

# RealONE Enterprise Desktop/Desktop Manager White Paper

by Larry Bouthillier, (28 June 2002)

The new RealONE player is a marvelous platform for finding and viewing streaming media of all types. The standard player has great features for the consumer. But the needs of managing a media player in the enterprise differ from what works best in a consumer product. We'll briefly go over a few of these differences. Then we'll describe how RealONE uniquely solves those problems and makes bringing rich media to your enterprise a breeze.

## **What makes enterprise deployments different?**

First, you'll most likely want to keep your employees focused on business. To drive employee productivity, you'll probably want to remove all the distractions from the media player interface. After all, you don't need your users checking out the amazing plays from last night's big game or working on their music collection when they should be learning the latest news from your CEO webcast or your company training videos.

Of course, you want to reduce ongoing support costs. You want it to be easy and inexpensive to maintain consistency and quality of the users' experience. This means making sure users' players and components are up-to-date, and that everyone is on the same versions. It also means knowing that the player settings are correct for the best viewing experience. These settings can also affect the impact streaming media has on the corporate network, so control over these can be critical.

In some companies, security and control are vitally important. Your company may have a concern about the player making connections outside your corporate Intranet for updates, programming information, or tech support. On a related note, you'll want to be sure that the configuration is stable – no configuration changes you didn't ask for and didn't expect.

## **The Solution**

RealNetworks has created a version of the RealONE player – the RealONE Enterprise Desktop - which together with the RealONE Desktop Manager, will help with all of these issues and more. There are three basic capabilities you'll get out of the RealONE Enterprise Desktop and the Desktop Manager:

1. You'll create custom versions of the RealONE player installer with your intranet options and settings preconfigured.
2. Once you've distributed your customized players, you can remotely change the configuration preferences using RealONE Desktop Manager at any time.
3. You'll have complete control over the player's auto-update process, allowing you to push out player and plugin updates when you choose.

Let's dig into this a little and see how it works. We'll start with an overview of the RealONE Enterprise Desktop itself. The RealONE Enterprise Desktop includes all the important media playback features that make the RealONE player unique and powerful. The three-pane interface, with the Related Info and Media Browser windows are included, as is the Now Playing window, support for over 60 different media file types, SMIL 2.0, and more.

What's different about it as compared to the consumer player? First, all the consumer features are removed – including the radio tuner, the jukebox, visualizations, and the consumer content channels. This means that your users will be focused on work and not play. One feature that's optional in the consumer player is turned on in the RealONE Enterprise Desktop: TurboPlay, which provides nearly instant playback of streaming content with almost no buffering delay. The RealONE player offers myriad preferences settings, and the Enterprise Desktop player lets you,

as your company's IT desktop administrator, preconfigure these and lock down the ones you don't want users to change. Proxy settings, performance settings, network bandwidth settings, cache settings – all of these can be preset and built into the RealONE players you distribute within your company. You can even preconfigure the home page URL of the RealONE browser, or the URLs pointed at by the Help or Favorites menus.

The RealONE Desktop Manager is the tool you'll use to create and maintain your RealONE player configurations. It's a software application that you install and run much as you would the RealServer. Consistent with Real's commitment to maintaining maximum choice and flexibility, you can run it on your choice of operating systems, including Windows (NT/2000/XP), Solaris, Linux, HP-UX and AIX (HP-UX and AIX are scheduled for release shortly after the others). All of its capabilities are accessible from any computer with a web browser (IE 5.x+ and Netscape 4.75+/6.x are supported).

### Creating Custom Player Installers

Building a custom RealONE player is easy using the RealONE Desktop Manager. Naturally, you can create RealONE Enterprise Desktop players for any supported platform from any RealONE Desktop Manager platform. The Desktop Manager provides a browser-based interface to all of the settings you see in the RealONE Enterprise Desktop player's Preferences screens. (see Figure 1) The Player Setup section is where you'll configure and create your custom RealONE players. Let's look at an example - say, we're setting up player configurations for our company. First, we're going to configure a RealONE setup for our company headquarters.

First, we'll create a set of Preferences settings for our new player. Using the Desktop Manager's browser interface, we'll name the configuration we're creating: headquarters (not too clever, but descriptive!) Then, we'll select the options we want for these installations. Here are a few of the ones we might choose:

- ⑩ We'll check the **Enable Cookies** box since we'll be using the authentication features of the RealSystem platform.
- ⑩ We'll set the **Bandwidth** setting to "Corporate LAN/10Mbps" in keeping with our network infrastructure.
- ⑩ **Attempt to use multicast for live content** will be on and locked
- ⑩ **UDP port** – set and locked as per the instructions of our network administrators
- ⑩ **RTSP Proxy** setting pointing at our corporate headquarters rtsp proxy server (RealProxy)
- ⑩ Since our company has relatively new PCs with powerful CPUs, we'll set the **Playback Performance** slider to Best Quality

We'll accept the default values for everything else. Now we'll save that preferences configuration with the name "headquarters". These settings will end up in an XML configuration file that will be installed with your RealONE Enterprise Desktop players. We'll talk more about this XML file in a moment. What's important now is that we've created and saved a full set of custom configuration options that we can use for different RealONE Enterprise player installers. We can create other configuration files for other parts of our corporate network. For example, we could have one with settings for our users on dial-up, another for users in a branch office with only a T1 connection to the main network, and yet another for users with a different RealProxy server to connect to.

