

Definitions

In this document you will see some definitions of basic keywords that we use in the course. These are mainly IT concepts that we expect students to be familiar with. The expectation is that you have an idea what these terms mean (not a formal definition). Therefore, where I find appropriate I use Wikipedia and other online informal sources for the definitions. This document is considered prerequisite and will not be directly part of the examination materials.

Buffer: A data buffer (or just buffer) is a region of a physical memory storage used to temporarily store data while it is being moved from one place to another.

Window: Is a kind of buffer and may be used interchangeably with buffer. But window is used when we consider some number of data structure with the same type in the buffer. For example in networks a window of N frames, means a buffer of size $N \times \text{sizeof}(\text{frame})$ which contains N frames when it is full.

Units in Networks: Kilo (K): 1000, Mega(M): 1,000,000, Giga(G): 1,000,000,000, Tera(T): 1,000,000,000,000.

1's complement of a number: If all bits in a byte are inverted by changing each 1 to 0 and each 0 to 1, we have formed the one's complement of the number.

2's complement of a number: Add 1 to the 1's complement of a number.