

Page cache



O_DIRECT

Page load



1. Render asks for 512 bytes of scene.dat starting at offset 0.

render `read(scene.dat, into
heap buffer, 512);`

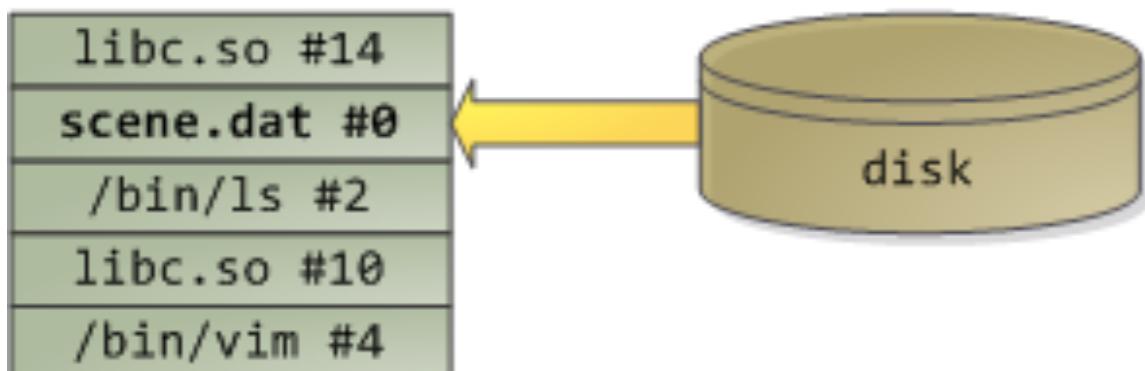


2. Kernel searches the page cache for the 4KB chunk of scene.dat satisfying the request. Suppose the data is not cached.

Kernel `Find
scene.dat #0`

libc.so #14
free
/bin/ls #2
libc.so #10
/bin/vim #4

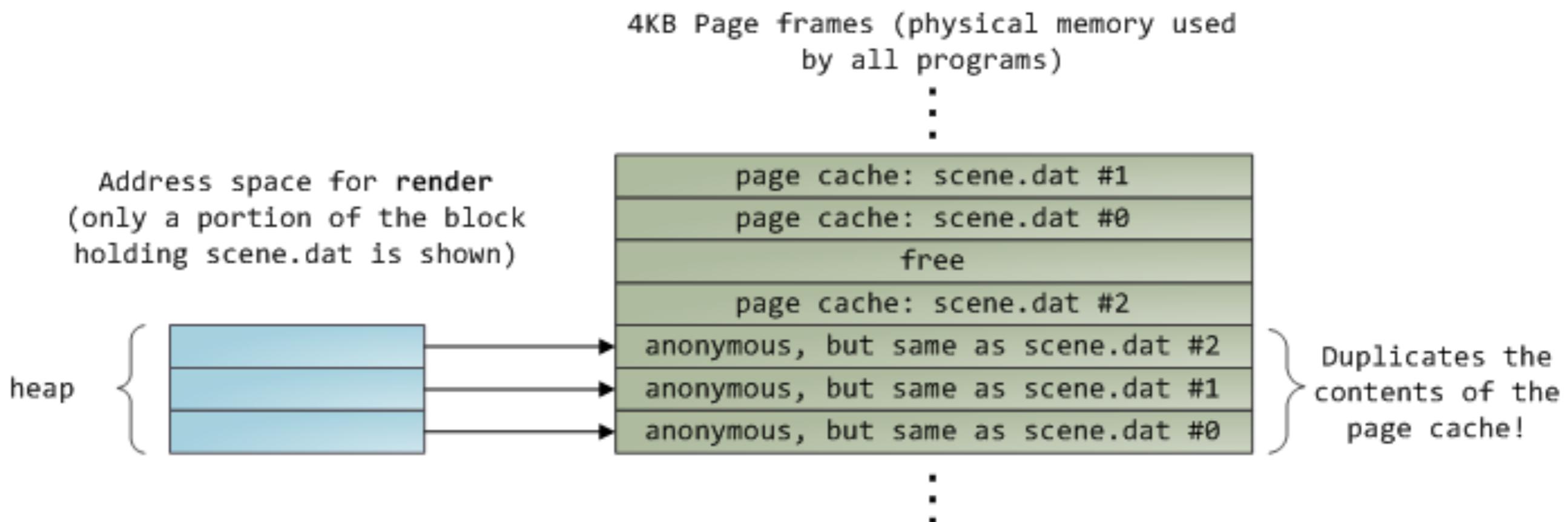
3. Kernel allocates page frame, initiates I/O requests for 4KB of scene.dat starting at offset 0 to be copied to allocated page frame

