This tutorial deals with the implementation of a video decoder using the Motion-JPEG format. The main idea is presented in the paper "Platform-Based Design From Parallel C Specifications", Ivan Augé, Frédéric Pétrot, François Donnet and Pascal Gomez, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Dec. 2005, vol. 24, num. 12, pp. 1811-1826. It is a beta version presenting uni and multiprocessor implementations, and includes a pratical on how to make the OS evolve, and addition of drivers. It requires the MutekA kernel installation (also under evolution, so please contact us for setting up the correct environment).