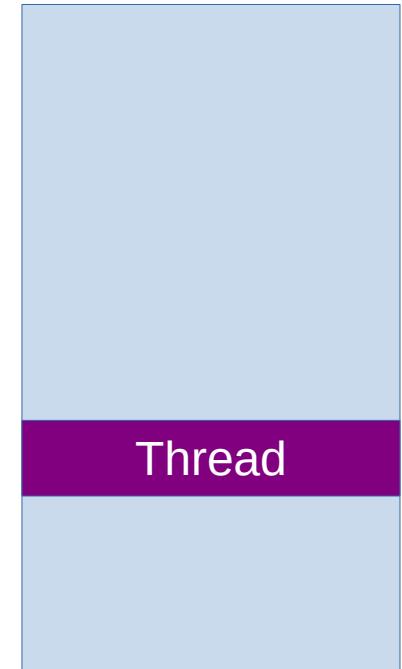
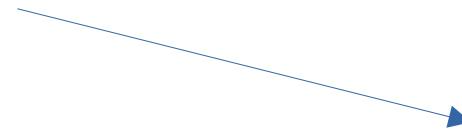


Understanding Threads

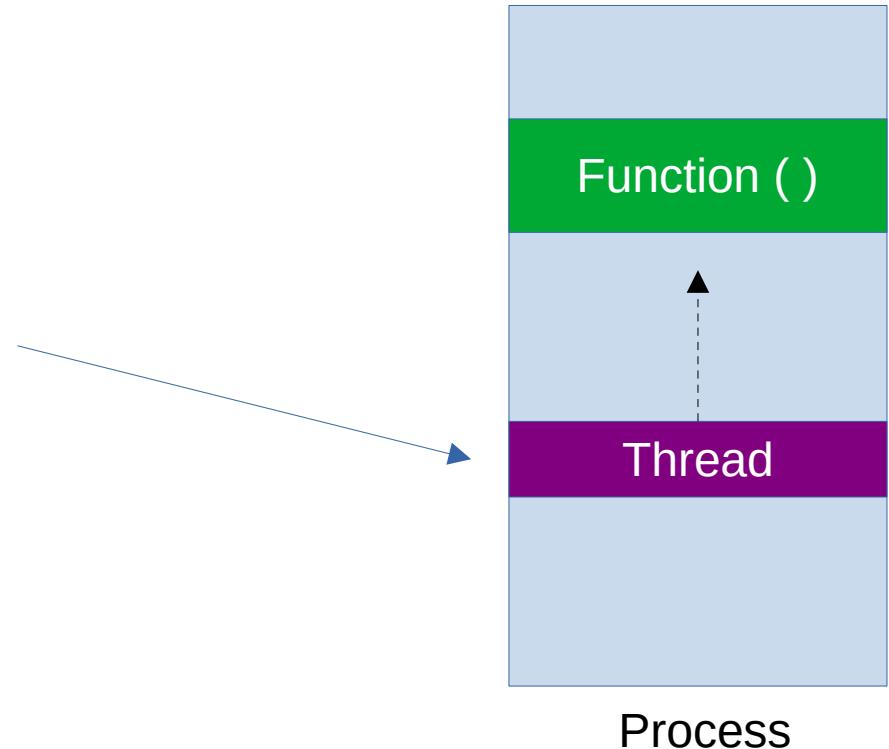
What is a thread ?

A thread is the smallest unit of execution in a process.



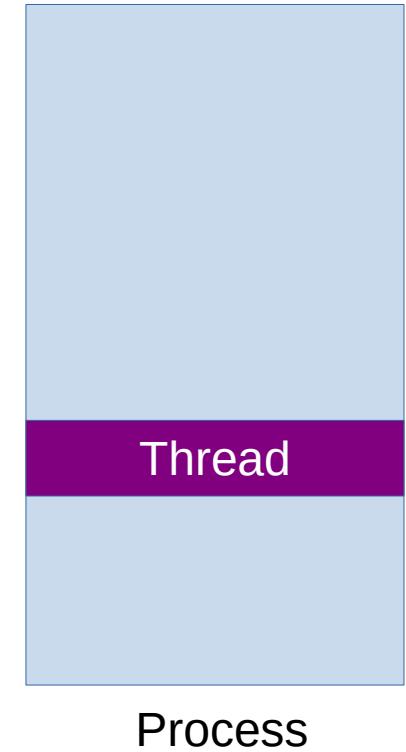
What a Thread does ?

