM technology in Real and Microsoft formats and cannot be analyzed. MusicNet's infrastructure and digital rights management software deployed are highly secure, and authorized by the intellectual property holders who comprise our catalog.

Integration with a university would happen by establishing a relationship through one of our existing distributors with the university. We are currently launched with AOL and will be rolling out a service with Virgin this summer. We will have four other deals signed, and will continue to launch more distribution partners in the first half of 2004. Such partners would be major ISPs, portals, media companies, retailers, or hardware manufacturers.

The service, as conceived by MusicNet, would offer unlimited streams and downloads from our library to the paid subscriber constituency designated by the university. Students and faculty who wanted to subsequently purchase permanent downloads could

purchase them a la carte, by song or album, with a credit card. MusicNet would be able to offer such a system to users located either on-campus or off.

MusicNet has numerous third-party relationships with vendors for various functionalities within the service. These include: search, databases, streaming servers, license servers, CD burning, audio players/jukeboxes, artist bio data and recommendations.

MusicNet currently charges on a per subscriber basis, but might consider the idea of a “site license” pending modified content licensing agreements from the record labels and publishers.

1.2 Corporate Characteristics and Resources

MusicNet is a privately held company and does not disclose financial information or capitalization. MusicNet has five strategic investors which include a streaming technology company and four major labels: RealNetworks Inc., Warner Music Group Inc., Bertelsmann Inc., EMI Recorded Music Holdings Inc., and Sony Music Entertainment.

1.3 Pilot Testing

Implementation through an existing distribution partner could be achieved very rapidly, but will depend on the requirements of the university in question.

MusicNet is unable to discuss costs without a non-disclosure agreement in place. But during the recent meetings, it was noted that the vast majority of our costs are content royalties paid to the content holders. MusicNet needs more information to evaluate what university integration would entail, but would be willing to make investment toward the idea of a “pro-bono” pilot. However, this will require a renegotiation of content costs stipulated by labels and publishers. MusicNet is not in a position to absorb content costs due to the labels and publishers.

1.4 Commercial Terms

MusicNet can discuss commercial terms with the execution of a non-disclosure agreement.