

# Documentation for creating Streaming Video Library in Greenstone

## Introduction

- ✓ For collection based on audio/video media files including MPEG-1, MPEG-2, MPEG-4, MPA, WMV, WMA, ASF, MP3, QuickTime etc.
- ✓ This documentation gives brief instructions for developing a Media Streaming Video Library in Greenstone. For media streaming Unreal Media Server is required at the server end and Streaming Media Player is required to be installed at end user's desktops. TCP protocol is used for communication between client and server. This protocol may not work satisfactorily if a firewall is installed on server. For more information about such and another aspects of Unreal Media Server and Steaming Media Player please visit website of Unreal Media Server at <http://www.umediaserver.net>
- ✓ Please note that this documentation works for Windows platform.
- ✓ **Important:** Before starting your work and to get an idea of such Online Video Library project a visit to IIMK's Digital Library (Video Collection at <http://intranet.iimk.ac.in/gsd/cgi-bin/library>) is **highly recommended**.

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### 1.0 Prerequisites at server end

#### 1.1 Unreal Media Server

Downloaded from <http://www.umediaserver.net/download.html>

Downloaded file: UmediaServer.zip

#### 1.2 Streaming Media Player

Downloaded from <http://www.umediaserver.net/download.html>

Downloaded file: StreamingMediaPlayer.zip

#### 1.3 Sample audio/video media files

In MPEG-1, MPEG-2, MPEG-4, MPA, WMV, WMA, ASF, MP3, QuickTime format.

#### 1.4 Greenstone collection

A simple collection in Greenstone based on HTML documents.

## 2.0 Installation Process

### 2.1 Setting up Unreal Media Server

Extract the downloaded UmediaServer.zip file. Following two files will be extracted

- a. UmediaServer.msi
- b. UhttpProxy.msi

### 2.2 Installing Unreal Media Server Version 4.0

Double click UmediaServer.msi & follow the default installation procedure. (If using Windows 2000 or later, install it for everyone)

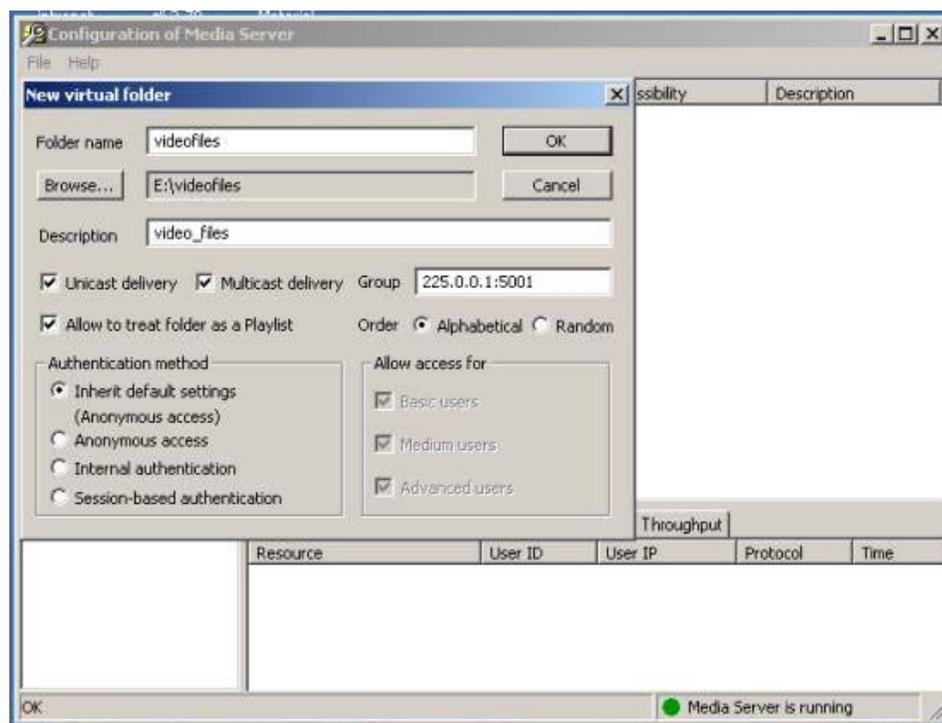
### 2.3 Where to store video files?

