

Structure passed to thread

```
struct FILEs {  
    char *input_file;  
    char *first_output;  
    char *second_output;  
    int status;  
    //status 0 nothing done  
    //status 1 input_file read  
    //status 2 svd done  
    //status 3 Sx.bin written  
    //status 4 reconst file written  
    int num_bytes_rd;  
    int mem_allocated;  
};
```

Thread: thread that reads and image and performs the Single Value Decomposition SVD. The singular values and the reconstructed image are written in files.

Structure used by thread for thread variables

```
struct th_var {  
    float w[256], *pw;  
    int m,n,i,j,p,q,result,len1,len2,len3,len4;  
    //Several of the arrays use 2 pointers to allocate memory.  
    //9 x 8 arrays  
    float *pv, **ppv, **ppvfr;  
    float *puds, **ppuds, **ppudsfr;  
    float *pa,**ppa, **ppafr;  
    float *pds, **ppds, **ppdsfr;  
    //8 x 9 arrays  
    float *pvt, **ppv, **ppvfr;  
    //9 x 9 arrays  
    float *pudsvt, **ppudsvt, **ppudsvtfr;  
  
    int *ps, **pps, **ppsfr;  
    int *inbuf, *inbuffr;  
  
    FILE *inptr,*outptr;  
};
```

RaspBian ./build_svd.sh ; ./master

Ultibo ./buildsvd.sh or with Lazarus tftp 192.168.1.202 < cmdstftp

Ultibo version provides a remote shell using telnet, tftp, and webstatus webpage.