**+9lCommand Lists**

**Connection Functionality:**

**“ping {ip\_address} [GSM module req]”**: shows if a specific transformer is online

           returns: “OK  {TRANSFORMER SERIAL NUMBER}” : if it is online

                        “OFFLINE “:if it is offline

**“bcast -s {transformer serial number}”** : **connects to a specific transformer**

           returns: “Connected To {Transformer\_Serial\_Number} : if connected Successfully

                        “Wrong serial Number  {Wrong serial Number}”

                        “Command {Wrong Command} dont exist”: if wrong command entered

**“bcast -a all”: connects to all transformers [GSM module req]**

           returns: “Ok: connected to all transformers”: if connected to all transformers

                        “Command {Wrong Command} dont exist”: if wrong command entered

**“bcast -l {transformer\_location}”:connects to all transformers on the specified location [GSM module req]**

returns : “OK: Connected to all transformers in {location}”:if connected successfully

                        “FAIL: No Transformers in {location}”: if such location don't exist

                        “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**“bcast -r {transformer\_rating}” : connect to all transformer with the same rating [GSM req]**

  returns :“OK: Connected to all transformers with {rating} ratings”:if connected successfully

                        “FAIL: No Transformers in {location}”: if such location don't exist

                        “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**View Functionality**

**“view -transformer  {transformer\_serial\_number}”: view specific transformer information and status**

returns :“OK: {transformer information}”:if transformer Serial number exists

                      “FAIL: Transformer {wrong\_transformer} does not exist}”: if such transformer don't exist

                      “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**“view -config all”: shows all configuration list [ADMIN PRIVILEGE]**

  returns :“OK:

                         > config-1

                         > config-2

                         > config-3”:if config exists

                         “OK:

                                > NO CONFIG EXIST ADD CONFIG TO VIEW”: if no config exists

                         “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**“view -config {config-name}”: views a specific configuration details**

 returns :“OK:

                                  >  T\_min 20

                                  >  T\_max 40

                                  >  H\_min 50

                                  >  H\_max 80

                                  >  V\_min 10

                                  >  V\_max 50

                                  >  C\_min 50

                                  >  C\_max 200

                                  >  OL\_min 40

                                  >  OL\_max 100

                                                                 ”:if connected successfully

                        “FAIL: No {config-name} configuration exists”: if such config don't exist

                        “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**Updating functionality**

**“update -config  {config-name}”: allows the editing of config files” [ADMIN PRIVILEGE]**

           returns: “ OK:

                       >config-name(config-1):\_

                       >  T\_min (20):\_

                       >  T\_max (40):\_

                       >  T\_shutdown(<value):

                       >  H\_min (50):\_

                       >  H\_max (80):\_

                       >  H\_shutdown(<value):

                       >  V\_min (10):\_

                       >  V\_max (50):\_

                       >  V\_shutdown(<value):

                       >  C\_min (50):\_

                       >  C\_max (200):\_

                       >  C\_shutdown(<value):

                       >  OL\_min (40):\_

                       >  OL\_max (100):\_

                       > T\_min (20):\_

                      > Do you want to or edit another config file(Y/N)”:if correct config-name

                        “FAIL: no such {config-name} configuration”:if wrong config-name

                        “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**Create Functionality:**

**“create -config”**: **creates a configuration setting [ADMIN PRIVILEGE**]

            Returns:

                               “OK:

                                > config-name:\_

                                >  T\_min {value}

                                >  T\_max {value}

                                > T\_shutdown(<value):

                                >  H\_min {value}

                                >  H\_max {value}

                                > H\_shutdown(<value):

                                >  V\_min {value}

                                >  V\_max {value}

                                >  V\_shutdown(<value):

                                >  C\_min {value}

                                >  C\_max {value}

                                > C\_shutdown(<value):

                               >  OL\_min {value}

                               >  OL\_max {value}

                               > OL\_shutdown(<value):

                               >created config {config-name}”:if every input is correct

   “FAIL: Wrong value {parameter value} please input again”:If wrong type to the inputs or duplicate config-name

