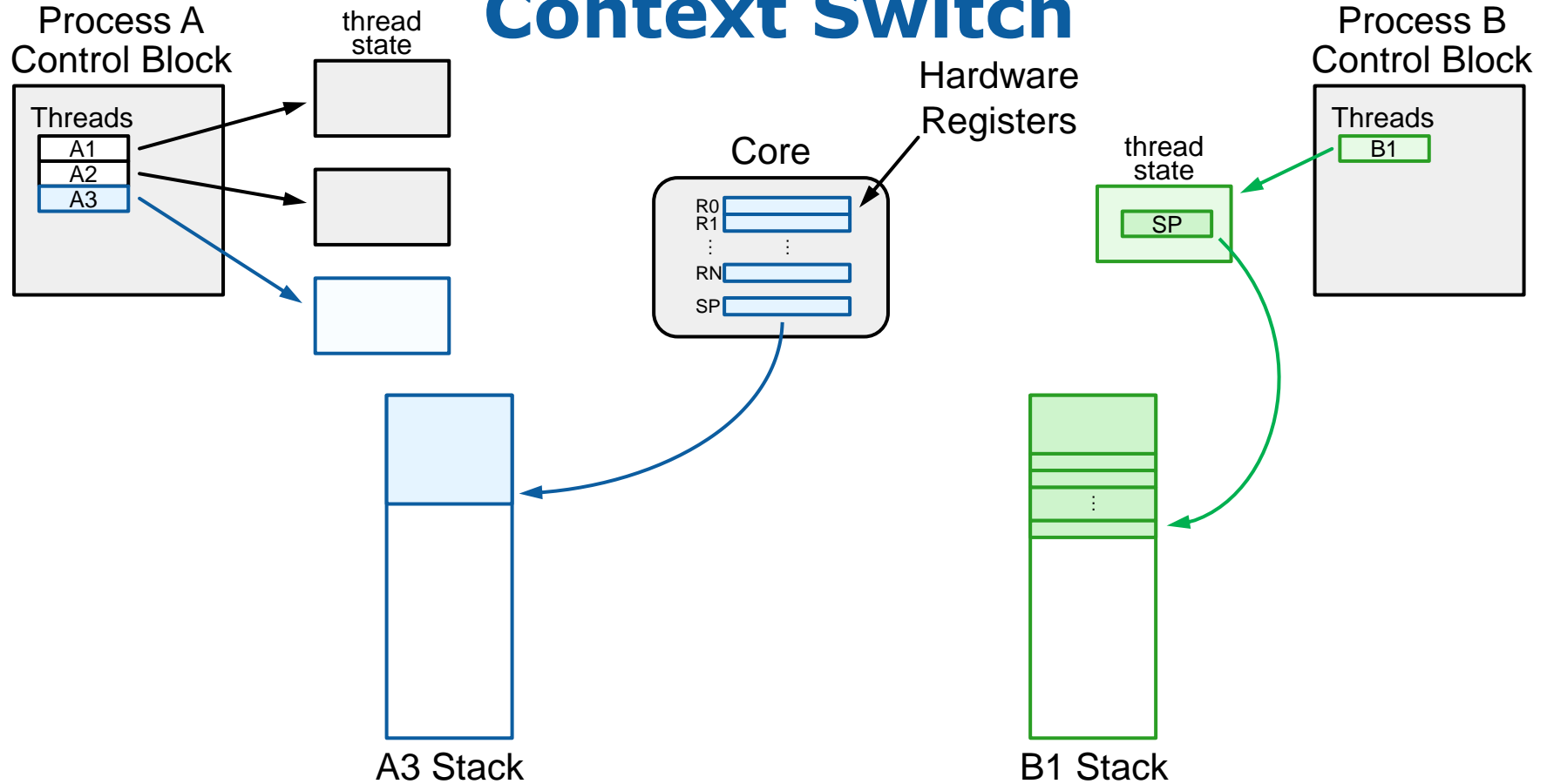
