

Importance of Setting MediaPlayRate Parameter Accurately

ID: 5

Creation Date: 2/10/00

Product: Burstware Bridge for Windows Media Player

Version: 1.2

Platform: Windows 95, 98, NT

Distribution: External

Summary: This technote explains the importance of accurately setting the **MediaPlayRate** parameter in a burst-enabled Windows Media Player.

Contents

The **MediaPlayRate** parameter specifies the rate, in kilobits per second, at which a burst-enabled player plays a video or audio file. To ensure the highest quality viewing and listening experience, set **MediaPlayRate** to the average encoded rate—also known as “play rate”—of the video or audio file.

The default value is 1500, as many MPEG-1 files have an encoded rate of 1500 Kbps.

Leaving this parameter at its default value of 1500 Kbps has three possible consequences:

- Burstware Server may unnecessarily reject player connection requests, thinking the player needs more bandwidth than it actually does.
- If the actual encoded rate of your content is greater than 1500 Kbps, you may data starve your player, resulting in jerky and jittery images and sounds.
- If the actual encoded rate of your content is less than 1500 Kbps, there may be a substantial delay before the video or audio starts playing.

The Math Behind Delays

Windows Media Player requires four seconds worth of data in its buffer before it will play. Suppose your content is encoded at 38 Kbps and your connection to the Internet is over a 56Kbps modem that averages 42 Kbps.

Multiply 4 seconds by the play rate to yield the amount of data the player will buffer. Divide the resulting amount of data by the connection speed to yield the amount of time the player will wait before beginning play:

If you set **MediaPlayRate** correctly, the player waits 3.6 seconds before beginning play:

$$4 \text{ seconds} \times 38 \text{ Kbps} = 152 \text{ Kb}$$

$$152 \text{ Kb} / 42 \text{ Kbps} = 3.6 \text{ seconds}$$

If you fail to set **MediaPlayRate** and it defaults to 1500 Kbps, the player waits 143 seconds before beginning play:

$$4 \text{ seconds} \times 1500 \text{ Kbps} = 6000 \text{ Kb}$$

$$6000 \text{ Kb} / 42 \text{ Kbps} = 143 \text{ seconds}$$

JavaScript Sample

This JavaScript code below can be used to burst an ASF file encoded at 38Kbps. This code sample is for a burst-enabled Windows Media Player.

```
<SCRIPT LANGUAGE="JavaScript" TYPE="TEXT/JAVASCRIPT">
<!--
    plyFile = "themill.mpg";
    cdtList = "bsrv01:8018";
    burstParam = "?MediaPlayRate=38";
```

```

function playNewFile() {
    document.MediaPlayer.Stop();
    newFileName = "burst://" + cdtList
    + "/" + plyFile + burstParam;

    if (navigator.appName == "Netscape") {
        document.MediaPlayer.SetFileName("\\\\"
        + newFileName +
        "&metafile=.burst");

        // No ? necessary before metafile
        // because burstParam has one

    else {

        document.MediaPlayer.FileName =
        newFileName;

    }

    document.MediaPlayer.Play();
}

//-->
</SCRIPT>

```

HTML Sample

This HTML code can be used to burst an ASF file encoded at 38Kbps. This code sample is for a burst-enabled Windows Media Player.

```

<HTML>
<HEAD>
<TITLE> Burstware - Simple embedding of the Windows
Media Player</TITLE>
</HEAD>
<BODY

```

```
<P>

<object id="MediaPlayer" classid="clsid:22D6F312-B0F6-
11D0-94AB-0080C74C7E95"

codebase="http://activex.microsoft.com/activex/
controls/mplayer/en/nsmp2inf.cab#Version=6,0,0,0"

standby="Loading Microsoft Windows Media Player
components..."

width="352" height="315"

type="application/x-oleobject">

<param name="ShowStatusBar" value="True">

<param name="PlayCount" value="0">

<param name="AutoStart" value="True">

<param name="FileName" value="burst://bsrv01/
t38.asf?MediaPlayRate=38&BufferType=memory">

<embed type="application/x-mplayer2"

pluginspage="http://www.microsoft.com/windows95/
downloads/contents/wurecommended/s_wufeatured/
mediaplayer/default.asp"

name="MediaPlayer" showcontrols="1" autostart="1"
showstatusbar = "1"

filename="\\burst://bsrv01:8018/
t38.asf?MediaPlayRate=38&BufferType=memory
&metafile=.burst"

Width="352" Height="315" PlayCount="0">

</embed>
</object>
</BODY>
</HTML>
```