IEEE802.11 standard related code:

User can select the IEEE standard, standard related code description to find Rx power given below, extra code to get Rx power printed on NetSim console has highlighted in red colour.

**IEEE802.11b-** Under IEEE802\_11\_DSSSPhy.c file int fn\_NetSim\_IEEE802\_11\_DSSSPhy\_DataRate() function contains code related data rate calculation, user can find the Rx power,

NETSIM\_ID in = fn\_NetSim\_Stack\_GetConnectedInterface(nDeviceId, nInterfaceId, nReceiverId);

double power=GET\_RX\_POWER\_dbm(nDeviceId, nInterfaceId, nReceiverId, in, time);

fprintf(stderr, "\n Rx Power = %lf \n", power);

**IEEE802.11ac/n-** Under IEEE802\_11\_HTPhy.c file int fn\_NetSim\_IEEE802\_11\_HTPhy\_DataRate() function contains code related data rate calculation, user can find the Rx power,

NETSIM\_ID in = fn\_NetSim\_Stack\_GetConnectedInterface(nDeviceId, nInterfaceId, nReceiverId);

double power = GET\_RX\_POWER\_dbm(nDeviceId, nInterfaceId, nReceiverId, in, time);

fprintf(stderr, "\n Rx Power = %lf \n", power);

**IEEE802.11a/g/p-** Under IEEE802\_11\_OFDMPhy.c file int fn\_NetSim\_IEEE802\_11\_OFDMPhy\_DataRate() function contains code related data rate calculation, user can find the Rx power,

NETSIM\_ID in = fn\_NetSim\_Stack\_GetConnectedInterface(nDeviceId, nInterfaceId, nReceiverId);

double rssi =GET\_RX\_POWER\_dbm(nDeviceId, nInterfaceId, nReceiverId, in, time);

fprintf(stderr, "\n Rx Power = %lf \n", power);

User can defined the value of transmitter power from using UI parameter Transmitter Power(mW) (Wireless Node/ Access Point properties 🡪 Interface (wireless) 🡪 Physical layer)

1. Go to the **IEEE802\_11** project, please add the code given below according to the IEEE802.11 standard.

IEEE802.11 standard related code (**IEEE802\_11** Project):

User can select the IEEE802.11 standard, standard related code description to find Rx power given below, extra code to get Rx power printed on NetSim console has highlighted in red color.

**IEEE802.11b-** Under IEEE802\_11\_DSSSPhy.c file int fn\_NetSim\_IEEE802\_11\_DSSSPhy\_DataRate() function contains code related data rate calculation, user can find the Rx power,

NETSIM\_ID in = fn\_NetSim\_Stack\_GetConnectedInterface(nDeviceId, nInterfaceId, nReceiverId);

double power=GET\_RX\_POWER\_dbm(nDeviceId, nInterfaceId, nReceiverId, in, time);

fprintf(stderr, "\n Rx Power = %lf \n", power);

**IEEE802.11ac/n-**Under IEEE802\_11\_HTPhy.c file int fn\_NetSim\_IEEE802\_11\_HTPhy\_DataRate() function contains code related data rate calculation, user can find the Rx power,

NETSIM\_ID in = fn\_NetSim\_Stack\_GetConnectedInterface(nDeviceId, nInterfaceId, nReceiverId);

double power = GET\_RX\_POWER\_dbm(nDeviceId, nInterfaceId, nReceiverId, in, time);

fprintf(stderr, "\n Rx Power = %lf \n", power);

**IEEE802.11a/g/p-**Under IEEE802\_11\_OFDMPhy.c file int fn\_NetSim\_IEEE802\_11\_OFDMPhy\_DataRate() function contains code related data rate calculation, user can find the Rx power,

NETSIM\_ID in = fn\_NetSim\_Stack\_GetConnectedInterface(nDeviceId, nInterfaceId, nReceiverId);

double rssi =GET\_RX\_POWER\_dbm(nDeviceId, nInterfaceId, nReceiverId, in, time);

fprintf(stderr, "\n Rx Power = %lf \n", power);

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2. ​Right click on the **IEEE802\_11**project in the solution explorer and click on rebuild.

3. After the **IEEE802\_11** project is rebuild successful, go back to the network scenario.

User can define the value of transmitter power from using UI parameter Transmitter Power(mW) (Wireless Node/ Access Point properties à Interface (wireless) à Physical layer)