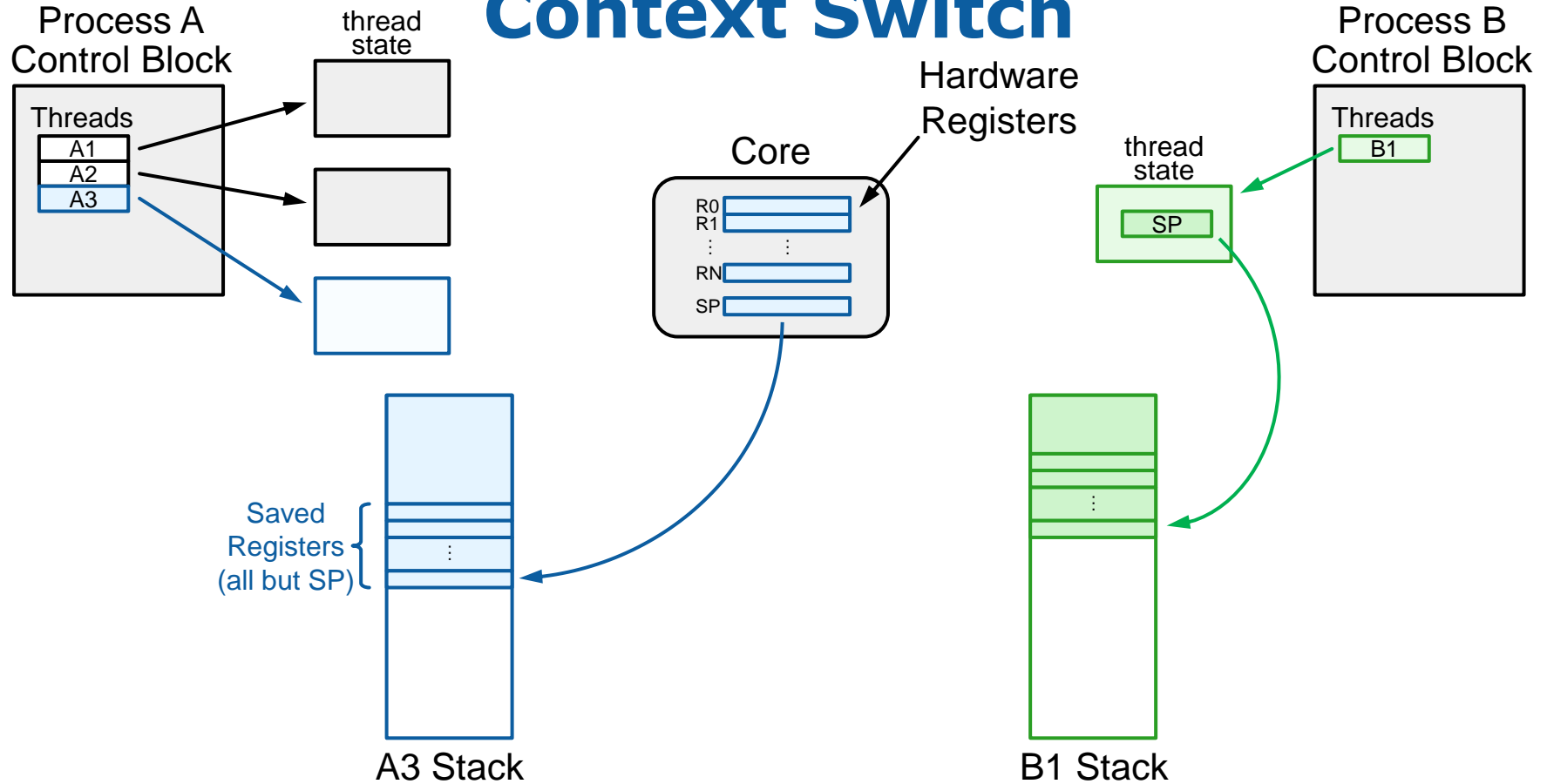


