INTRODUCTION

The “HKUST TV Network” system is a set of programs for broadcasting real-time video on the internet. Nowadays, multimedia information exchange has become essential on the fast growing internet industry. The high bit-rate of video data, however, raised some problem such as the limitation in bandwidth and the unstable condition of the internet. An effective solution is thus important to the development of live video broadcasting on the internet. In this project, we will implement a high quality video broadcasting system using some latest techniques.
The “HKUST TV Network” system uses H.264 video codec with MDC error concealment technique and MP3 audio codec to achieve high quality and no degrading video streaming.

**H.264 Video Codec**

In most video streams, the signal sequence contains a large portion of redundant bits of patterns. To decrease the size of the transmitted video data, a latest codec called “H.264” will be used. This codec can compress the video data by eliminating some redundancies, to give a much higher bit-rate.