

Basic setup of a Micromate® for Auto Call Home™

Question:


How do I set up a Micromate to run the Auto Call Home function?

Answer:

The Auto Call Home function requires that the Micromate, modem, and PC are configured before it will transfer data. Please refer to the Micromate User Manual 721U0201 section 11.4.4 and the Blastware™ User Manual 714U0201 section 4.4 for a complete description and extended instructions.

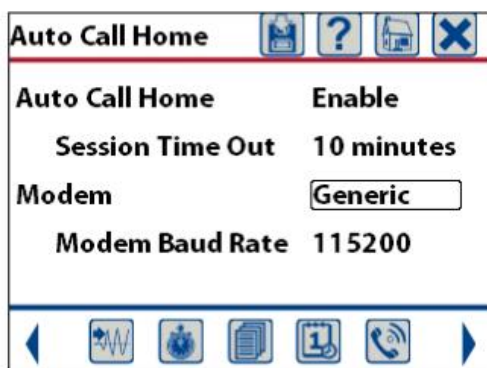
NOTE: It is suggested that you configure the Micromate, modem, and PC in the office before deploying in the field.

Configuring the Micromate for Auto Call Home

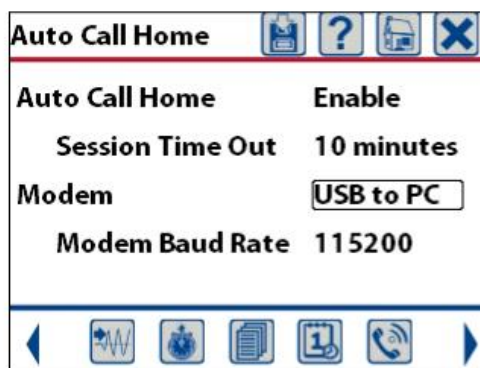
- 1 Touch the Auto Call Home short cut icon on the Micromate touch screen . This Auto Call Home menu configures how the Micromate calls your destination computer, assuming this function has been enabled.

NOTE: The Auto Call Home function does not support manually recorded events.

- 2 Enable Auto Call Home. Set Session Time Out to 30 minutes, Modem to Generic or USB to PC, and baud rate to 115200.
 For Modem connected Unit



For Serial Port Connected Unit



NOTE: Session Time Out is used to exit Auto Call Home and return to monitor mode after the given time. Use this feature to set the maximum amount of time the Micromate will NOT be in monitor mode.

SKIP THIS STEP IF YOU PLAN TO CONNECT OVER SERIAL TO THE UNIT




- 3 Use **ONLY** a Sabrent CB-FTDI USB to Serial Cable to connect the Micromate to the



modem.

To Configure the Modem

The Micromate supports the following three modems: Raven X, LS-300 and GX-400. The following example is for the GX-400 modem, using the AirLink Ace Manager software to configure the modem.



Software and Firmware | Template | Refresh All | Reboot | Help | Logout

Status | WAN/Cellular | Wi-Fi | LAN | VPN | Security | Services | GPS | **Serial** | Applications | I/O | Admin

Last updated time : 9/14/2015 12:31:01 PM

Expand All | Apply | Refresh | Cancel

Port Configuration

[-] Port Configuration

MODBUS Address List	AT Startup Mode Default	TCP
LED Indicator	AT Configure Serial Port	115200,8N1
	AT Flow Control	None
	AT DB9 Serial Echo	Disable
	AT Data Forwarding Timeout (.1 second)	5
	AT Data Forwarding Character	0
	AT Device Port	9034
	AT Serial MTU	1304
	AT Destination Port	23789
	AT Destination Address	209.202.82.101
	AT Default Dial Mode	TCP
	Host Authentication Mode	NONE
	PPP User ID	
	PPP Password	