A thread **executes** code — plain and simple.



How to create Thread ?

CreateThread()



CreateThread prototype

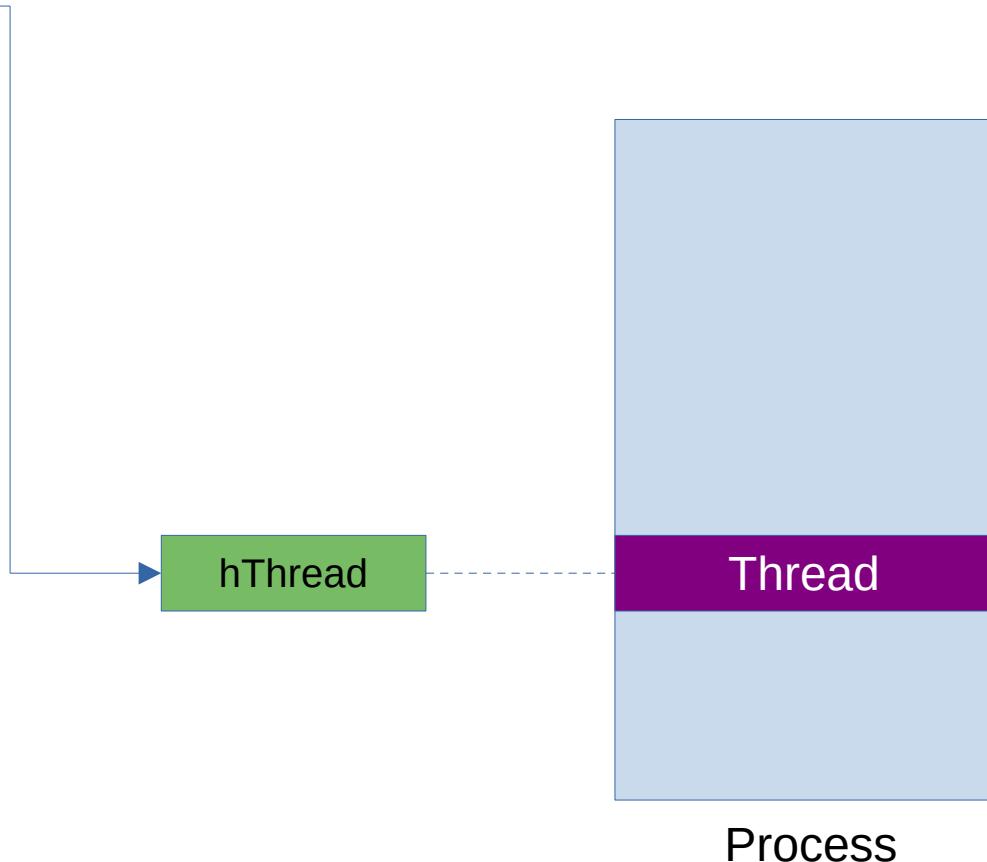
```
HANDLE CreateThread(  
    lpThreadAttributes,  
    dwStackSize,  
    lpStartAddress,  
    lpParameter,  
    dwCreationFlags,  
    lpThreadId  
);
```



