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INVESTIGACIÓN DE REDES DEFINIDAS POR SOFTWARE

## **SDN(Redes definidas por software)**

Software Defined Networks are the future. With this type of networks, the creation of networks is approached but no longer controlled by the hardware, if only a controller is assigned to it that would be a software application, more clearly this model allows managing and controlling the different hardware components with the software.

What the control plane does now is separate from the hardware. With the data plane that remains with the network devices that are for example firewalls, routers, switches, etc. What the data plane does in the SDN model is to take care of the packet forwarding nothing else, which helps better data processing. Thanks to SDN, the control plane can be programmed more easily which makes the network management more reliable and flexible compared to other architectures.

For the SDN to work, OpenFlow is needed, which is nothing more than a specific communication interface between the control plane and the data plane. To be more specific, the OpenFlow protocol allows the software server to create the packet forwarding path. With this protocol the packet movements are centralized so this network can be programmed without depending on the switches.

## **Bibliografía**

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