

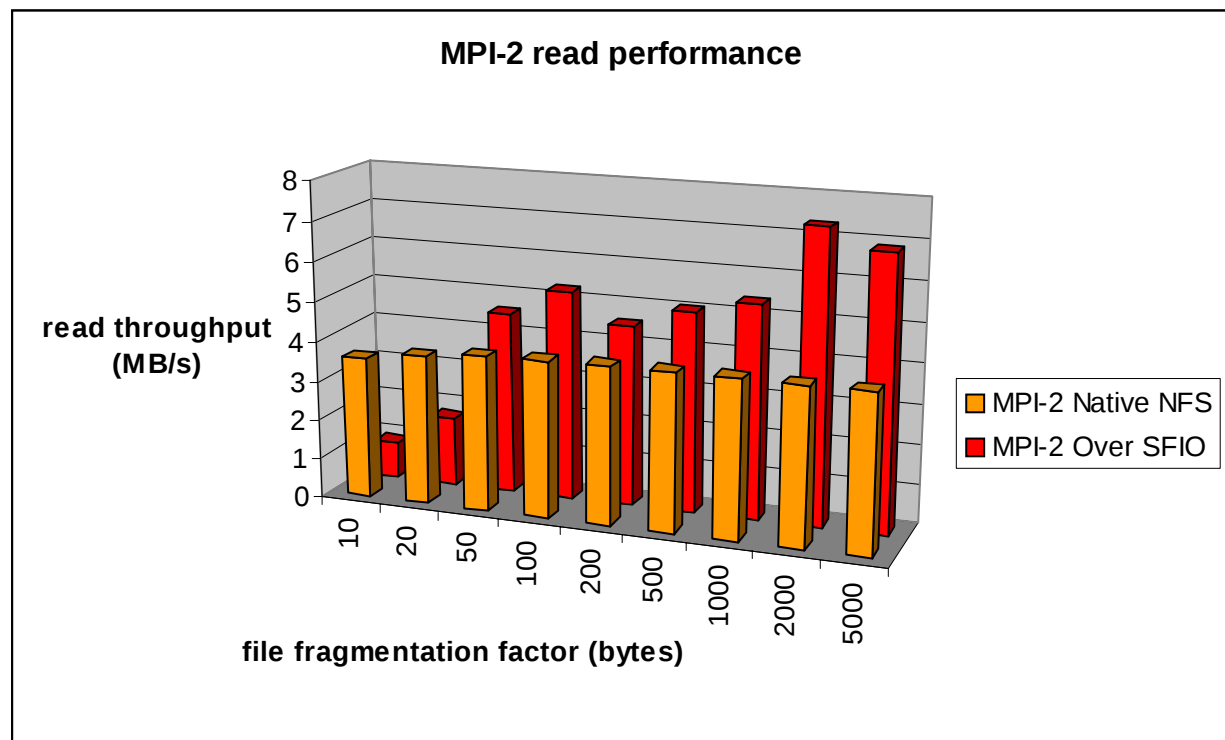
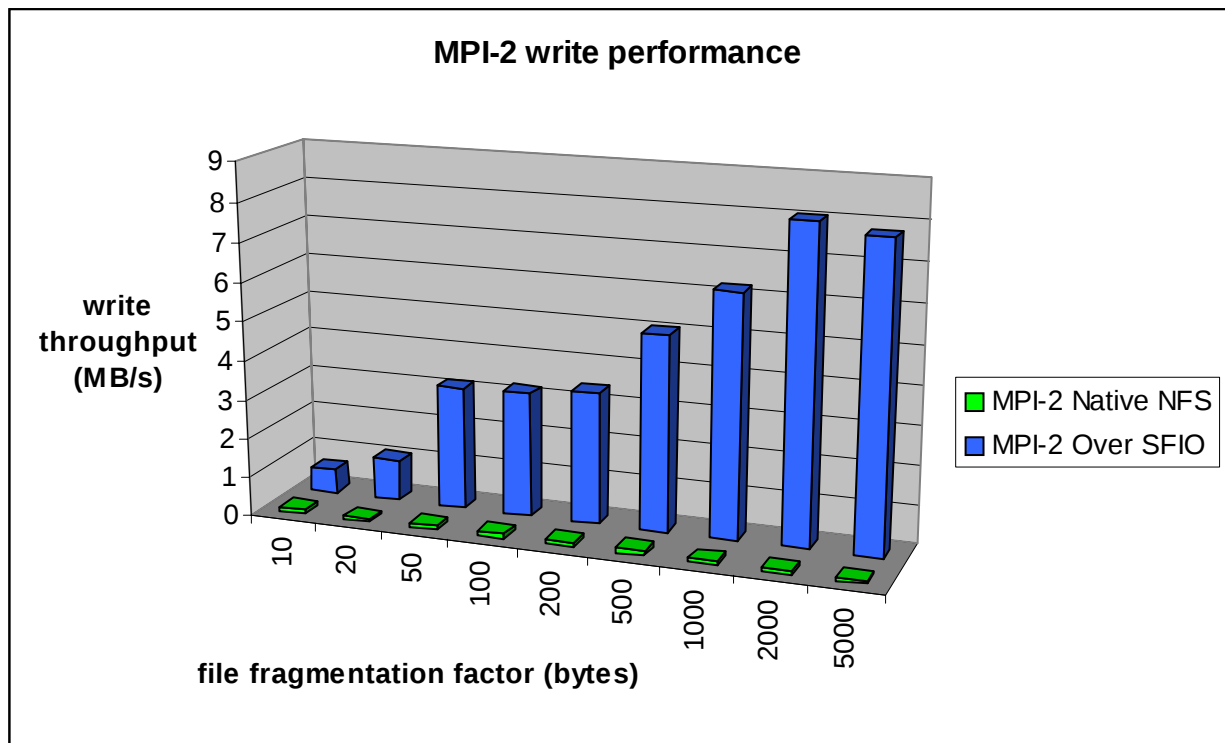
Progress report meeting and Managing
Board meeting, June 20th, 2000

