portalplayer

media service framework

Supporting all Major Downloadable Media Service Providers

PortalPlayer's Media Service Framework is the industry's first standards-based compatible platform for designing personal media players that work with the majority of today's music and audio book services.

Downloadable media services and technologies that have been integrated in the PortalPlayer development platform include:

- **Audible®**
- **Microsoft® Windows Media® Technologies**
- **Musicmatch®**
- **Napster®**
- **RealNetworks®**

By supporting all the major downloadable media services and technologies, PortalPlayer enables its customers to focus on bringing personal media players quickly to market – eliminating their need to spend resources on supporting multiple formats and standards as they evolve.

Features of the Media Service Framework

PortalPlayer's Media Service Framework provides customers with the flexibility to select from a range of media service providers (MSPs) that offer music and audio books today, and video in the future. The Media Service Framework includes a range of certified services including:

- Enhanced decoders with extensions for digital rights management (DRM) metadata
- API and protocol between the PortalPlayer Operating System (PPOS) in the device and the Windows PC media player application enabling secure download to device, synchronization, and firmware updates
- Digital rights management, including encryption/decryption, and copy management. Additional services will be rolled out in 2004 expanding DRM capabilities beyond purchased download or CD burning services.

Media Service Provider Platforms

Various options exist for a consumer audio product to become download aware download-aware and supported. Audible offers a rich set of features including its DRM, chapter support, bookmarks, and resume-at-last-listen capability. Microsoft offers the Windows Digital Media Framework supported by Napster and Musicmatch. RealNetworks offers RealAudio and the Helix DRM. Additionally, PortalPlayer offers its own crypto services that will make DRM issues "transparent" to the end user when used with content from other sources.

This flexibility marks a significant change in the industry, where each portable device has been dedicated to one music service. Using PortalPlayer's Media Service Framework, customers will be able to deliver personal media players that work with a multitude of music services and ultimately will offer the consumer the ability to take advantage of the exclusive content provided by each download service and removing a potential barrier to purchase.

audible.com®

Audible.com is the Internet's largest destination for audio books, radio programs, audio newspapers and magazines that you can download to your computer and listen to anywhere and at anytime on music juke-boxes and PDAs. Audible.com was recently named the "best consumer Web service" by CNET.com (April 2003) and one of the "Best of Today's Web" by *PC World* (August 2002) featuring daily audio editions of *The Wall Street Journal* and *The New York Times* as well as *Forbes*, *Harvard Business Review*, *Scientific American* and *Fast Company*. The site offers a powerful collection of audio book best sellers and classics. There are also speeches, lectures, and on-demand radio programs. All of the programs at Audible.com are available for computer-based playback, burning to audio CD, and on-the-go listening using numerous AudibleReady™ portable digital audio players offered by leading consumer electronics and computer manufacturers.

Windows Media™ Compatible

Microsoft Windows Digital Media Platform is a high-quality digital media platform that has been adopted by consumers, content providers, solution providers, software developers and corporations throughout the world. Many of the major download content providers support the Microsoft Windows Digital Media Platform such as Napster and Musicmatch.

musicmatch®

Musicmatch Jukebox is the music lover's media player, offering the easiest and fastest way to manage, enjoy, discover and buy music in one place. Whether music enthusiasts want to burn, record and organize their MP3 collection, or simply sit back and listen to their favorite music, Musicmatch Jukebox offers every-thing needed to experience personal fulfillment through music. Musicmatch Jukebox also includes Musicmatch Downloads, the easiest way to find, buy and enjoy music. It's easier than ever to listen to your downloaded tracks and albums all in one place using the new Jukebox. Now, you can create, burn and transfer playlists with downloaded tracks and previously recorded tracks from your existing music library.

napster™

Napster is the world's most recognized brand in online music. Napster is the most full-featured digital music service, offering both a complete a la carte download store, as well as a month-to-month unlimited subscrip-tion service called Napster Premium. Napster has content agreements with the five major record labels, as well as hundreds of independents. Napster delivers access to the largest catalog of online music with more than 500,000 tracks spanning all genres and artists from Eminem to Miles Davis. Napster offers broad com-patibility to over 40 devices. Napster is a division of Roxio, Inc., (Nasdaq: ROXI), the Digital Media Company, provider of the best-selling digital media software in the world. Napster has offices in Los Angeles and New York.

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PortalPlayer Crypto Services secures MP3 files with an encryption wrapper that allows non-crypto services clients to preview the files but not play them. PortalPlayer developed its own crypto services to accommodate the fact that the new DRM schemes being deployed for music services address new music, but do not address the non-secured music already in the customer's collection. PortalPlayer Crypto Services also give the OEM flexibility to design a DRM policy that is unique to their specific needs rather than accept a pre-packaged policy.

real

RealNetworks is the leading creator of digital media services and software. Consumers use RealNetworks® RealPlayer 10 and the content subscription and download services it offers to play free and premium digital content. RealNetworks and PortalPlayer are working together to provide the complete secure digital music solution to portable music player device OEMs. RealAudio 10, with its support of MPEG-4 AAC, can be played back in the widely used RealPlayer and on the wide range of PortalPlayer platform-enabled AAC devices. PortalPlayer's platform support for the recently introduced RealAudio 10 and Helix DRM 10means that OEMs can offer support of the Real Music Store to their consumers.

PortalPlayer, Inc. is personalizing digital entertainment by providing complete platforms for computer and consumer electronics manufacturers to design innovative personal media players that integrate audio and photo capabilities. The company's award-winning, flexible silicon and software platform has been adopted by the majority of leading audio jukebox manufacturers worldwide by providing superior features and unmatched flexibility, and enabling rapid time to market. Founded in 1999, PortalPlayer is a privately-held company with offices in Santa Clara, California; Charlotte, NorthCarolina; Seattle, Washington; and Hyderabad, India. For more information, visit www.portalplayer.com.