Process

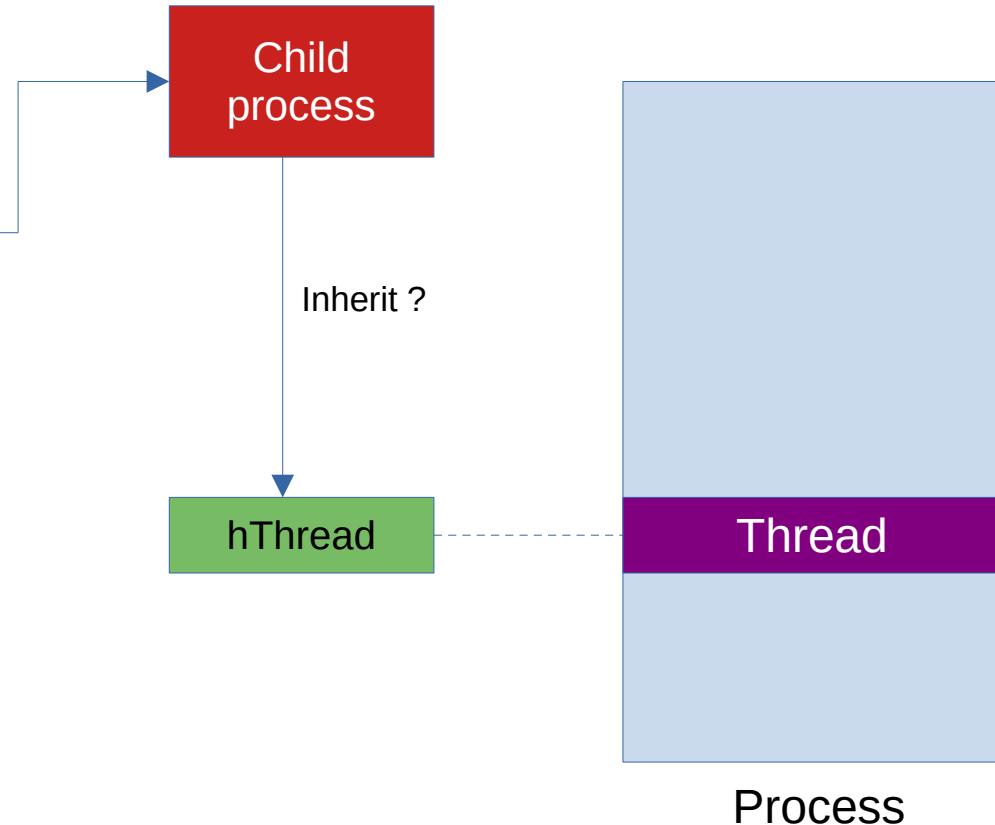
CreateThread prototype

```
HANDLE CreateThread(  
    _In_opt_     LPVOID lpThreadAttributes,  
    _In_         DWORD dwStackSize,  
    _In_         LPVOID lpStartAddress,  
    _In_         LPVOID lpParameter,  
    _In_         DWORD dwCreationFlags,  
    _Out_opt_    LPVOID lpThreadId  
);
```



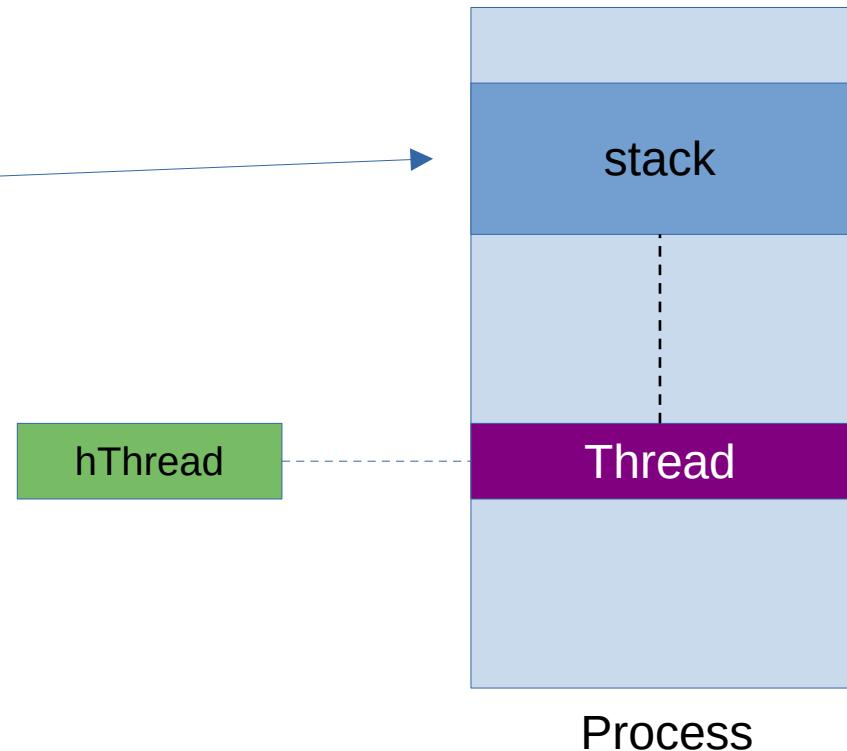
CreateThread prototype

```
HANDLE CreateThread(  
    lpThreadAttributes,  
    dwStackSize,  
    lpStartAddress,  
    lpParameter,  
    dwCreationFlags,  
    lpThreadId  
);
```



