

Configuring Network Data Usage for the Cell Interface on WTI

(Please note that this feature is compatible with the latest firmware version v8.07 and above)

Steps to Configure Network Data Usage

To configure the network data usage, login to the unit via **CLI** and issue **/cell** command and select option 1 to navigate to the Cell Modem Parameters.

The following options are available under the **Network Data Usage Settings** menu:

1. **Plan Start Day**
 - **Description:** Specifies the start day of the billing cycle (the "plan start day" for data usage). The cycle will reset on this day every month.
 - **Range:** 0-31 (where '0' disables the feature).
2. **Plan Data Max**
 - **Description:** Defines the maximum data limit for your plan in bytes, kilobytes (K), megabytes (M), or gigabytes (G). For example, 50MB = 52428800 bytes.
3. **Network Data Usage**
 - **Description:** Displays current data usage (RX and TX).
 - **RX Data:** Total data received.
 - **TX Data:** Total data transmitted.
 - **Total Data:** Combined total data usage (RX + TX).
4. **Default Network Data Usage Parameters**
 - **Description:** Resets the network data usage settings to their default values.
5. **Clear Network Data Usage**
 - **Description:** Clears the data usage logs. You can choose to clear:
 - **Current Data Usage Logs:** Clears data usage from the current session.
 - **Archived Data Usage Logs:** Clears archived usage logs.
 - **All Data Usage Logs:** Clears both current and archived logs.

After modifying the settings, <ESC> to the main menu to save the configuration.

```
CELL MODEM PARAMETERS: [cell1] IPv4

COMMUNICATION SETTINGS          SERVERS AND CLIENTS
1. Default Gateway:             Off          21. Web Access:                Off
2. Use Peer DNS:                Off          22. SNMP Access:              Off
3. Static Route:                Off          23. PING Access:              Allow
4. DDNS Services:              (undefined)
5. Modem Stay Alive:           Off
6. LCP Echo:                    On
7. Protocol:                    IPV4
8. MTU/MRU:                     16384

NETWORK DATA USAGE SETTINGS
9. Plan Start Day:              3
10. Plan Data Max:              52428800, (50.0MB)
11. Network Data Usage:         53716, (52.4KB)
12. Default Network Data Usage Parameters:
13. Clear Network Data Usage:
```

To configure it via **WebGUI**, navigate to the Configuration menu and select Cellular Configuration. Configure the **Cellular Usage Parameters** to monitor the data usage on the Cell interface.

The screenshot shows the WebGUI interface for configuring Cellular Data Usage Parameters for IPv4. The top right corner displays "Site ID: (undefined)". The left navigation menu includes options like HOME, STATUS, CONTROL, METERING, CONFIGURATION, GENERAL PARAMETERS, SERIAL PORT CONFIGURATION, NETWORK CONFIGURATION, CELLULAR CONFIGURATION, IPV4, Cellular Parameters, Cellular Usage Parameters (highlighted), Network Parameters, Static Route, DDNS, and Web. The main configuration area is titled "Cellular Data Usage Parameters [cell] IPv4" and contains the following settings:

Plan Start Day:	3	Default Start Day
Plan Data Max:	52428800	Default Data Max
Network Data Usage:	55492	

Below the settings is a button labeled "Change Cellular Usage Parameters".

Verifying Data Usage

Once you have configured the **Plan Data Max** and **Plan Start Day** settings, the data usage information will be displayed in the **Network Data Usage Settings** menu as well as in the **/cell** menu under **Network Data Usage**.

```
REM> /cell
CELL MODEM STATISTICS:      Vendor: Multitech      Model: MTSMC-L4N1-U
                             Desc: 4G/LTE                    Rev: M0F.660006
CELL MODEM INFORMATION
Cell Phone Number:         (undefined)
Device ID (IMEI):          350344984806511
SIM Number (ICCID):
Cell Network Carrier:     AT&T, 4G/LTE
Signal Strength (0-31):   31 (Excellent)
Cell Session Established:  Yes
IP Address:
Connected, Network Data Usage: 39302 seconds, 52.4KB/50.0MB
```

Configuring Alerts for Network Data Usage

You can configure alerts for network data usage by setting **initial** and **critical** thresholds. These thresholds will trigger notifications via **SNMP**, **Syslog**, **Email**, or **Slack** when your data usage reaches specified levels. Issue **/ac** command to access **Alarm Configuration** menu.

1. **Network Data Usage (Initial)**

- **Description:** Sets the initial alert threshold for data usage. An alert will be triggered when the data usage reaches this level.

2. **Network Data Usage (Critical)**

- **Description:** Sets the critical alert threshold for data usage. An alert will be triggered when the data usage reaches this critical level.

```
REM> /ac
ALARM CONFIGURATION:
1. Over Temperature <Initial>:      On - 110 Degrees F
2. Over Temperature <Critical>:    On - 120 Degrees F
3. Lost Communication with Unit:    On
4. Ping No Answer:                  On
5. Serial Port Invalid Access Lockout: On
6. Power Cycle:                      On
7. Buffer Threshold:                 On
8. Emergency Shutoff:               On
9. No Dialtone:                      On
10. Wakeup on Failure Cell (Awake):  On
11. Wakeup on Failure Eth0:         On
12. Wakeup on Failure Eth1:         On
13. IP Passthrough Data Usage:      On
14. Buffer Filtering:                On
15. No Cellular PPP Connection:     On
16. User Login/Logout:              Off
17. Network Data Usage <Initial>:    On - 70% of max
18. Network Data Usage <Critical>:   On - 90% of max
```