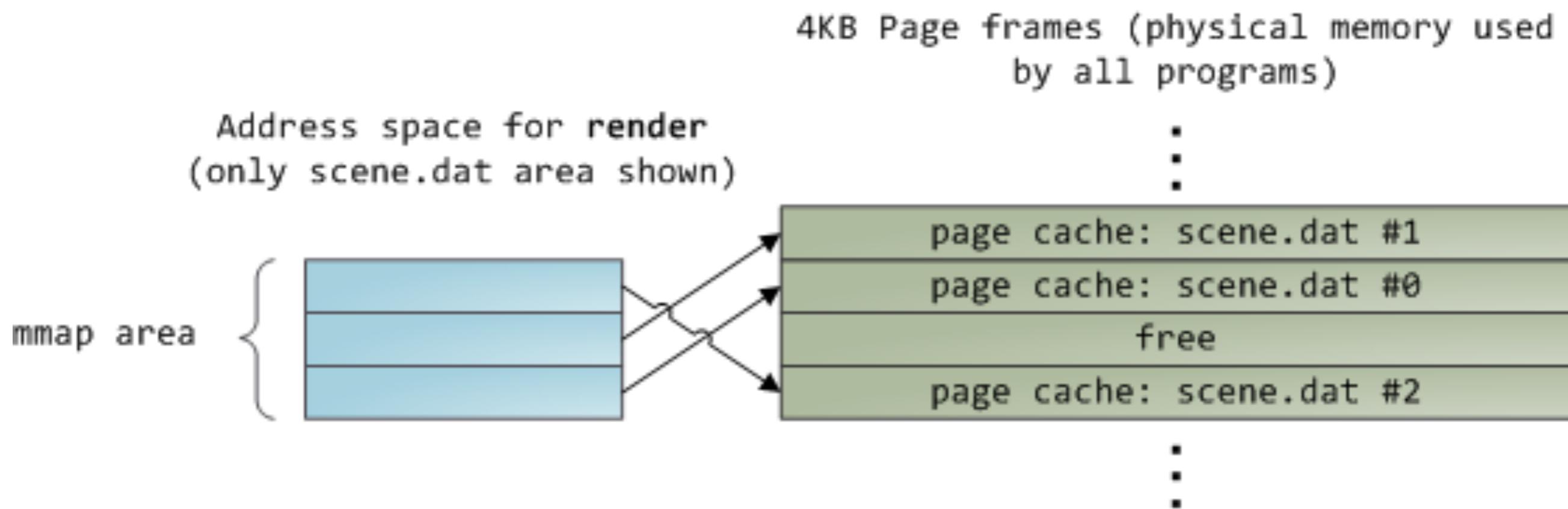


4. Kernel copies the requested 512 bytes from page cache to user buffer, read() system call ends.

render `Copy 512
bytes`

libc.so #14
scene.dat #0
/bin/ls #2
libc.so #10
/bin/vim #4





