



Project Proposal
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BeComm corporation



INTRODUCTION

The following proposal outlines several solutions that will enable the Tatung Webpad to engage with a wide variety of rich multimedia content.

The proposal is broken into three separate phases. The first phase is focused on enabling audio content on the Tatung Webpad. Phase Two extends the capabilities of the tablet to include video and telephony. Phase Three adds two simple devices that will allow the Tatung Webpad to distribute content to existing home stereos, TVs and monitors.

We hope the various solutions depicted below will evidence how quick and inexpensive it is to transform the Tatung Webpad into the market's most advanced media device. Whether Tatung chooses to serve as an original equipment manufacturer (OEM) for these products or to serve as an outsourced manufacturer, BeComm can provide great value.

Detailed within are the following solutions:

PHASE 1:

- Port Strings to Tatung Hardware
- Develop Audio Application

PHASE 2:

- Develop Video Player Application
- Develop Telephony Application

PHASE 3:

- Assemble Strings Audio Adapter
- Assemble Strings Video Adapter



Figure 1: The Tatung Webpad

The Strings enabled Tatung Webpad can view photos, play music, watch television, display video camera feeds, make telephone calls, control music playback and more....



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PHASE ONE

Outlined below are the key steps required to enable audio playback on the Tatung Webpad. First, Strings will need to be ported to the Tatung Webpad platform. This will enable Tatung's Webpad to efficiently interact with network based multimedia even when using Mira. Second, application software will be needed on the PC to allow the user to select where audio playback should happen. Both projects are described in more detail below.

PLATFORM PORTING

BeComm has had extensive experience working with embedded devices. In addition to working with companies like Intel, Gateway, Bsquare, Wind River, Frog Design and Stratos, BeComm has pioneered the development of several next generation devices.

Porting Strings to the Tatung Webpad platform is a critical step in enabling advanced media capabilities on the Tatung Webpad. The port involves the following steps:

- Port Strings runtime to Tatung hardware
- Optimize media playback on Tatung hardware and application profile
- Test interoperability of audio playback on Tatung hardware
- Test Mira integration with specified application set

TIME: 4 WEEKS

COST: \$20,000



Figure 2: Examples of Strings enabled solutions developed by BeComm. Clockwise from the top left: Media Gateway, Intel Tablet, Media Pad, Media Relay.



AUDIO PLAYER APPLICATION

Enabling music playback to distributed devices such as the Tatung Webpad will require application software on the PC. BeComm can rapidly prototype several possible solutions including using existing media players or developing custom applications that leverage the full potential of a distributed network. The schedule and costs listed below are for prototype of these applications. Release versions would include additional engineering and license fees.

Details for an audio application are listed below. A player based on existing applications such as WinAMP or Windows Media player would require a similar amount of time to prototype.

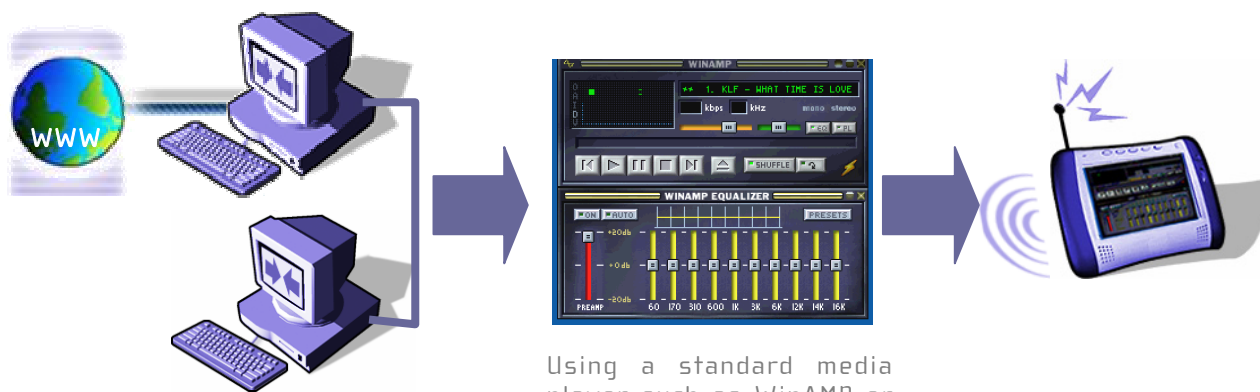
FEATURES:

- Ability to aggregate music content from multiple PCs into a single music library
- Ability to select playback to other network devices such as PCs and audio adapters (see Strings Audio Adapter)
- Ability to control audio playback on other devices such as home stereos and PCs
- Advanced browse and search capabilities based on genre, title, artist etc...

TIME: 4 WEEKS

COST: \$20,000

Figure 3: Distributed WinAMP player.



Content from multiple PCs and the internet is aggregated into a common music library. Content across PCs is automatically discovered by Strings without requiring windows file sharing. This makes for a truly plug-and-play home network.

Using a standard media player such as WinAMP or a custom audio player application, users can browse the music library based on various attributes such as music genre, category, length, artist, title etc...

Once a user selects a title, they can select any Strings enabled speaker, such as the Tatung Webpad, for playback.

The audio application can be hosted on the PC and run on the Webpad via RDP or it can be run natively on any Windows machine in the network including handhelds such as Pocket PCs. The user can also use the audio player on the Webpad to control playback on other devices such as the PC or a home stereo.

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