BS 1

Aufgabe 1

1. % Privileged Time is the percentage of elapsed time that the process threads spent executing code in privileged mode.  When a Windows system service in called, the service will often run in privileged mode to gain access to system-private data. Such data is protected from access by threads executing in user mode. Calls to the system can be explicit or implicit, such as page faults or interrupts. Unlike some early operating systems, Windows uses process boundaries for subsystem protection in addition to the traditional protection of user and privileged modes. Some work done by Windows on behalf of the application might appear in other subsystem processes in addition to the privileged time in the process.
2. Interrupts/sec is the average rate, in incidents per second, at which the processor received and serviced hardware interrupts. It does not include deferred procedure calls (DPCs), which are counted separately. This value is an indirect indicator of the activity of devices that generate interrupts, such as the system clock, the mouse, disk drivers, data communication lines, network interface cards, and other peripheral devices. These devices normally interrupt the processor when they have completed a task or require attention. Normal thread execution is suspended. The system clock typically interrupts the processor every 10 milliseconds, creating a background of interrupt activity. This counter displays the difference between the values observed in the last two samples, divided by the duration of the sample interval.
3. % Processor Time is the percentage of elapsed time that the processor spends to execute a non-Idle thread. It is calculated by measuring the duration of the idle thread is active in the sample interval, and subtracting that time from interval duration.  (Each processor has an idle thread that consumes cycles when no other threads are ready to run). This counter is the primary indicator of processor activity, and displays the average percentage of busy time observed during the sample interval. It is calculated by monitoring the time that the service is inactive, and subtracting that value from 100%.
4. % User Time is the percentage of elapsed time the processor spends in the user mode. User mode is a restricted processing mode designed for applications, environment subsystems, and integral subsystems.  The alternative, privileged mode, is designed for operating system components and allows direct access to hardware and all memory.  The operating system switches application threads to privileged mode to access operating system services. This counter displays the average busy time as a percentage of the sample time.

Aufgabe 2

* 1. Daemons sind Prozesse, die im Sysemhintergrund laufen und an kein Terminal angehängt sind.  
     ps xa –forest gibt Hierarchie aller Hintergrundprozesse aus. Prozesse, die mit „d“ enden, sind höchstwahrscheinlich Daemons. Namensgebung eher Konvention, wird aber stark eingehalten.