MARCHÉ DE LA SCIENCE - TEXTE À TRADUIRE – M2

Document source : *White Paper FUJITSU Server PRIMERGY HDD or SSD or NVMe drives for servers – what is more suitable?*

Solid state drives (SSDs) are based on flash memory, basically the same type of memory as used in SD cards or non-volatile memory in mobile devices. However, there are certain differences between an SSD and an SD card: SD cards have a different type of controller and are regarded by the operating system as a replaceable medium. However, the main difference is in the reliability. SD cards are only suitable for short-term data exchange whereas SSDs have much greater reliability and are thus ideal for storing data on a long-term basis. SSDs have a data throughput level that is much greater than that of HDDs but their performance varies which greatly depends on the type of access. A direct comparison of HDDs and SSDs in benchmarks is usually a difficult process. Traditional HDD benchmarks usually concentrate on areas where HDDs have difficulty, namely rotation latency and search times. As SSDs do not have to rotate nor look for local data, they seem to do much better in these tests compared to HDDs. SSDs thus offer much better performance values than HDDs in most of the application scenarios. The earlier very short life expectancy of SSDs has since been constantly increased in recent years. The SSDs supplied by Fujitsu are ideal for long-term use in servers.”