**CD++ Model Data Form**

Title: Software Defined Network

Type:

Acronym/Short name: SDN

Purpose for which Developed: A model of the software defined networks which uses controller to manage network’s switches.

Other Applications for which it is Suitable:

Date Developed/Implemented: Oct 2020

Domain:

Current Version: v1.01

URL: <https://github.com/nephilimboy/SdnCadmium>

Description (including characteristics): The client sends a packet to the server through the switch and waits for an acknowledgment. The switch compares the packet’s destination IP with its flow table. If the packet’s destination IP does not match with any destination IP address in the flow table, the packet will be sent to the controller otherwise the packet will be sent to the server immediately. The controller receives the packet and sends back the packet to the switch. The switch receives this packet from the controller and adds the packet’s destination to its flow table and sends the packet to the server. The server receives the packet and sends ACK to the client. This process will be repeated for any packet that its destination IP does not available in the switch’s flow table.

Links to Related Documents

Short Title:

URL:

Description:

Keywords: Software defined network, SDN, Controller, Switch, Server

Developer:

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Comments: A self-designed model, The visualized result using the “**ARSLabDEVS Web Viewer**” is available in the project folder.