Page Fault



SHARED



PRIVATE



Copy-On-Write



Преимущества



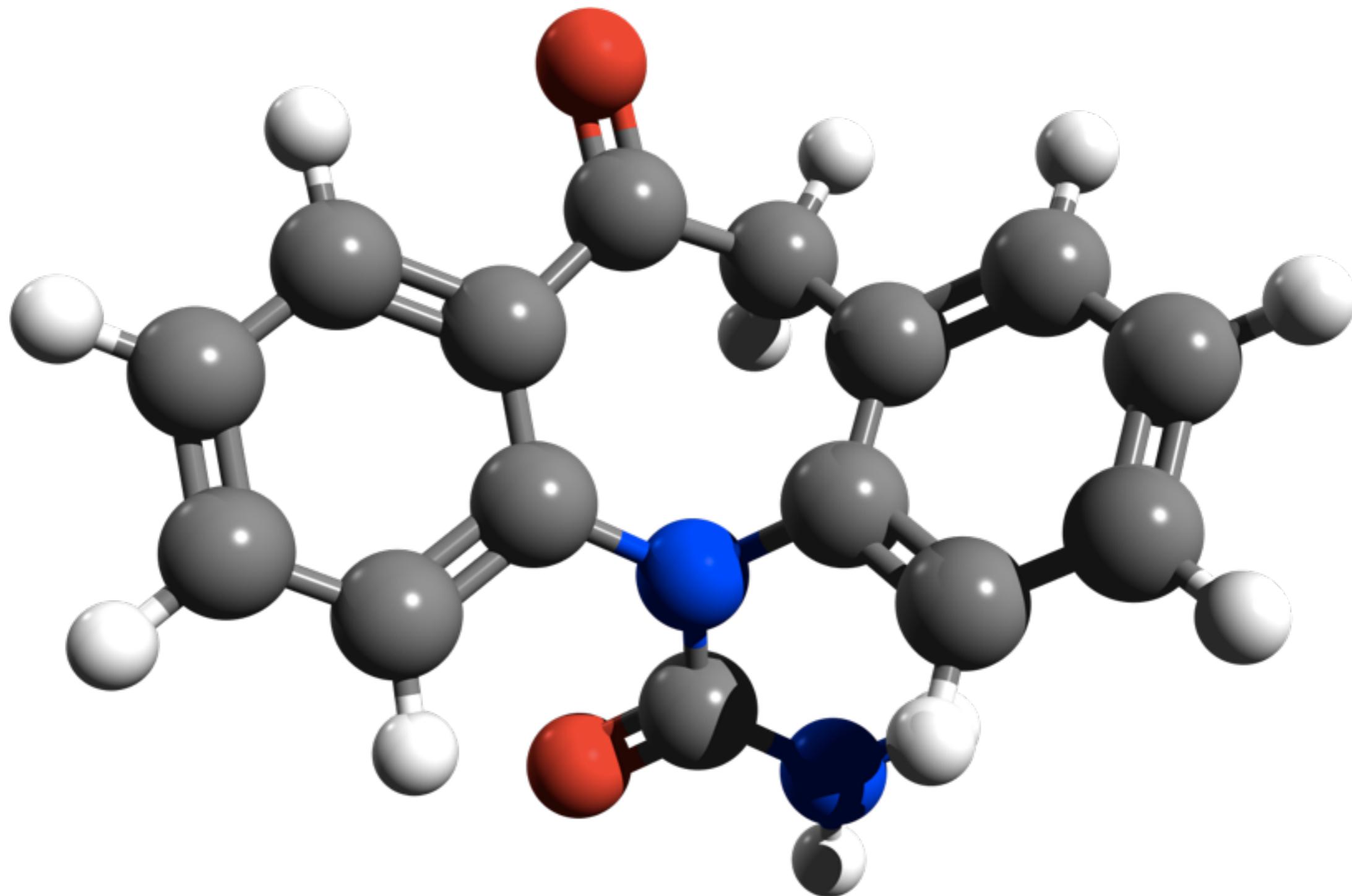
Преимущества



Преимущества



Недостатки



Недостатки



Недостатки



Недостатки



Недостатки



Недостатки