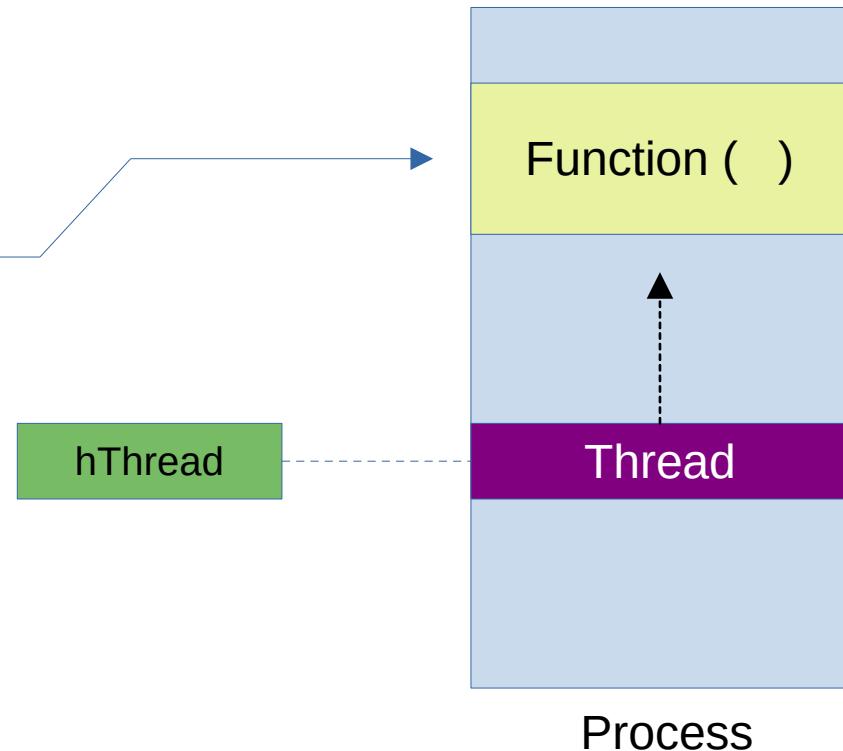
CreateThread prototype

```
HANDLE CreateThread(  
    _In_opt_ LPVOID lpThreadAttributes,  
    _In_        DWORD dwStackSize,  
    _In_opt_ LPVOID lpStartAddress,  
    _In_opt_ LPVOID lpParameter,  
    _In_        DWORD dwCreationFlags,  
    _Out_opt_  LPTHREADID lpThreadId  
);
```



