



Packet Ship *Timeline* IPTV Recorder

Release Note 1.2 “Hooke” Update 2

Package	Version	Revision
ps-captured	1.2.2	1



Release Note

The 1.2 "Hooke" Update 2 release of the Packet Ship Timeline IPTV recorder contains improved support for near-live streaming in conjunction with the Streamline 3.1 Update 4 release. It also has improved support for some 'interesting' H.264 encodings for live indexing.

In summary the changes are:

- Incompatible change to get-playlist request
- Removal and rename of playlist generation configuration options
- Option to regularly sync() disk cache
- H.264 indexing improvements

This update is recommended but not essential unless these features are required.

Change to get-playlist request

To provide better support in the Streamline video server for near-live streams, particularly with HLS output, the `get-playlist` request used by Streamline to locate files to stream has changed. The sender (in this case Streamline) must now provide a start time, and the response returns the real time of both the start and end of the playlist.

This change means that to support live streaming both Streamline and Timeline must be upgraded together, to 3.1.4 and 1.2.2 respectively.

Change to playlist configuration options

Because it is now the sender's responsibility to quote a start time for live streams, the previous **current-lead** attribute of **<playlist>** has been removed.

The remaining configuration options for event-based requests have been renamed as **lead** (previously **programme-lead**) and **tail** (previously **programme-tail**) of an **<event>** element (previously **<playlist>**):

```
... capture configuration ...  
    <event lead="5 minutes" tail="5 minutes" min-percent="98" />  
...
```

Option to regularly sync() disk cache

The Streamline video server reads disk data using direct reading (`O_DIRECT`) by default, which means it does not use the Linux disk cache. The Timeline recorder, however, does write captured data through the disk cache. Hence left to its own devices the Streamline server would see data somewhat later that could be achieved ideally, leading to a longer delay from capture to output.



There are two solutions to this:

1. Disable direct read in Streamline: This has the benefit that the recently captured data is likely to be in disk cache already, but the disadvantage that the efficiency of disk access for all other types (VOD, NPVR) is reduced.
2. Force a regular sync() in Timeline to ensure the captured data is written to disk.

A new configuration option allows a regular sync() to be scheduled to provide (2):

```
<disk>
  <sync interval="1"/>
</disk>
```

The interval between calls to sync() is set by the **interval** attribute of a **<sync>** element in a new top-level **<disk>** element. The default is 1 second.

H.264 indexing improvements

Still more weird and wonderful H.264 encodings have come to light and the live indexer has been fixed to support these.