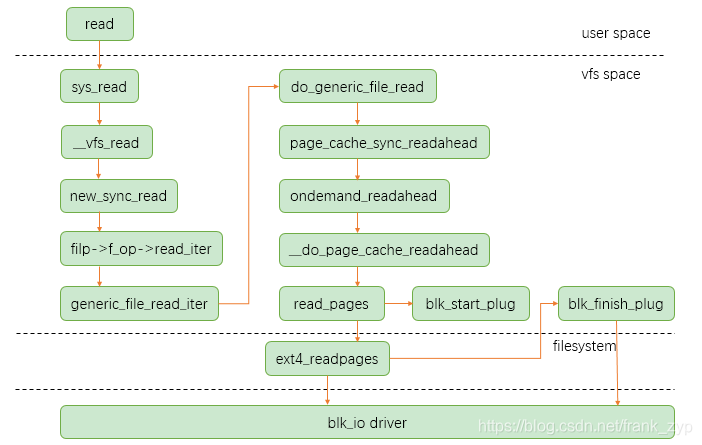
read函数系统调用图谱：



SYSCALL\_DEFINE3(read, unsigned int, fd, char \_\_user \*, buf, size\_t, count)

loff\_t pos = file\_pos\_read(f.file); //获取文件的位置

ret = vfs\_read(f.file, buf, count, &pos);

ret = rw\_verify\_area(READ, file, pos, count); // read or write verify

ret = \_\_vfs\_read(file, buf, count, pos);

new\_sync\_read(file, buf, count, pos)

file->f\_op->read\_iter(&kiocb, &iter) //ext2\_file\_operations

走ext2 的generic\_file\_read\_iter 函数：

generic\_file\_read\_iter(&kiocb, &iter)

mapping->a\_ops->direct\_IO(iocb, &data, pos); //direct io

do\_generic\_file\_read(file, ppos, iter, retval)

page = find\_get\_page(mapping, index); //在radix树中查找相应的page

page\_cache\_sync\_readahead(mapping,ra, filp,index, last\_index - index); //没有page cache中，进行预读