Prof. Roger D. Hersch
Peripheral Systems Laboratory
Ecole Polytechnique Fédérale de Lausanne
Switzerland

- SFIO Performance on Swiss-Tx
- SFIO Interface
- MPI-I/O Interface for SFIO
- MPI-I/O over SFIO performance
- MPI-I/O native performance
- Time Sceduling

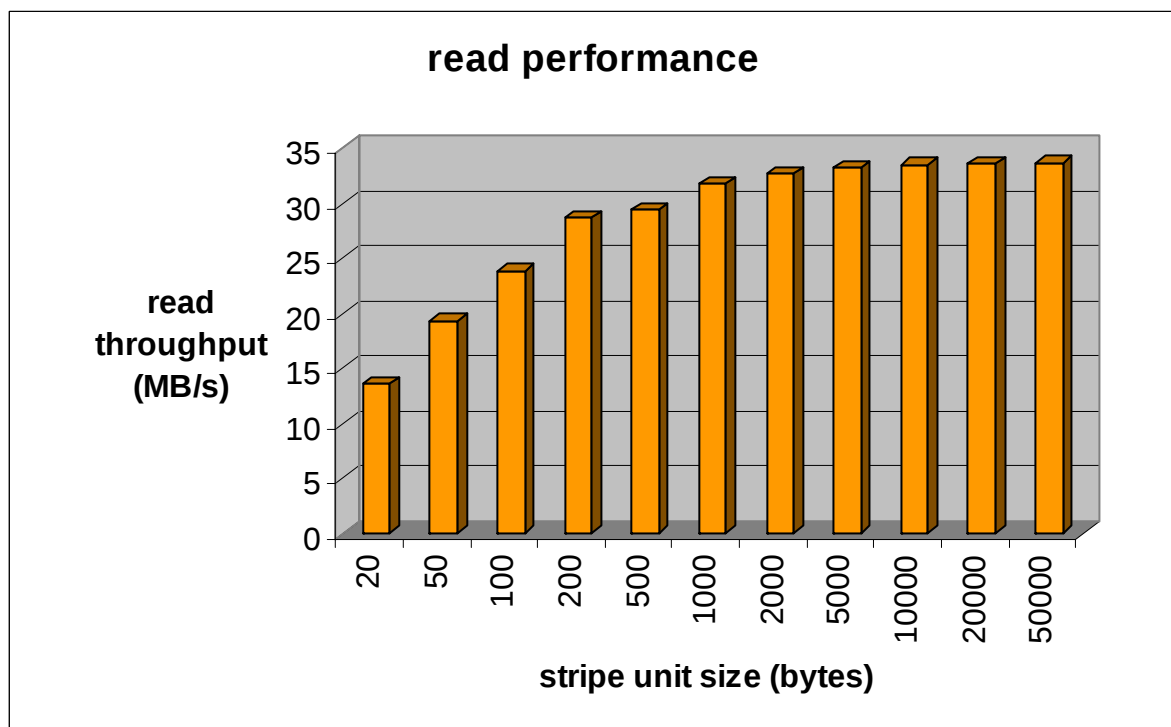
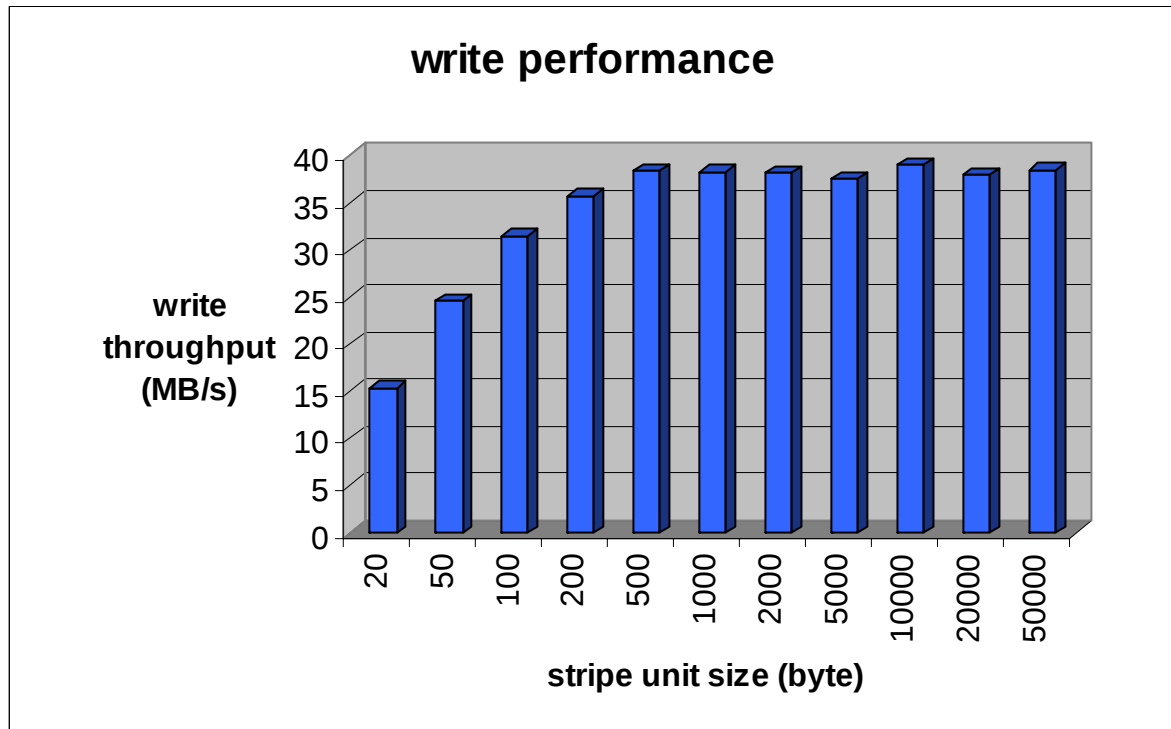
MPI-II I/O APPLE PERFORMANCE ON SWISS-TX

