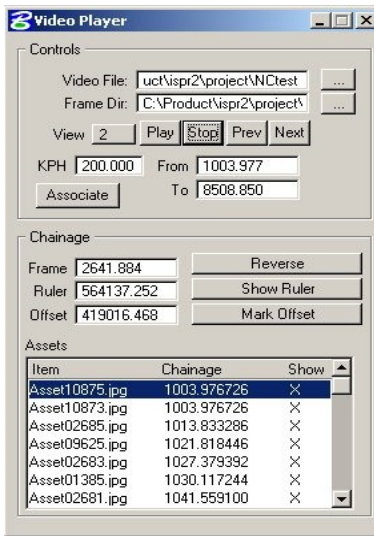


CAD-VMT (Video Microstation Tool)

Developed by dhp11 as an add-on to ISP. This tool is used for displaying train survey videos in Microstation view windows which are associated with a specified track. This is useful for signal sighting and such like.

Even when a survey video is unavailable. Survey point asset imagery can be used instead and played in TCL direction sequence giving the illusion of a video. Asset images which do not show the track clearly can be removed from play giving a smooth transition.

The Interface



The main dialog allows you to select either a video file, or a directory of ISP asset images to play in sequence. The video can be played back using the standard video control. The user can specify speed in KPH and the view to display the video in.

The integration into ISP means you can play back the video and at the same time a view displaying the geographic will update with the corresponding position.

The interfaces also shows current chainage, the duration of the video

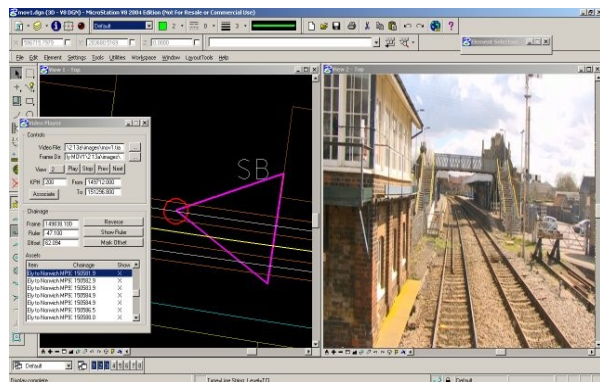
and current frame, and the ability to show or not show specific frames (useful if using the asset imagery if a video is unavailable)

Calibration

Sometimes the asset imagery in ISP gets out of step with the CAD-VMT. There are ways to calibrate the interval and interpolate the corresponding frame.

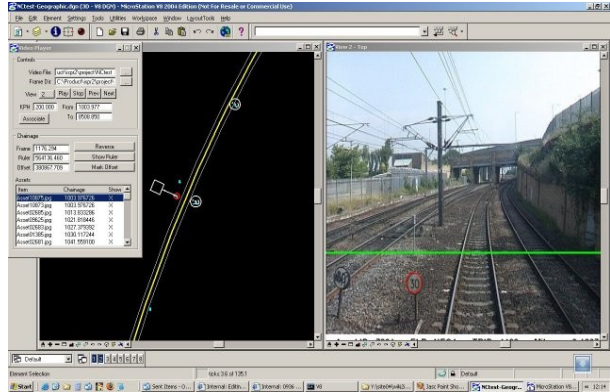
A field of view (FOV) is constructed automatically (the purple triangle below). A red circle is shown displaying the position it believes corresponds to the current video frame. If the user believes this to be incorrect, they would move the FOV triangle and line the base of it up with what they believe to be the correct frame of video.

In the example below, the FOV is being aligned with the building corner. You would sample a few of the asset frames in this way and the application would interpolate the rest.



Placing Assets

There are tools within CAD-VMT to measure the distance in the current frame of video and place assets in the associated ISP project



Accuracy Of Placement

In order for an accurate placement of features using the CAD-VMT ruler and offset feature you will need to specify details of the camera position that took the imagery. Details would include, the height of the camera, the angle, the fields of view – horizontal and vertical, and approximate the percentage of sky and ground in all the images. The calculations are based on simple trigonometry.

