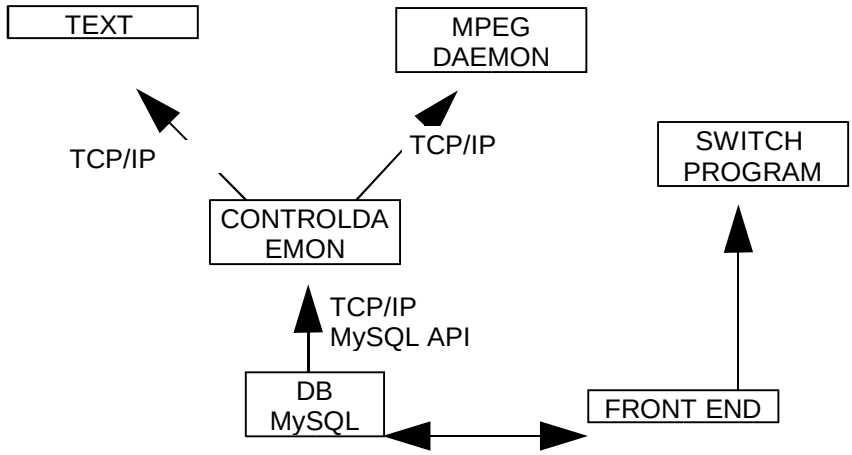
stoic Playout System Development meeting 2
Friday, 14th June 2002, 1200
Present: Andy Bennett, Paul Wortley, Tim Harcourt, James Robinson
Apologies: Rich Vodden

Software layout



Switch Unit

4 bit parallel interface to control unit, selects one from ten inputs. Suggested inputs:

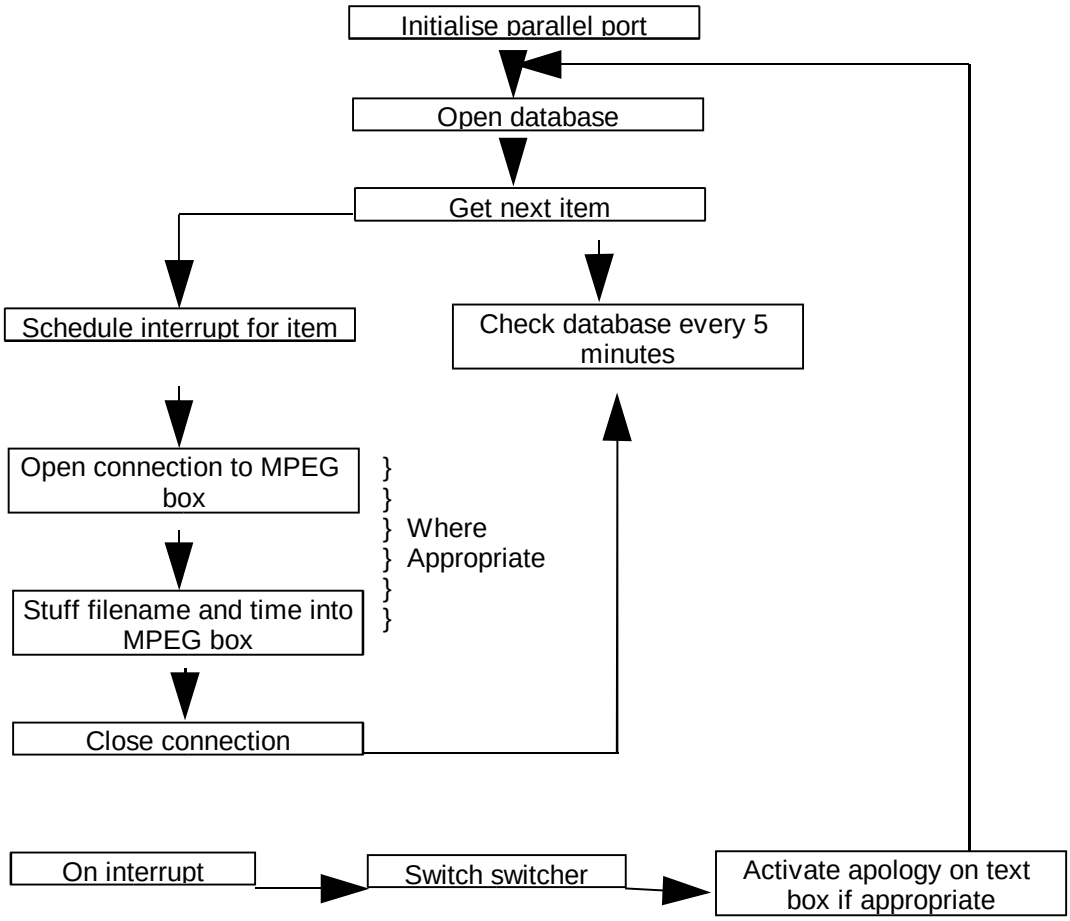
1) Text box with IC Radio
2) Text box without IC Radio
3) MPEG box
4) Tuner
5) (Sky? – some discussion of licensing issues, possible in long term)
6) Live
7) Black
8-10) Spare

Andy B has investigated the control of the existing switch hardware. Some circuit design is required to interface the existing switch with the control daemon. Also discussion of status LED's and overrides on front of unit, possibly utilising an EPROM.

