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620
621 void BG96_sendUDP_Data() {
622     //Variable and function to create the data string that should be sent to cumulocity
623     char data[153]="";
624     char data2[30]=""; //second part of the message
625     volatile int total_length=0;
626     char length[2]="";
627     volatile int length_rssi=0;
628     memset(data2, '\0', sizeof(data2));
629     strcat(data2, "rssi:");
630     strcat(data2, rssi2);
631     strcat(data2, ",");
632     strcat(data2, "snr:");
633     strcat(data2, snr2);
634     strcat(data2, ",");
635     strcat(data2, "rsrp:");
636     strcat(data2, rsrp2);
637     strcat(data2, ",");
638     strcat(data2, "rsrq:");
639     strcat(data2, rsrq2);
640     strcat(data2, "\r\n");
641     //strcat(data2, BG96_ID);
642     strcpy(data, BG96_DATA_STRING);
643     total_length= (strlen(data2)-2);
644     sprintf (length, "%d", total_length); //convert back to string
645     //strcat(data, length);
646     strcat(data, data2);
647     //length_rssi=strlen(data);
648     //for debugging to check the data string
649
650     HAL_UART_Transmit(&huart2, data, strlen(data), 1000);
651     HAL_Delay(200);
652
653     //check connectivity
654     while (BG96_Context_Check()==0) { //infinite loop until context is up
655         BG96_Context_Activation(); //
656     }
657
658     //UART data transmission. open the socket
659     HAL_UART_Transmit(&huart1, (uint8_t *) &BG96_AT_PREPARE_UDP_PCKT, sizeof(BG96_AT_PREPARE_UDP_PCKT), 1000);
660     HAL_Delay(2000);
661     char *c = strstr(EVB_Buffer, "+QIOPEN: 0,0");
662     BG96_Send_Clean();
663     if (c) {
664         HAL_UART_Transmit(&huart2, "Socket opened.\r\n", sizeof("Socket opened.\r\n"), 1000);
665         HAL_Delay(200);
666     }
667     else {
668         HAL_UART_Transmit(&huart2, "Check the health of the server and the internet service.\r\n", sizeof("Check the health of the server and the internet service.\r\n"), 1000);
669         HAL_Delay(200);
670         if (BG96_Check_Internet()==1) {
671             HAL_UART_Transmit(&huart2, "The internet service is OK , check the health of the server.\r\n", sizeof("The internet service is OK , check the health of the server.\r\n"), 1000);
672             HAL_Delay(200);

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