T0, 5 Compute Nodes, HUB100Mbps, 3 I/O Nodes, 50MBytes



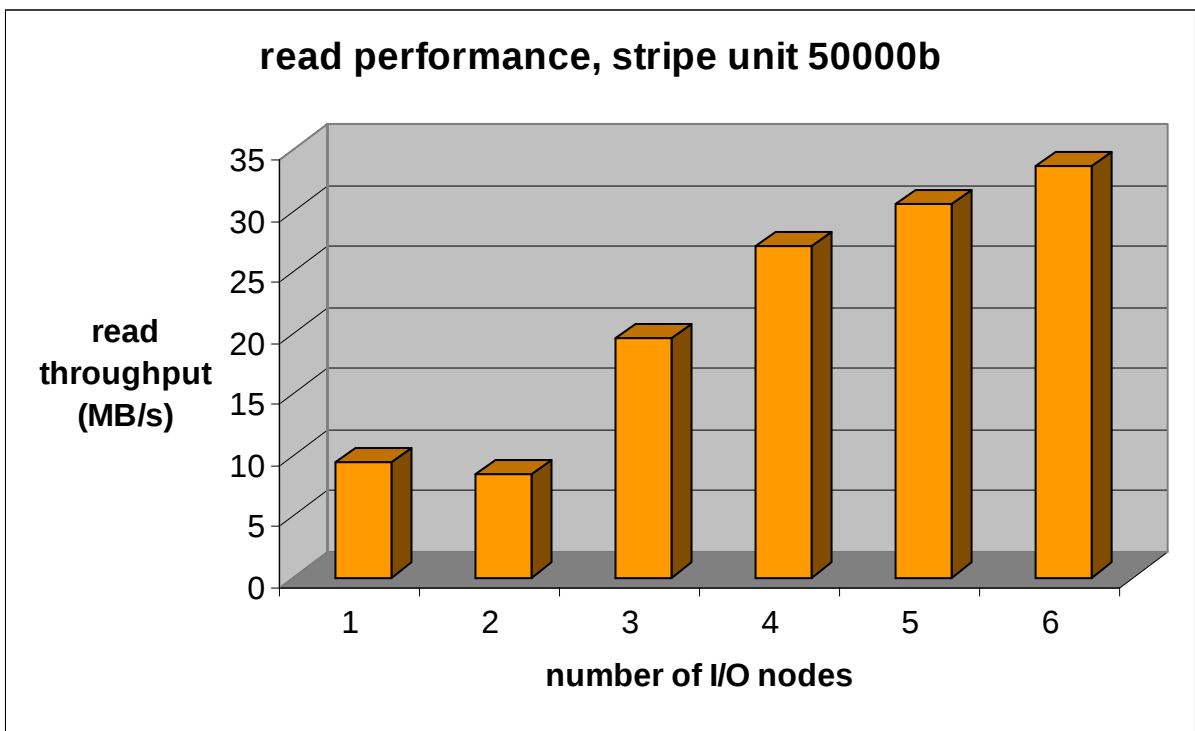
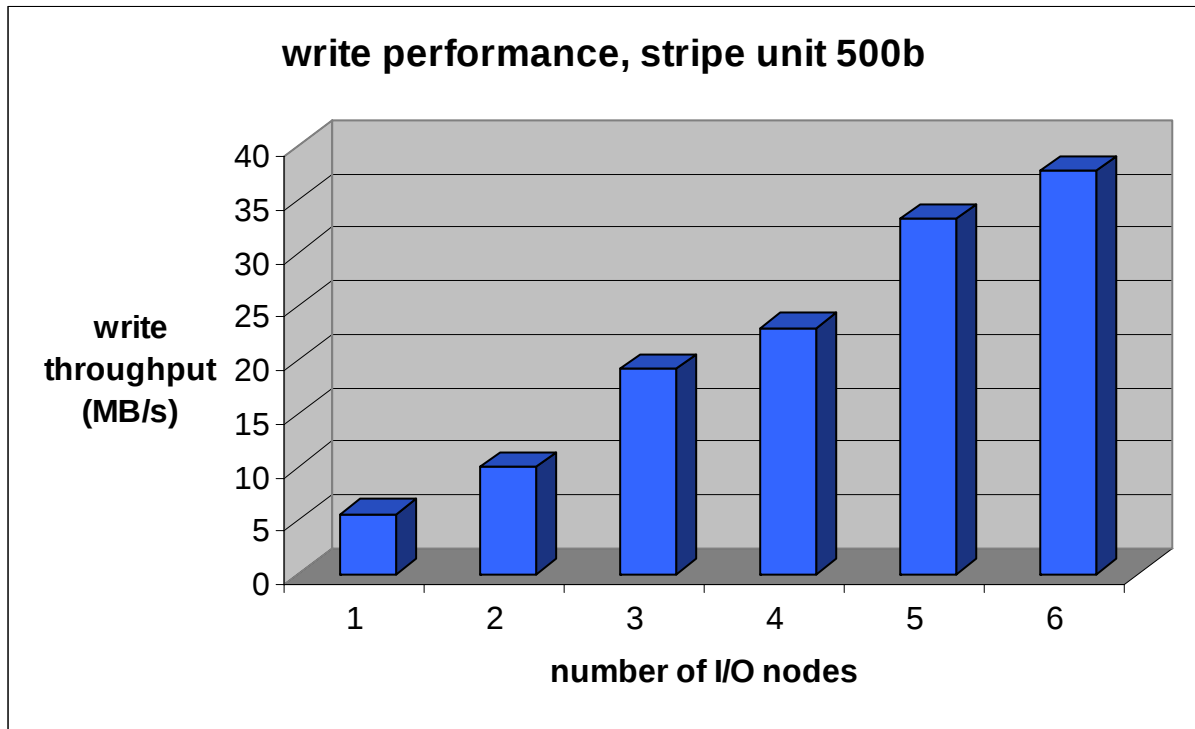
SFIO PERFORMANCE ON SWISS-TX