General agreement on the switch unit was reached, hardware to be mounted in 1U box in cool room, possibly using existing interface case.

Action: Andy B / Tim to develop electronics / hardware immediately (pref. by 22/06/02).

Control Daemon



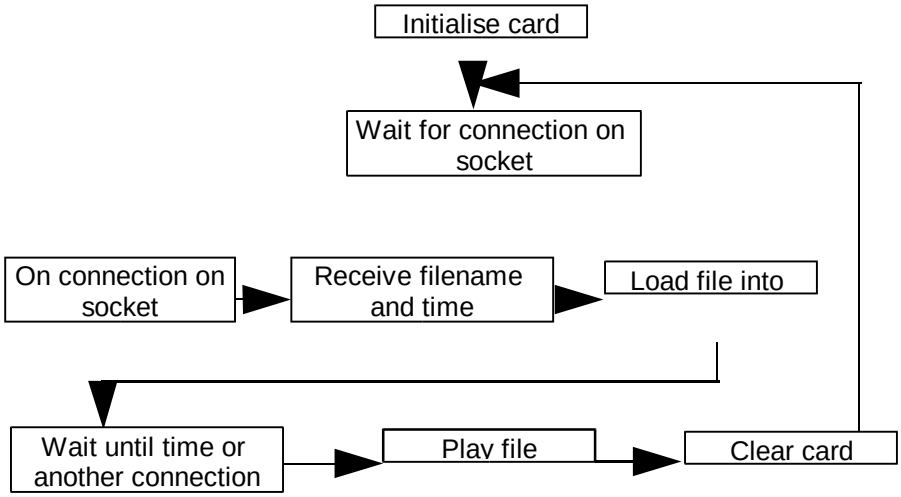
Controls overall stoic output – schedule database, text service, MPEG playouts, live broadcasts etc.

Communicates over TCP/IP, therefore can be run on any box/OS. Likely candidates at this stage are the text box or Crossroads. Paul mentioned that Andy G was intending to commission Crossroads as a (very small) render farm.

Andy B has investigated the MySQL API (see below) and envisages no problems other than monitoring changes to the schedule. Was proposed that control daemon polls database for next programme every 5 minutes. This would not allow late schedule changes, so Paul proposed this reduced to 30 seconds (allowing scheduling of random adverts before programmes at the last minute (well, the last 30 seconds!)). A 30 second poll interval was agreed.

Action: Andy B to write daemon, no specific deadline (see project deadlines below).

MPEG Daemon

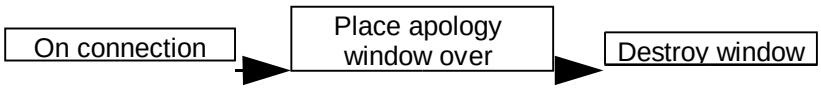


Plays MPEGS – running on Win 2K machine already in cool room.

No major issues, other than how to check system heartbeat and reboot machine when necessary.

Action: Andy G to write. Liaise with Andy B.

Text Daemon



Proposed that text service becomes full screen browser window to allow more active content as simpler maintenance. Separate daemon to listen on TCP/IP port to display apology message when a programme is playing (in case of failure) and remove it on completion.

Paul mentioned this had been tried before but text box was unable to render pages without unsightly gap in broadcast. To be investigated again - existing image based system to be kept if this is the case.

Action: Andy B / Rich

Front End

To be developed as a web based interface to allow ease of upgrades and user interface. To be restricted to stoic computers and username / passwords.

In terms of scheduling, will edit schedule database, while aware of 30 second minimum notice period (see above).

In terms of direct switch control, to integrate with a simple switch program to change to live transmission when necessary. It was agreed that a forced switch to live could be problematic, so live scheduled programs must be confirmed before transmission begins by gallery crew. A delay of 5 seconds would be required to account for processing delays.

Database

As was agreed previously, a database would offer most flexibility. Since Andy B and James have most knowledge of MySQL and it has a C API this is the preferred system. This can integrate very simply with a web interface for the front end.

James also mentioned the possibility of integrating the tape archive into this database, managed by same front end. Thus any program can be scheduled, if no MPEG available then list of sources can be displayed.

At this point the issue of data storage came up. Priority of purchase of DVD burner increased. All scheduled programs to be copied to hard disk at time of scheduling. Storage space may become an issue in the future, possible large (~80GB) hard drive purchase suggested in long term.

Action: James to draw up specifications of front end / database and tape archive system, to be approved by rest of team before development over summer. Andy B mentioned that Andy G already has some archiving scripts – please advise of status / possible compatibility.

General Comments

Clocks on all computers to be synchronised with internal time server.

Entire system must be complete by 15/9/02 for intensive testing before start of term. Paul to develop front end to old system in case of failure over the summer (independent project).

Meeting closed ~ 1330

All comments to tech-dev@ashurst.eu.org