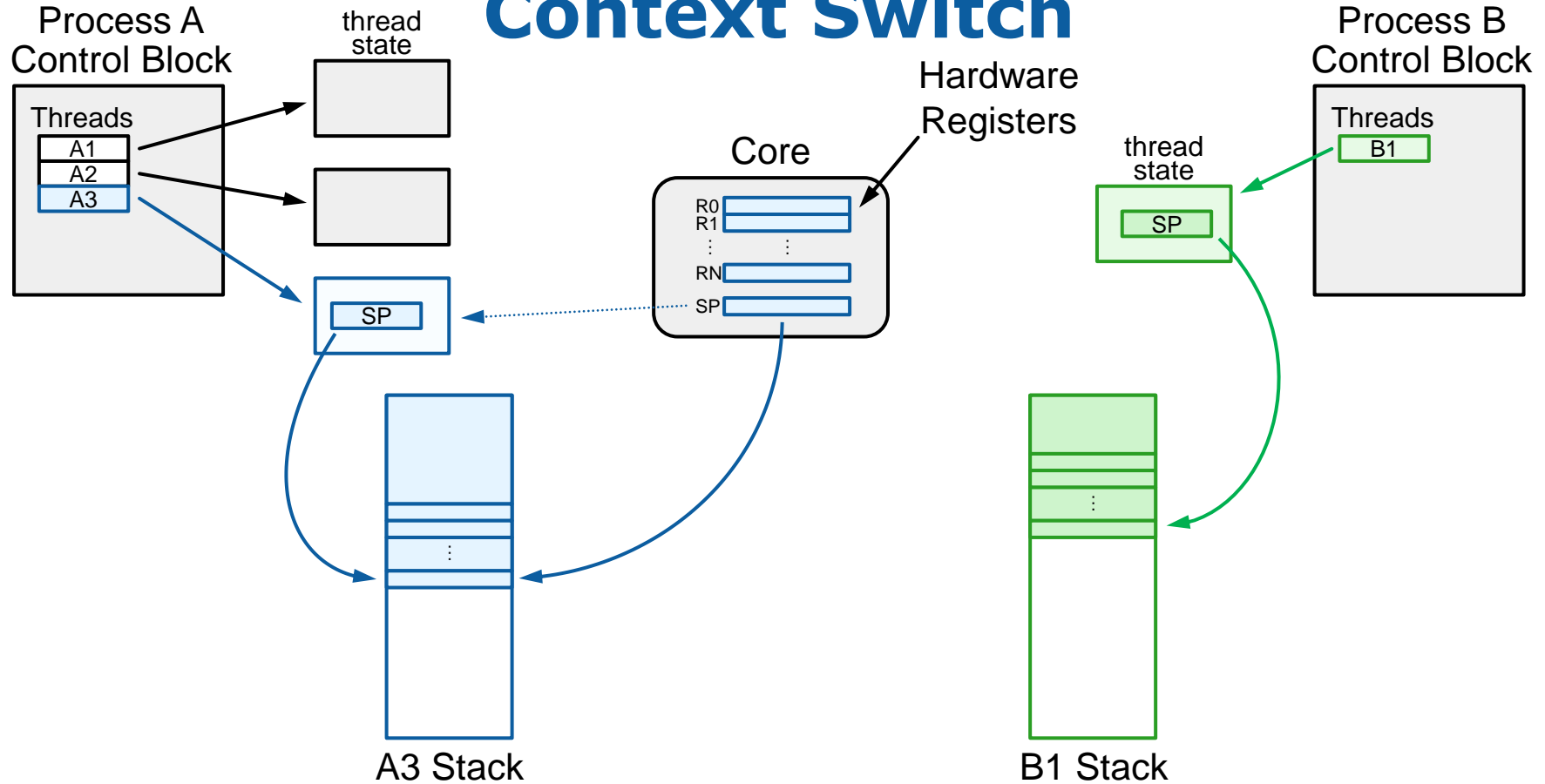
# Context Switch



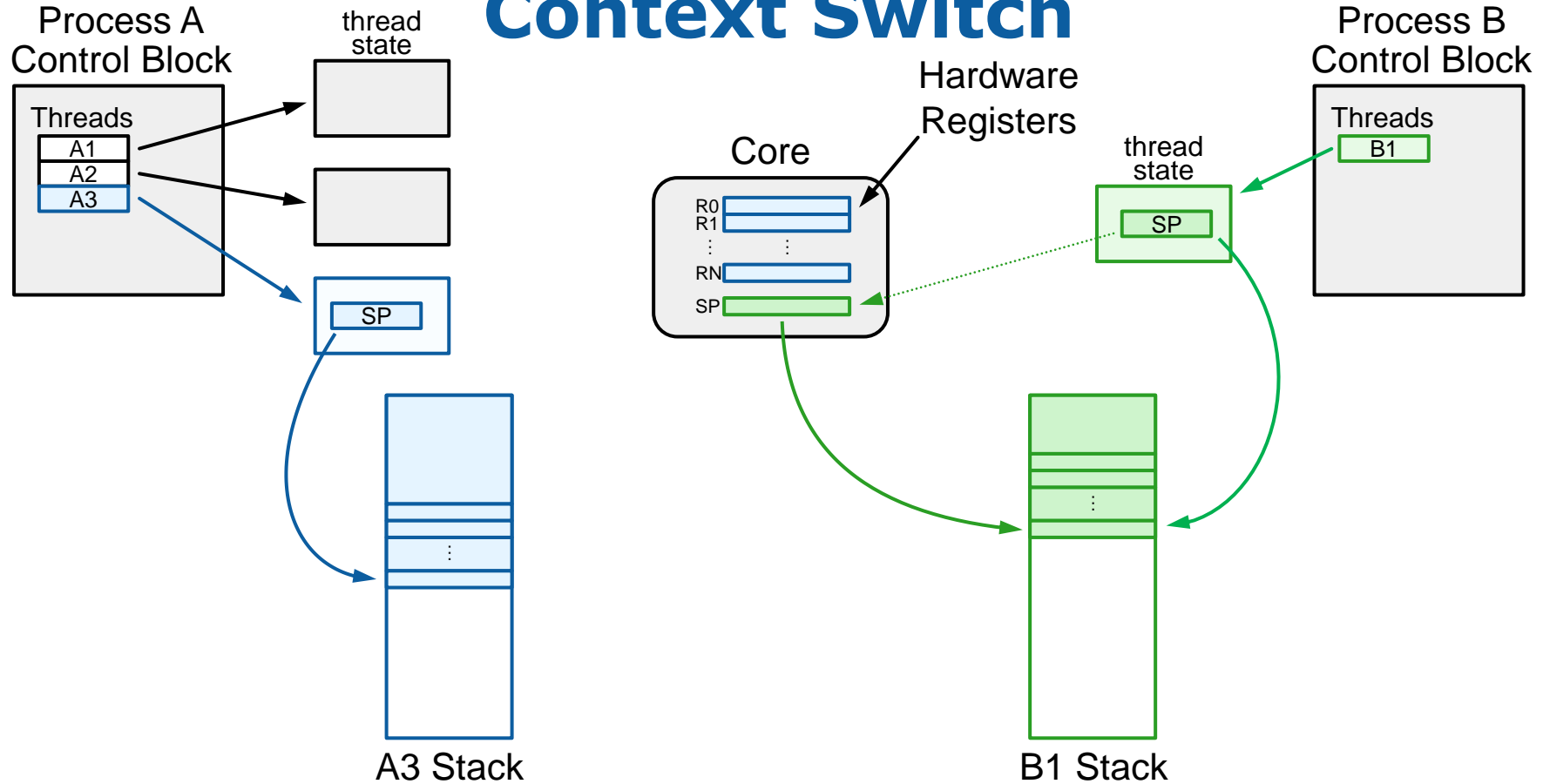
# Context Switch



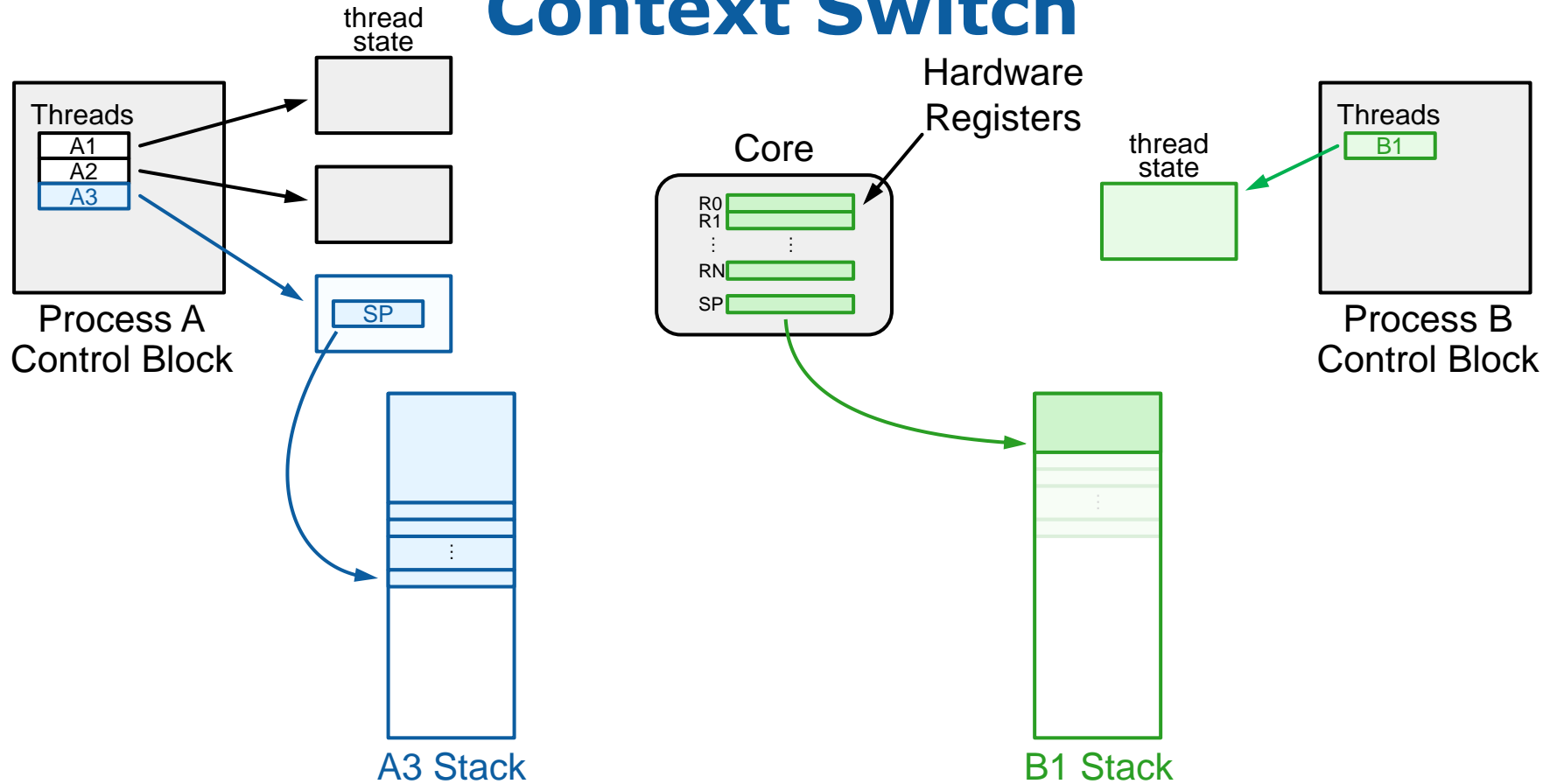
# Context Switch



# Context Switch



# Context Switch



# Linux Fork/Exec Example

```
int pid = fork();  
if (pid == 0) {  
    execvp("ls", argv);  
} else {  
    waitpid(pid, &status, options);  
};
```

← **Child process**

**Parent process** ↗

# Windows Process Creation

```
BOOL CreateProcess(  
    LPCTSTR lpApplicationName,  
    LPTSTR lpCommandLine,  
    LPSECURITY_ATTRIBUTES lpProcessAttributes,  
    LPSECURITY_ATTRIBUTES lpThreadAttributes,  
    BOOL bInheritHandles,  
    DWORD dwCreationFlags,  
    LPVOID lpEnvironment,  
    LPCTSTR lpCurrentDirectory,  
    LPSTARTUPINFO lpStartupInfo,  
    LPPROCESS_INFORMATION lpProcessInformation  
);  
  
WaitForSingleObject(lpProcessInformation->hProcess, INFINITE);
```