

同步异步IO



日成蝶—Windows 高级编程

七日做茧，一朝成蝶！

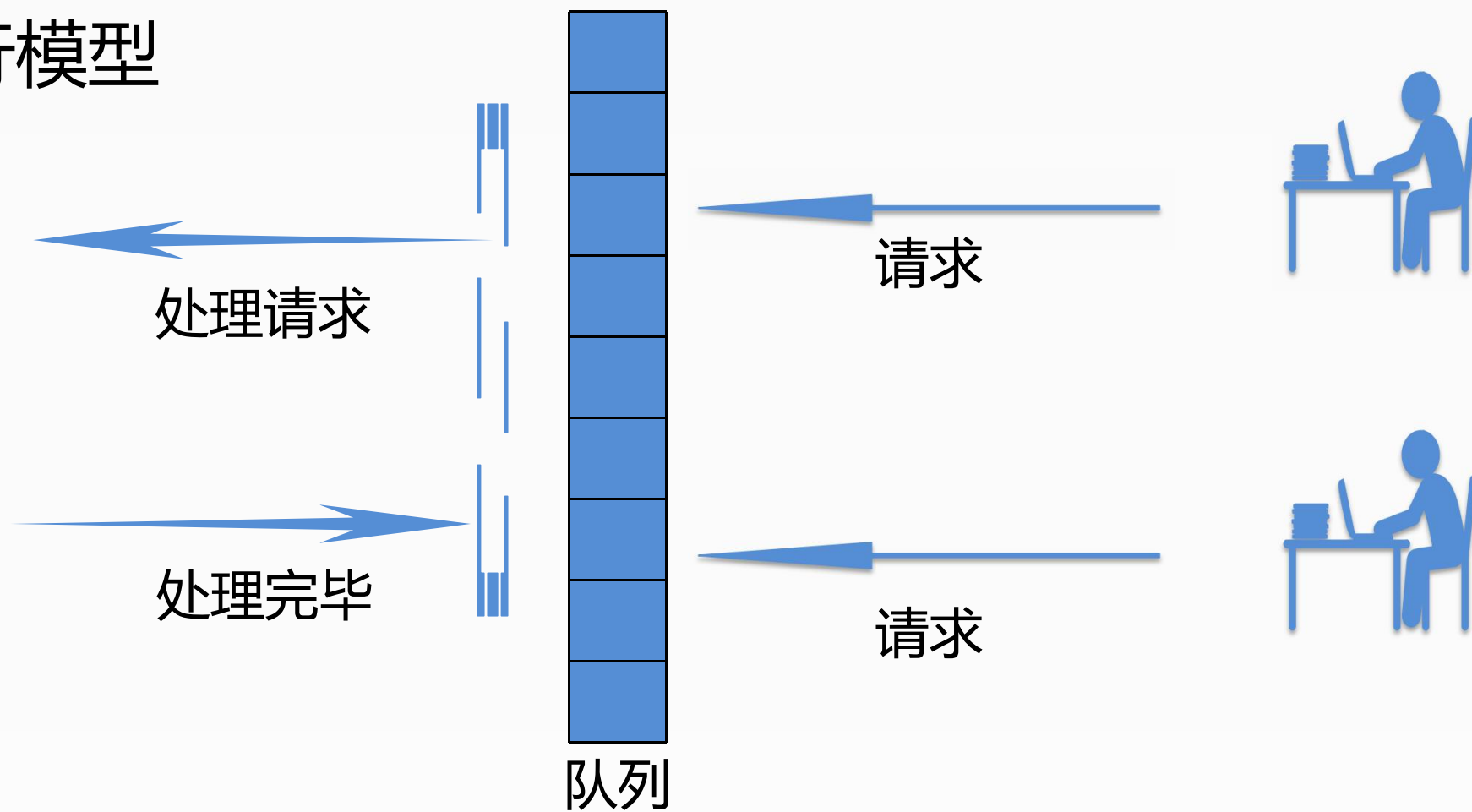


主讲：袁春旭

串行模型与并发模型

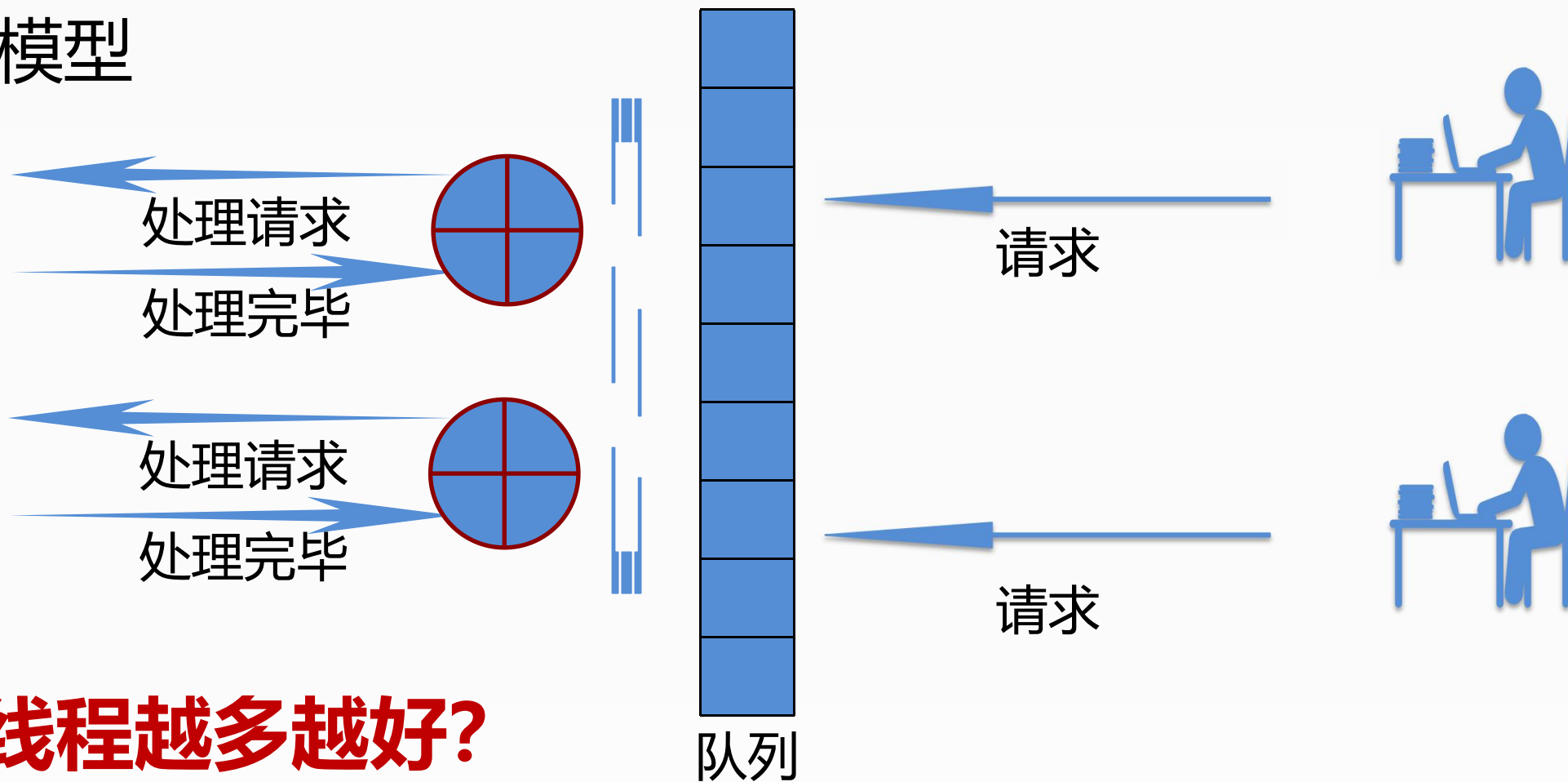
串行模型与并发模型

串行模型



串行模型与并发模型

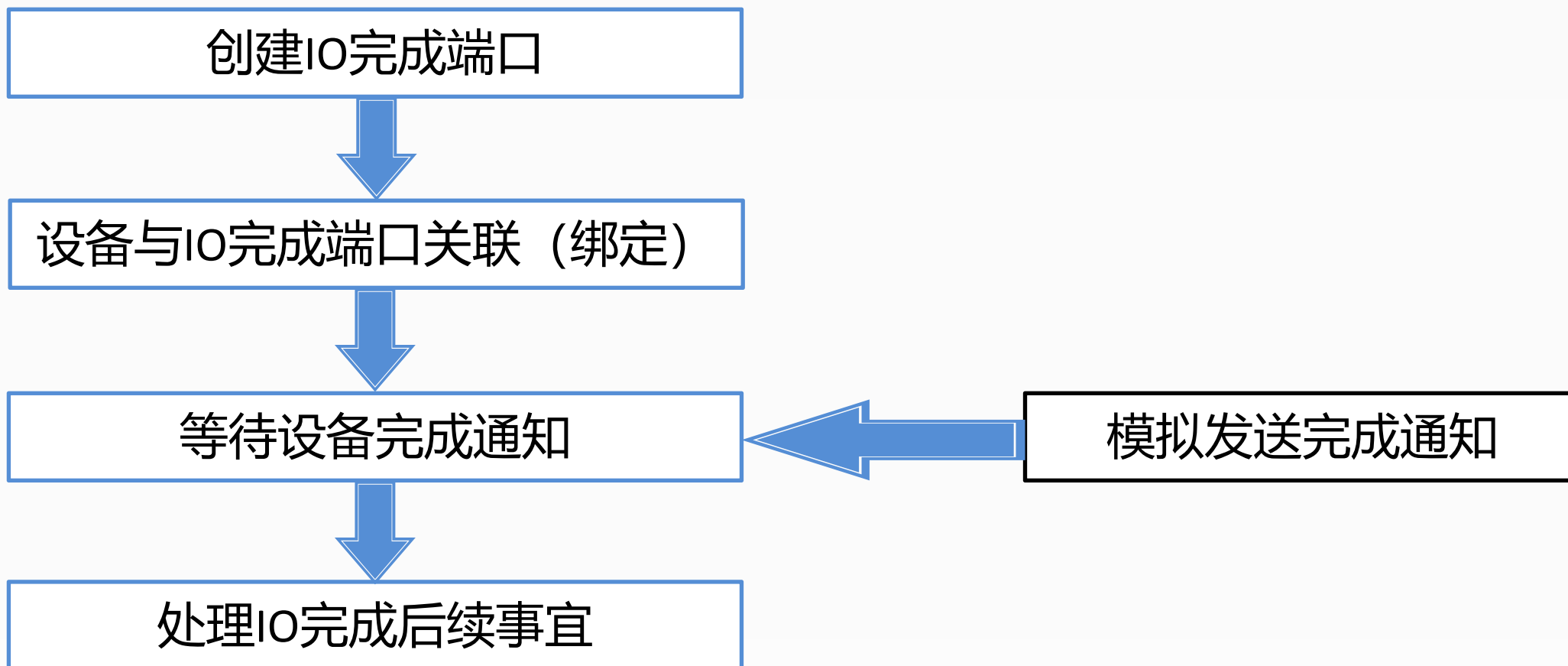
并发模型



思考：线程越多越好？

IO完成端口

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IO完成端口

```
HANDLE WINAPI CreatIoCompletionPort(  
    HANDLE   FileHandle,  
    HANDLE   ExistingCompletionPort,  
    ULONG_PTR CompletionKey,  