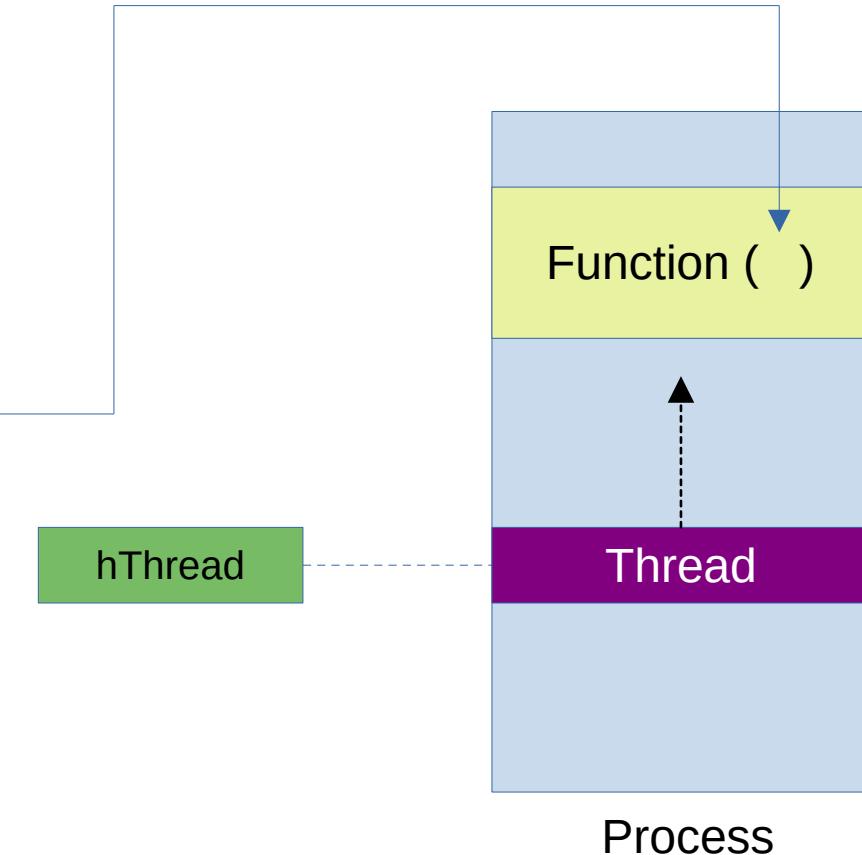
CreateThread prototype

```
HANDLE CreateThread(  
    _In_opt_ LPVOID lpThreadAttributes,  
    _In_        DWORD dwStackSize,  
    _In_        LPVOID lpStartAddress,  
    _In_        LPVOID lpParameter,  
    _In_        DWORD dwCreationFlags,  
    _Out_opt_  LPVOID lpThreadId  
);
```



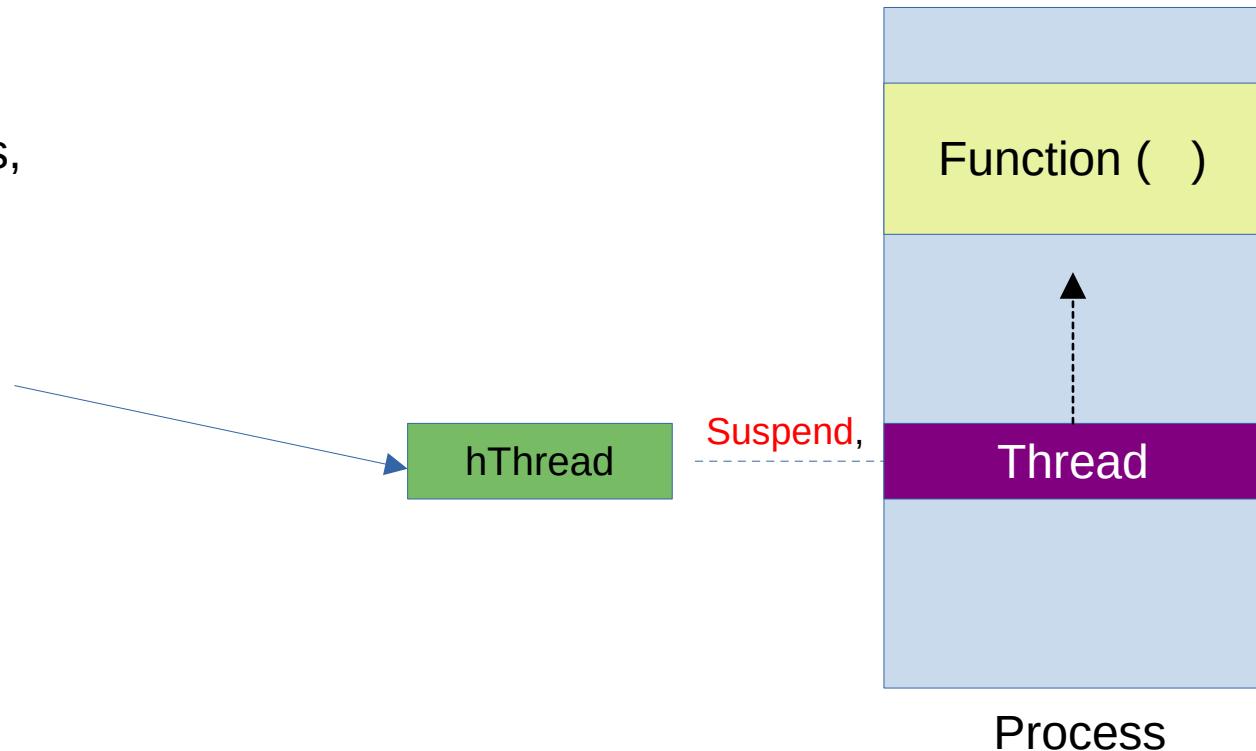
CreateThread prototype

```
HANDLE CreateThread(  
    _In_opt_     LPVOID lpThreadAttributes,  
    _In_        _Out_opt_  SIZE_T dwStackSize,  
    _In_        _Out_opt_  LPVOID lpStartAddress,  
    _In_opt_     LPVOID lpParameter,  
    _In_        _Out_opt_  DWORD dwCreationFlags,  
    _Out_opt_    _In_opt_   LPVOID lpThreadId  
) ;
```



