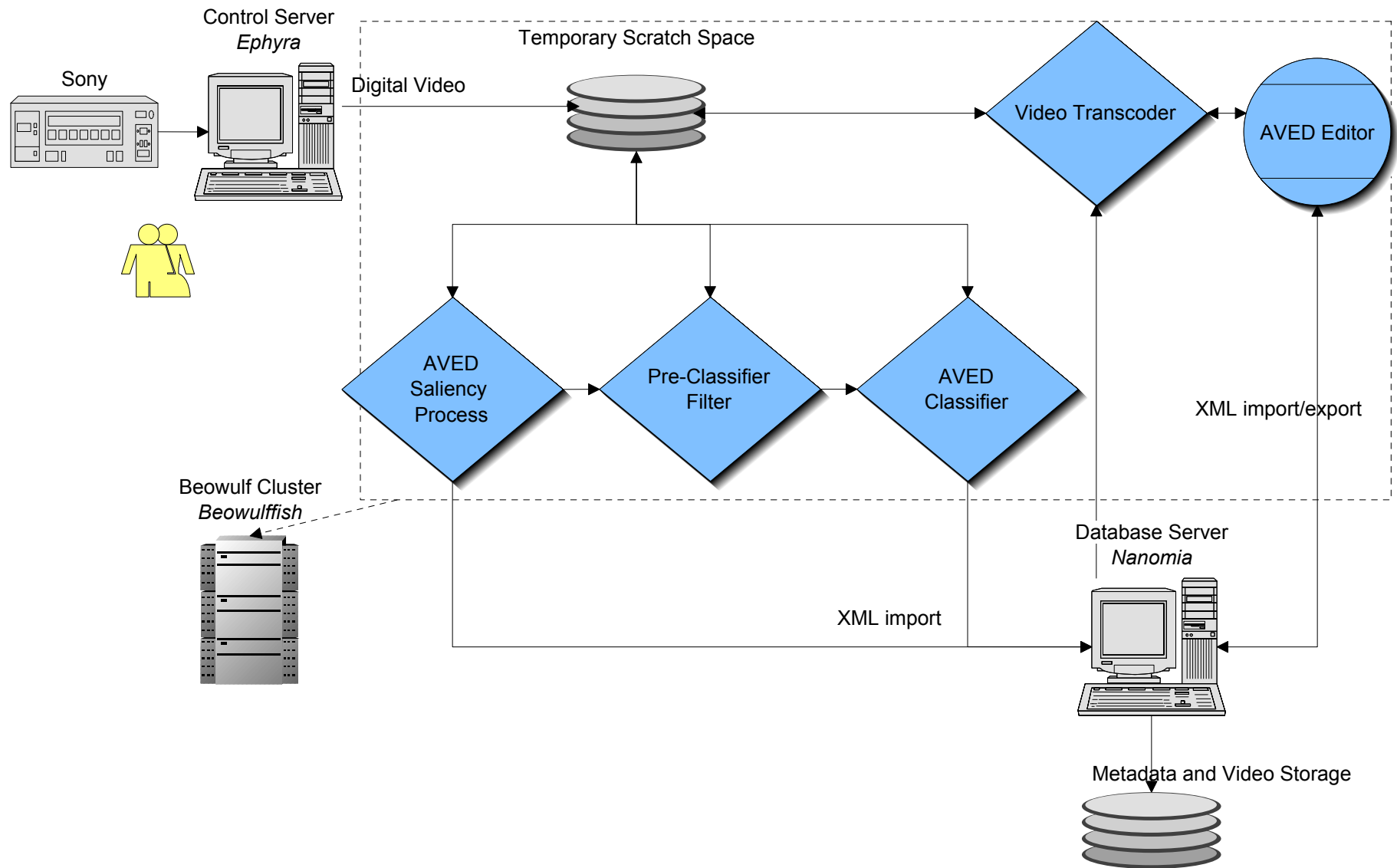


AVED Workflow



Components

Control Server - Single point for AVED control. Digital recording control, AVED Editor, and other tools to coordinate processing run here.

Temporary Scratch Storage - Temporary RAID storage for still frames generated from tape, a digital video (master) Quicktime file, or other digital format.

This is a fast fiber-RAID for rapid read and write access times for work flow speedup.

AVED Process - Frame based Automated Video Event Detection process that outputs AVED XML metadata for ingest into Database Server, and, optionally, outputs event-centered clips for input to classification system.

Pre-Classifer Filter - Filters event-centered clips to find "best" representation for AVED classifier

AVED Classifier - Matlab based classifier tool to recognize objects.

Video Transcoder - Transcodes from digital master to another format and/or resolution, e.g.

(1) Transcode master to high resolution clip using AVED key frames, e.g. generate keyframe for every new event.

This could be used to create intelligent fast forward to AVED events for general preview/edit.

(2) Transcode master to high resolution event-centered clips. This could be used to identify animals in isolation, or in conjunction with item (1) for preview/edit

(3) Transcode master to high resolution event-frames for classification/identification research.

(4) Transcode master to high quality MPEG-2 compressed video to send to another person or process.

(5) Transcode master to low resolution streamable format for preview over web.

AVED Editor - Graphical editor to modify AVED results

Database Server - Dedicated server for AVED database transactions.

Metadata and Video Storage - RAID storage for long-term storage of AVED metadata, still frames, and clips.