

MARQUIS PARTIAL FILE RESTORE

INDEX WEB SERVICE API

CONTENTS

Introduction	2
New in This Version.....	2
Documented but still to be implemented:	2
PFR API Calls.....	3
Indexing a File	3
Requesting File Index Status	4
Returned XML	5
Requesting File Byte Offsets	6
Returned XML	7
Partial File Request	8
Partial File Request Status	9
Returned XML	9

INTRODUCTION

NEW IN THIS VERSION

This release include the extra API calls and functionality required for the Spectra Logic Black Pearl Partial File Restore solution.

- fileoffsets – Request the byte offsets from an index for a set of in and out timecodes
- partialfile – Request the creation a media file from a partial restored segment of the original

DOCUMENTED BUT STILL TO BE IMPLEMENTED

- partialfilestatus – Request the status of the partial file creation process

PFR API CALLS

The PFR Index Web Service API is a REST Interface that listens on TCP/IP port 60792.

INDEXING A FILE

Call Name	indexfile
Call Type	GET
Parameter	filepath The full path (via a mapped drive on the StorNext MDC) to the media file to be indexed.
Returns	See section below – Returned XML

NOTES

This method will block while the index is created and will only return when either the index file has been created or for some reason it has not been possible to create the index file.

On file systems that leave stub files on disk, such as StorNext, if a request is made to create an index for a media file which has been truncated, this call will cause the entire media file to be restored by StorNext.

The Web Service will support multiple concurrent calls to this command.

EXAMPLE

The following example shows the HTTP request to send PFRIndexer a request to index the media file S:\Test\File1.mov:

<http://PFRIndexer:60792/indexfile?filepath=S:\Test\File1.mov>

REQUESTING FILE INDEX STATUS

Call Name	filestatus
Call Type	GET
Parameter	filepath The full path (via a mapped drive on the StorNext MDC) to the media file whose status is to be retrieved.
Returns	See section below – Returned XML

NOTES

This method will block while retrieving the index status for a previously indexed file.

This method internally uses an XML file, generated by the indexer to retrieve the detailed status.

The Web Service will support multiple concurrent calls to this API call.

EXAMPLE

The following example shows the HTTP request to request from server PFRIndexer the status of media file S:\Test\File1.mov:

<http://PFRIndexer:60792/filestatus?filepath=S:\Test\File1.mov>

RETURNED XML

The return from either of the above calls is a packet of XML that describes the result of the call. In effect, internally, when requested to perform an index on a file, we then request its status and make that the return packet of the call.

Failed To Index

```
<?xml version="1.0" encoding="utf-8" ?>
<IndexerReport IndexResult="Failed" IndexTime="2011/10/21 15:30:15"/>
```

Good fileindex or filestatus call

```
<?xml version="1.0" encoding="utf-8" ?>
<IndexerReport IndexResult="Succeeded" IndexTime="2011/10/21 11:40:53"
FileStartTC="01:00:00;00" FileDuration="1800" FileFrameRate="29.97"/>
```

filestatus when file not present

```
<?xml version="1.0" encoding="utf-8" ?>
<IndexerReport IndexResult="Error File Not Found"/>
```

filestatus when file not indexed

```
<?xml version="1.0" encoding="utf-8" ?>
<IndexerReport IndexResult="Not Indexed"/>
```

Call Name	fileoffsets
Call Type	GET
Parameter	filepath The full path (via a mapped drive) to the media file whose partial offsets are being requested. tcin Timecode ¹ of the first frame requested tcout Timecode of the last frame requested fileframerate Frame rate, as returned in the file status report
Returns	See section below – Returned XML

NOTES

This method will block whilst retrieving the start and end byte offsets for the requested timecodes. The offsets are extended in order to handle GOP and interleave ordering.

EXAMPLE

The following example shows the HTTP request to retrieve the byte offsets from the media file S:\Test\File1.mov:

<http://PFRIndexer:60792/fileoffsets?filepath=S:\Test\File1.mov&tcin=00:00:10:00&tcout=00:05:00:00&fileframerate=25>

¹ Timecode format should be in form hh:mm:ss:ff for non-drop framerates and hh:mm:ss;ff for drop framerates

RETURNED XML

The return from the **fileoffsets** call is a packet of XML that describes the result of the call.

Good fileoffsets call

```
<?xml version="1.0" encoding="utf-8" ?>
< fileoffsetvalues fileoffsetsResult="Succeeded" in_bytes="0x0060000"
out_bytes="0x0080000"/>
```

fileoffsets when file not present

```
<?xml version="1.0" encoding="utf-8" ?>
< fileoffsetvalues fileoffsetsResult="Error File Not Found"/>
```

PARTIAL FILE REQUEST

Call Name	partialfile
Call Type	PUT
Parameter	filepath The full path to the media file whose partial offsets are being requested. tcin Timecode of the first frame requested tcout Timecode of the last frame requested fileframerate Frame rate, as returned in the file status report part_file Full UNC path to partial restored file fragment out_filename output file name for partial media file (care should be taken that this does not clash with other part restores, e.g. from other sections of the same source file)
Returns	Standard HTTP Status code

EXAMPLE

http://PFRIndexer:60792/partialfile?filepath=\\host\share\file.mxf&tcin=00:01:00:00&tcout=00:02:00:00&fileframerate=25&part_file=\\host\media\temp\partfile&out_filename=MyRestore.mxf

Notes

This method will use the parameters supplied to generate a Marquis XML file that will be used to create the partial output file.

PARTIAL FILE REQUEST STATUS

Call Name	partialfilestatus
Call Type	GET
Parameter	targetpartialname The out_filename value passed in the Partial File Request
Returns	See section below – Returned XML

Notes

This method will return status (% complete) for the creation of a partial media file initiated using the Partial File Request API call.

Still to be implemented.

RETURNED XML

For Existing Job:

```
<?xml version="1.0" encoding="utf-8" ?>
<partialfilestatus phase="[Pending|Parsing|Transferring|Complete|Failed]" per-
centcomplete="26"/>
```

For Non-existent Job:

```
<?xml version="1.0" encoding="utf-8" ?>
<partialfilestatus error="Job not found"/>
```