 “ERR: Command {Wrong Command} dont exist”: if wrong command entered

**“ use -config {config-name}”:allows to use pre-saved config file”[ADMIN PRIVILEGE]**

returns : “ OK:

                     >  T\_min 20

                     >  T\_max 40

                     > T\_shutdown(<value):

                     >  H\_min 50

                     >  H\_max 80

                     >  H\_shutdown(<value):

                     >  V\_min 10

                     >  V\_max 50

                     >  V\_shutdown(<value):

                     >  C\_min 50

                     >  C\_max 200

                     >  C\_shutdown(<value):

                     >  OL\_min 40

                     >  OL\_max 100

                     >  OL\_shutdown(<value):

                     > press enter to use config file

                     > successfully loaded config file exiting….

” :If correct config name

                   “FAIL: No config found”: if such configuration don't exist

                  “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**Stream Functionality**

**“stream {interval} {serial no}”: allows to stream information at a defined rate for a transformer”**

returns :“

> input stream interval(i.e 1 means in seconds)

> 1.sec

> 2.min

> 3.hour

> 1

>input the value(eg. {15} means every 15 seconds}

>15

>Saved exiting….

>

 “FAIL: no such transformer exists” : if such transformer does not exist

 “ERR:Command {Wrong Command does not exist”: if the wrong command is entered

**“stream {interval} {serial no} {parameter}”: allows to stream information at a defined rate for a transformer”**

returns :“

> input {parameter} stream interval(i.e 1 means in seconds, parameter: T-temperature H-humidity V-voltage C-current OL-Oil-level)

>  T {stream interval}

> 1.sec

> 2.min

> 3.hour

> 1

>input the value(eg. {15} means every 15 seconds}

>15

>T sec 15

>Saved exiting….

 “ERR:Command {Wrong Command} dont exist”: if wrong command entered

**Special Commands[ADMIN]**

**“shutdown -transformer all”:  instant shut down all transformer[GSM req]**

returns : “OK:

                           are you sure you want to shut down all transformers(Y/N)?

                         “:If correct command

                        “ERR:Command {Wrong Command does not exist”: if the wrong command is entered

**“shutdown -transformer -s {serial no}”: instant shut down a specific transformer**

returns : “OK: are you sure you want to shut down {serial no} transformer(Y/N)? ”:if correct command and correct serial number

                  “FAILED: no such transformer exist”:if wrong serial number

                  “ERR:command {wrong command} exist”

**“shutdown -transformer” -l {location}:instant shutdown for a group of transformers with the same location [GSM req]:**

returns: “OK: are you sure you want to shut down transformers in {location}? (Y/N)”:if location exists

                  “FAILED: no such location exists”:if no transformer in that location

                  “ERR:command not found”:if incorrect command

**“update temp {min},{max}”: updates min and max temperature value of the current configuration:**

          returns: “OK: updates successfully”: if command is correct

                        “FAIL: if wrong input type”: if input type is wrong

                        “ERR:command don't exist”: if incorrect command

**“update hum {min},{max}”: updates min and max humidity value of the current configuration:**

          returns: “OK: updates successfully”: if command is correct

                        “FAIL: if wrong input type”: if input type is wrong

                        “ERR:command don't exist”: if incorrect command

**“update vol {min},{max}”: updates min and max voltage value of the current configuration:**

          returns: “OK: updates successfully”: if command is correct

                        “FAIL: if wrong input type”: if input type is wrong

                        “ERR:command don't exist”: if incorrect command

**“update curr {min},{max}”: updates temperature value of the current configuration:**

          returns: “OK: updates successfully”: if command is correct

                        “FAIL: if wrong input type”: if input type is wrong

                        “ERR:command don't exist”: if incorrect command

**“update oil {min},{max}”: updates min and max  oil level value of the current configuration:**

          returns: “OK: updates successfully”: if command is correct

                        “FAIL: if wrong input type”: if input type is wrong

                        “ERR:command don't exist”: if incorrect command