Next, we'll create a custom RealONE player installer. We'll select the "headquarters" preferences configuration that we've just created above, then we'll finish setting up the other RealONE player characteristics that we can customize. The Desktop Manager lets us configure the "Home" page of RealONE's integrated browser, so we'll set that to load our company Intranet home page. We'll also add "Favorites" menu items that point to our weekly CEO webcast and the daily morning financial updates videos. Finally, we'll add an item to the RealONE player's Help menu – a link directly to our corporate Help Desk. That completes the configuration of the player features.

The RealONE Desktop Manager lets you create different types of installers for each configuration. You can choose which RealONE player plugins you want to include in your distribution. You can also choose between three types of install processes. The “Silent” option will install the RealONE Enterprise Desktop player without any user interaction at all – no decisions to make or questions for your user to answer. The “Minimal user interaction” option will do an “express” install with little user interaction. The “Standard” install will prompt the user with all the usual questions, such as where to install the application and whether to include icons on the desktop or the Start Menu.

Now, just click on the big “Generate Player” button. We’ll watch it churn away as it creates the custom RealONE installer, just as we instructed. In a moment, it’s ready to distribute to our users at the corporate HQ.

### **Remote Administration**

It’s easy to see how building a custom installer for the RealONE Player can make initial deployment of new streaming media players painless. RealONE Desktop Manager doesn’t just allow you to create configuration files to build into RealONE player installers. It also lets you manage those configuration files. And, perhaps most importantly, it lets you publish them on your network.

Let’s say that you want to change these preferences for the players already distributed around your company. Perhaps you’ve had some changes to the network infrastructure, or you want to make changes to the Performance settings. RealONE Desktop Manager makes it easy to seamlessly distribute these changes to your users. Just open that configuration in the RealONE Desktop Manager and change the preferences and save your changes. Remember that XML configuration file that we made when we created our custom RealONE player installer? What you’re really doing is to update this config file on the RealONE Desktop Manager server.

When the RealONE Enterprise Desktop starts up, it looks on the network for a fresh copy of its configuration file. The configuration files can live at any URL – it’s one of the settings you provided when you created the installer in the previous step. You can have copies of your configuration files on the RealONE Desktop Manager server or on any web server. If RealONE Enterprise Desktop finds an updated configuration file, it retrieves it and loads the new settings. In most cases, users will never need to know that anything has changed. It just silently updates the settings, while still honoring the users’ own preferences that they’ve set, provided that those settings have not been locked.

### **Auto-Updates**

So, now we can build a RealONE player installation with all the correct settings and components preconfigured. We can also push out new preferences settings as we need to. But there’s one more important need. What if we want to update the player components themselves, such as adding rendering plugins for new file formats?

RealPlayer has had an Auto-Update feature since Version 7. With Auto-Update, whenever RealPlayer encounters a data type that it does not know how to play, it contacts the RealNetworks auto-update server to see if there are any new or updated player components. With the user’s permission, RealPlayer automatically retrieves the new stuff, keeping content playing without interruption and keeping the player up-to-date. Now, if you’re like many IT desktop administrators, the idea of your users’ desktop software applications changing themselves at will is probably giving you heartburn. Consistency is one key to stability and supportability in the Enterprise.

On the other hand, you still want your users to have the latest components, provided that you have control over the update process. If you've read this far, you won't be surprised to learn that RealONE Desktop Manager has the solution. In short, RDM becomes your company's own internal auto-update server. At an interval you select, RealONE Desktop Manager will connect to the RealNetworks auto-update server and check for any new components or component updates. These get downloaded to the RDM and added to a menu you see in RDM's administrative interface (Figure 3). Your IT staff can test and poke and prod the new components; and authorize the ones they approve for inclusion in the company desktop environment. Whenever a RealONE Enterprise Desktop player in your company looks for an update, it will look only at the RDM and pick up only the components you've authorized for distribution.

## **Conclusion**

Successful corporate deployments of streaming media software depend upon consistency, reliability, and some measure of control. Users want to be focused on viewing valuable business content, not fiddling with their desktop software to make it all work. Desktop managers want to minimize support calls by presetting and locking the players with the right components and settings for a good user experience. Network managers want to be able to push out new settings needed as the network evolves. Streaming media managers want to be able to push out new components as content developers take advantage of new content formats and types.

The RealONE Enterprise Desktop and RealONE Desktop Manager addresses all of these opportunities and more. RealONE gives you unprecedented power to effectively manage your streaming media deployments and provide your users with the very best streaming media experience.