Create a folder on a drive of your computer e.g E:\videofiles

Open Media Server Configurator (To do this, Click Start > Programms > Unreal Streaming )

Right click File Resources to create a virtual folder. Give folder name as videofiles.

Browse for folder location i.e E:\videofiles and enter videofiles in description field.



### 2.4 Installing Unreal Http Proxy IIS extension Version 4.0

Double click UhttpProxy.msi and follow the default installation procedure.

This installation should make a virtual directory uhttpproxy in Default Website Menu of Microsoft IIS (web server).

**Important:** Verify c:\inetpub\wwwroot\uhttpproxy directory for uhttpproxy.dll file. If it doesn't exist there, then follow below mentioned uhttpproxy.dll file installation procedure.

#### 2.4.1 Installing uhttpproxy.dll file (Please read above instruction before proceeding)

Download uhttpproxy.dll file from <http://www.umediaserver.net/bin/uhttpproxy.zip> and copy it to c:\inetpub\wwwroot\uhttpproxy directory. (The necessity of this file is discussed at <http://www.umediaserver.net/faq.html>)

## 2.5 Installing Streaming Media Player Version 4.0

Extract the downloaded StreamingMediaPlayer.zip. Following file will be extracted StreamingMediaPlayer.msi  
Double click StreamingMediaPlayer.msi and follow the default installation procedure.  
**NB:** Streaming Media Player will be required at client end.

## 3.0 Creating Greenstone collection

This collection will be based on simple HTML documents

Copy the downloaded and extracted StreamingMediaPlayer.msi file in E:\videofiles folder so that users can download Streaming Media Player on their desktops.

Create a separate HTML web page for every available video file. Create a link to the video and files and Streaming Media Player. E.g. [http://ip\\_address/videofiles/hrdvideo.mpg](http://ip_address/videofiles/hrdvideo.mpg)

Create a link for downloading the Streaming Media Player i.e. [http://ip\\_address/videofiles/StreamingMediaPlayer.msi](http://ip_address/videofiles/StreamingMediaPlayer.msi)

A outline of such HTML page is given below.

```
<!--html code starts here -->
```

```
<html>
```

```
<head>
```

```
  <title>Video Library </title>
```

```
</head>
```

```
<body bgcolor="#DEDEDE">
```

```
<div align="center">
```

```
<h2>Media Streaming : Video Library Project</h2>
```

```
<h3>If you are viewing videos from this collection for the first time, please download
```

```
<a href="http://localhost/videofiles/StreamingMediaPlayer.msi">Streaming Media Player</a>
```

```
<br />
```

```
<a href="ums:\\TCP:localhost:5119\videofiles\mgmt.mpg">Introduction to Management</a>
```

```
</h3>
```

```
</div>
```

```
</body>
```

</html>

<!--html code ends here -->

Include this file in collect/collection-name/import directory  
Build the newly created collection

## 4.0 Testing phase

Browse for the newly created collection

Select the desired title from the collection by performing search or browse & click the desired links such as link for download Streaming Media Player or displaying the video file. Before viewing please ensure that Streaming Media Player is installed on the desktop.

## 5.0 Example collection

For viewing an example collection built on the above approach, you can visit the Digital Library at IIMK <http://iimk.ac.in/gsdل/cgi-bin/library> and take a look at the 'Videos' collection <http://iimk.ac.in/gsdل/cgi-bin/library?site=localhost&a=p&p=about&c=avideo&ct=0&l=en&w=utf-8>

**Note:** This collection is strategically built as a bibliography collection, keeping the Digital Library server relieved of the intensive server-loads in dealing with the hefty audio/video files.

Please send your comments/suggestions at [sharad7703@yahoo.co.in](mailto:sharad7703@yahoo.co.in)

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