T1BABY, 1 Compute Node, TNET, 6 I/O Nodes, 900MBytes



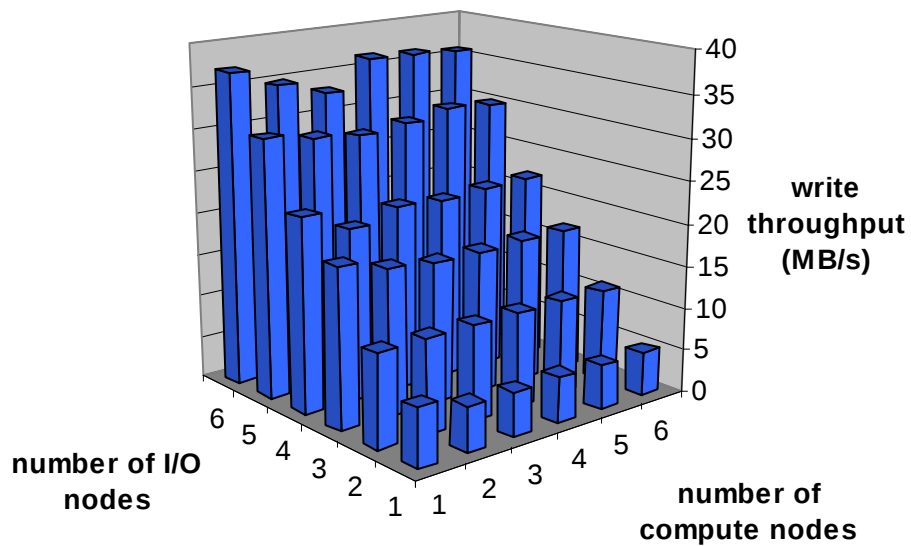
SFIO PERFORMANCE ON SWISS-TX

T1BABY, 1 Compute Node, TNET, 900MBytes

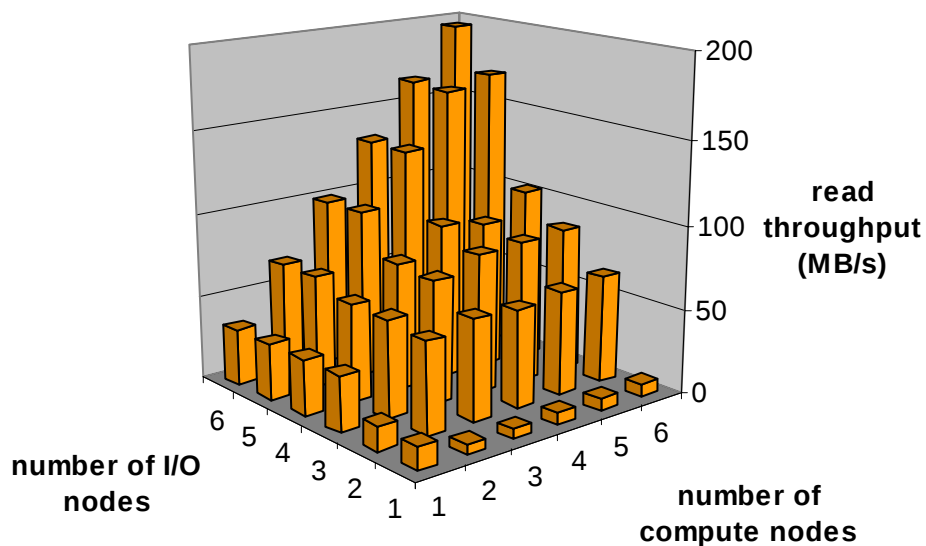


SFIO ALL-TO-ALL PERFORMANCE OF WHOLE APPLICATION ON SWISS-TX T1BABY, TNET, 900MBytes

write performance, stripe unit size 500b



read performance, stripe unit size 50000b



SFIO INTERFACE

```
MFIL* mopen ( char *name, int chunk )
```

```
void mwrite  
(  
    MFIL* f,  
    long offset,  
    char *buffer,  
    unsigned size  
)
```

```
void mread  
(  
    MFIL* f,  
    long offset,  
    char *buffer,  
    unsigned size  
)
```