    DWORD    NumberOfConcurrentThreads  
);
```

```
    CreatIoCompletionPort(INVALID_HANDLE_VALUE, NULL, 0, 0);  
    HANDLE hFile = CreateFile(L"1.txt", GENERIC_READ, 0, NULL, OPEN_EXISTING,  
        FILE_FLAG_OVERLAPPED, NULL);  
    CreatIoCompletionPort(hFile, hCicp, CK_READ, 0);
```


IO完成端口

```
BOOL WINAPI GetQueuedCompletionStatus(  
    HANDLE    CompletionPort,  
    LPDWORD   lpNumberOfBytes,  
    PULONG_PTR lpCompletionKey,  
    LPOVERLAPPED *lpOverlapped,  
    DWORD     dwMilliseconds  
);
```

```
GetQueuedCompletionStatus(hCicp, &transferredByte, (PULONG_PTR)&key, &ol, INFINITE)
```

IO完成端口

```
BOOL PostQueuedCompletionStatus(  
    HANDLE    CompletionPort,  
    DWORD     dwNumberOfBytesTransferred,  
    ULONG_PTR  dwCompletionKey,  
    LPOVERLAPPED lpOverlapped  
);
```

```
PostQueuedCompletionStatus(hCicp, 4, key, &ol)
```

编码实战



Thank You !