CreateThread prototype

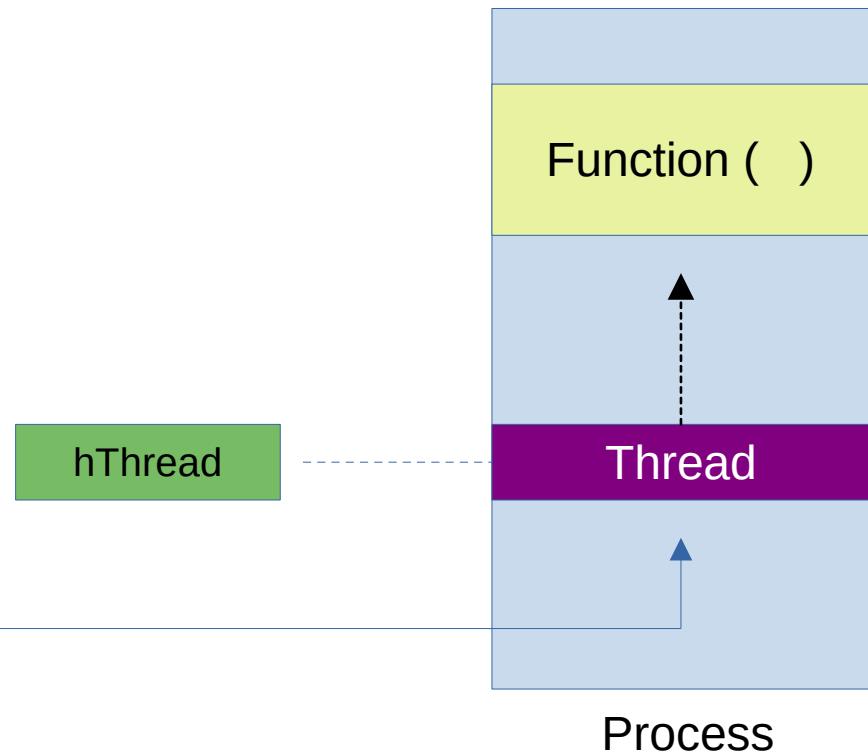
```
HANDLE CreateThread(  
    _In_opt_     LPVOID          lpThreadAttributes,  
    _In_         DWORD           dwStackSize,  
    _In_         LPVOID          lpStartAddress,  
    _In_         LPVOID          lpParameter,  
    _In_         DWORD           dwCreationFlags,  
    _Out_opt_    LPVOID          lpThreadId  
) ;
```



CreateThread prototype

```
HANDLE CreateThread(  
    _In_opt_ LPVOID lpThreadAttributes,  
    _In_        DWORD dwStackSize,  
    _In_        LPVOID lpStartAddress,  
    _In_        LPVOID lpParameter,  
    _In_        DWORD dwCreationFlags,  
    _Out_opt_  LPVOID lpThreadId  
);
```

Thread ID



CreateThread() syntax

