Lab - Parallel Read and Write in HDF5

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Writing data into file - C
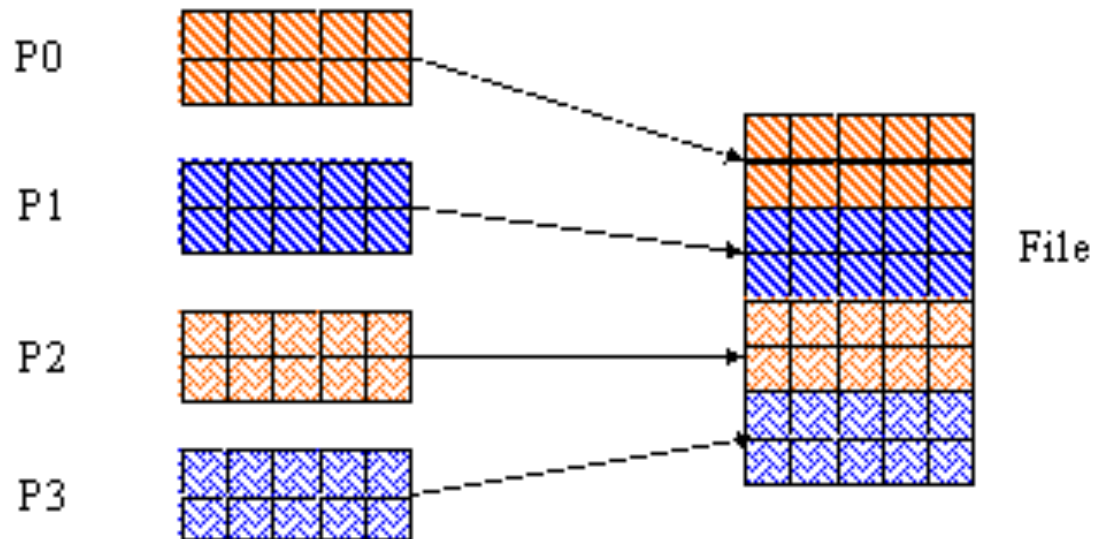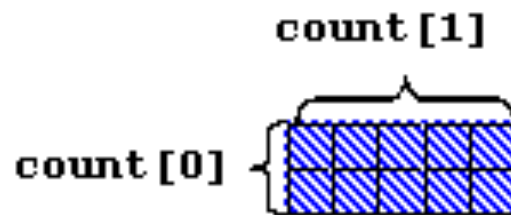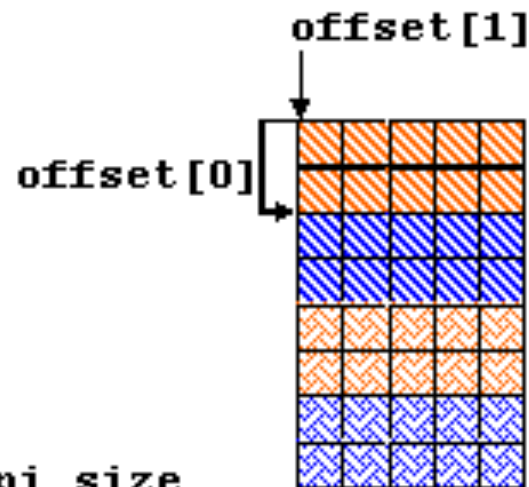

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html

Offsets in C


```
count[0] = dimsf[0]/mpi_size
count[1] = dimsf[1];
offset[0] = mpi_rank * count[0];
offset[1] = 0;
```
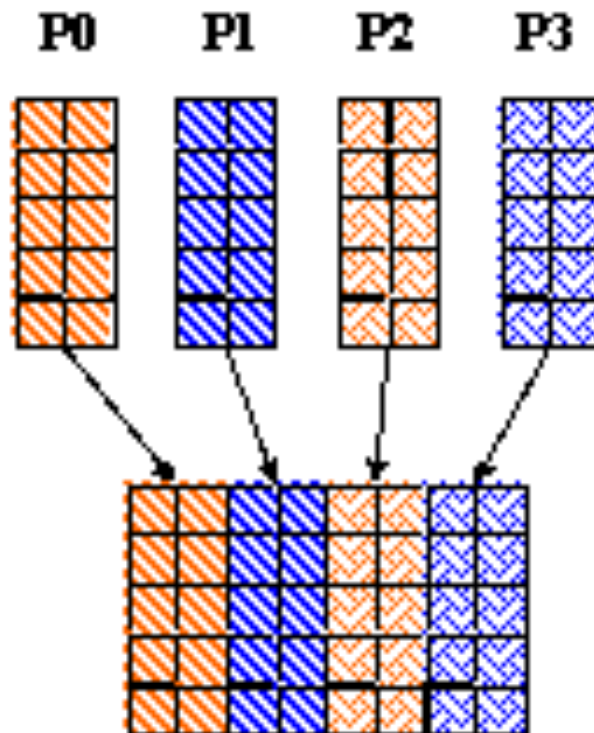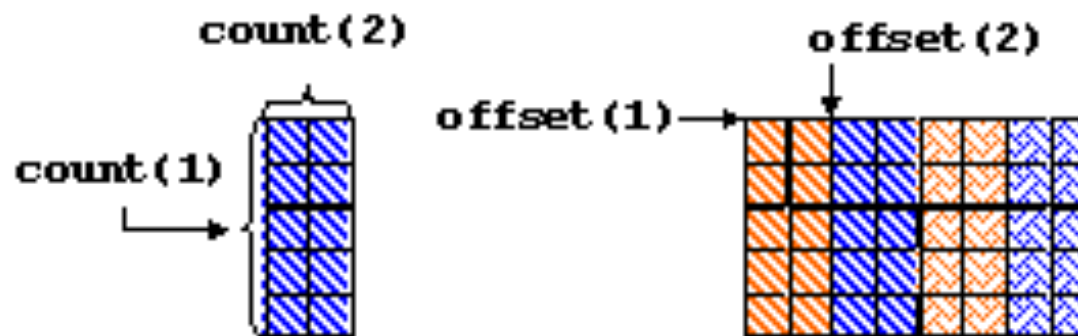
Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html

Writing data into file - Fortran

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html

Offsets in Fortran

P1 (memory space)

File

count(2)

count(1)

offset(1) →

offset(2)

```
count(1)   = dimsf(1)
count(2)   = dimsf(2)/mpi_size
offset(1) = 0
offset(2) = mpi_rank * count(2)
```

Image from: https://support.hdfgroup.org/HDF5/Tutor/phypecont.html