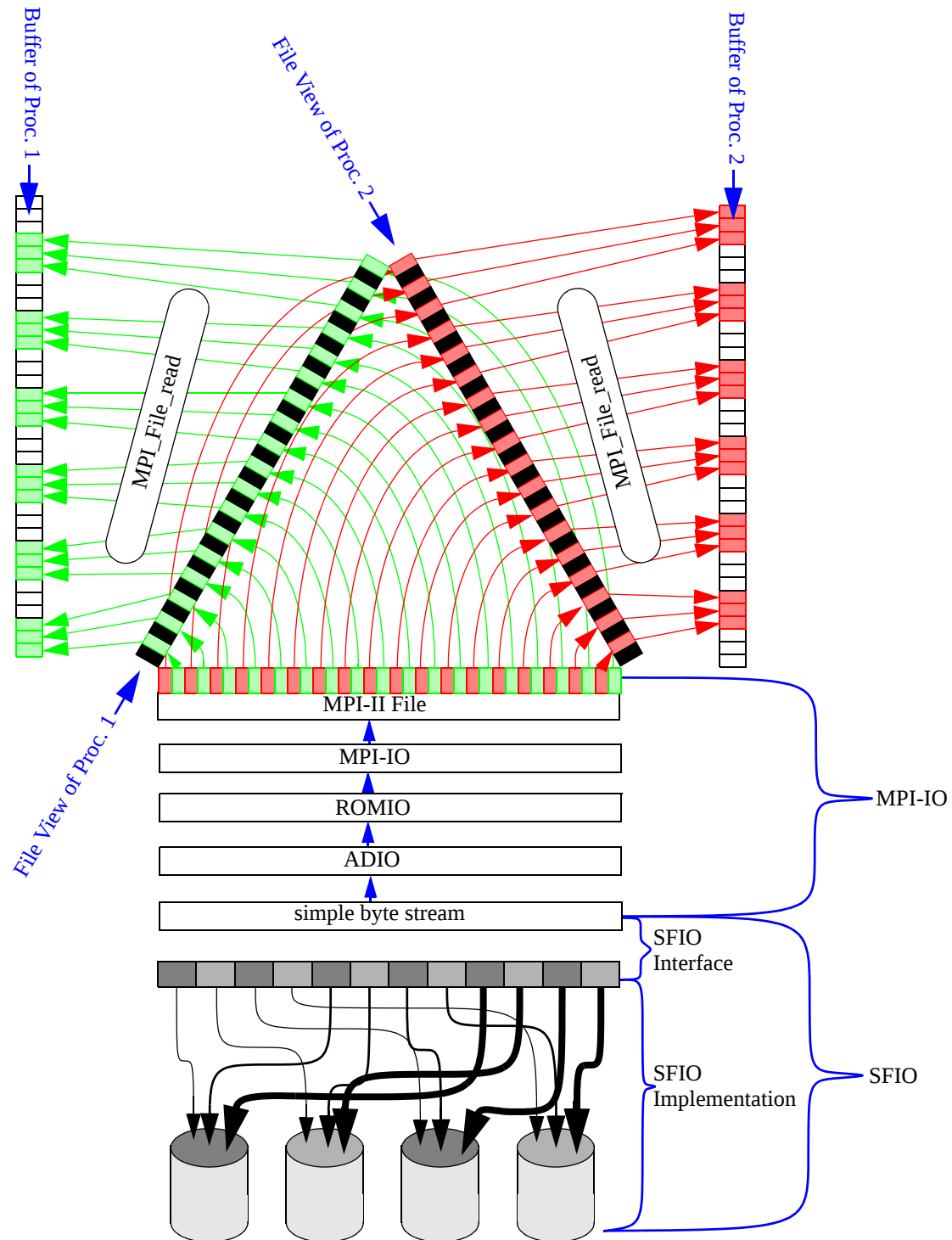
```
void mwriteb  
(  
    MFIL* f,  
    unsigned count,  
    long Offsets[],  
    char *Buffers[],  
    unsigned Sizes[]  
)
```

```
void mreadb  
(  
    MFIL* f,  
    unsigned count,  
    long Offsets[],  
    char *Buffers[],  
    unsigned Sizes[]  
)
```

```
void mclose ( MFIL* f )
```

```
MFIL* f=mopen( "toneb0,/tmp/a0;"  
               "toneb1,/tmp/a1;"  
               "toneb2,/tmp/a2;" , 50);  
  
mwrite( f , 0 , "Hello World !" , 14 );  
  
mclose( f );
```

MPI-I/O Interface for SFIO



Time Sceduling