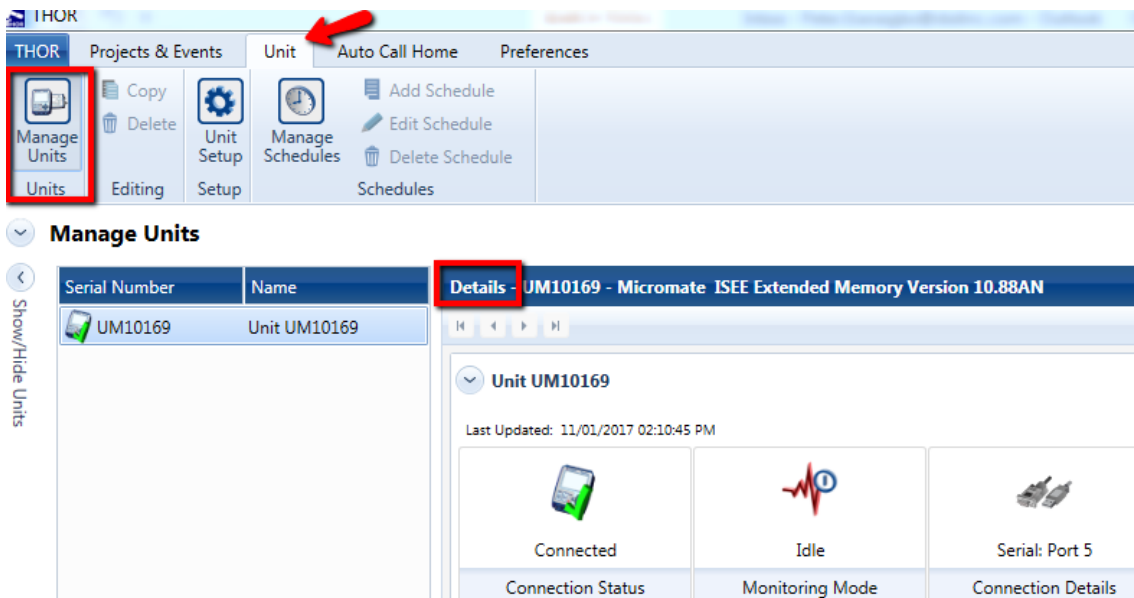
[-] Advanced	
AT Assert DSR	In Data Mode
AT Assert DCD	In Data Mode
AT Use CTS	Enable
AT DTR Mode	Use DTR
AT Quiet Mode	Enable
AT AT Verbose Mode	Verbose
AT Call Progress Result Mode	Disable
AT Convert 12 digit Number to IP Address	Use as Name
AT Disable ATZ Reset	Off
AT IP List Dial	Disable
Keep Alive Mode	Disable
Keep Alive delay	10
[-] TCP	
AT TCP Auto Answer	Enable
AT TCP Connect Timeout (seconds)	10
AT TCP Idle Timeout	65
AT TCP Idle Timeout Unit	Seconds
AT Telnet Echo Mode	No Echo
AT TCP Connect Response Delay (seconds)	0
AT Enable ENQ on TCP Connect	Disable
Include Device ID on TCP Connect	Disable
Device ID Prefix	
Device ID Suffix	
Send CR LF after Device ID	no CR LF
[-] UDP	
AT UDP Auto Answer	Enable
AT UDP Idle Timeout (seconds)	65
AT UDP Connect Last	Do not change S53
AT Allow Any Incoming IP	Allow any IP
AT Allow All UDP	No effect
AT UDP Auto Answer Response	No Response
AT Dial UDP Always	Disable
AT UDP Serial Delay (.1 second)	0
UDP Keepalive (seconds)	0
UDP Recovery Ping	0.0.0.0

When setting the TCP idle time-out value, InstanTel strongly recommends one of the following values based on your expected usage.

- If you do not remotely configure the Compliance Setup and Schedule of the monitoring unit, then we recommend using 65 seconds to allow for TCP idle time that occurs when an Auto Call Home session executes a Delete All on the unit.
- If you remotely configure the Compliance Setup or Schedule of the monitoring unit, then we recommend using 10 minutes to allow for the TCP idle time that occurs between the time the Compliance Setup window is opened in Blastware and the time the new configuration is sent to the unit.

To Configure the PC for Auto Call Home

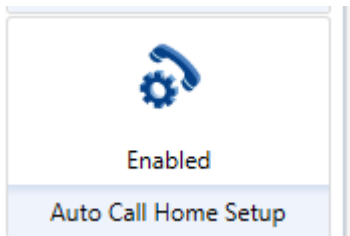
- 4 Start the most recent release of THOR. (See the software section of http://www.instantel.com/system/files/thor_web_installer.zip)
- 5 Connect the Micromate unit to the PC. Confirm that the **Micromate** can communicate with THOR. **Connection Status** should indicate **Connected** in THOR



The screenshot shows the THOR software interface. The 'Unit' tab is selected, and a red arrow points to it. The 'Manage Units' section is visible, showing a table with columns 'Serial Number' and 'Name'. The first row is 'UM10169' with 'Unit UM10169'. A red box highlights the 'Details' button for this unit. The 'Details' panel for 'Unit UM10169' is expanded, showing 'Last Updated: 11/01/2017 02:10:45 PM' and three status indicators: 'Connected' (Connection Status), 'Idle' (Monitoring Mode), and 'Serial: Port 5' (Connection Details).

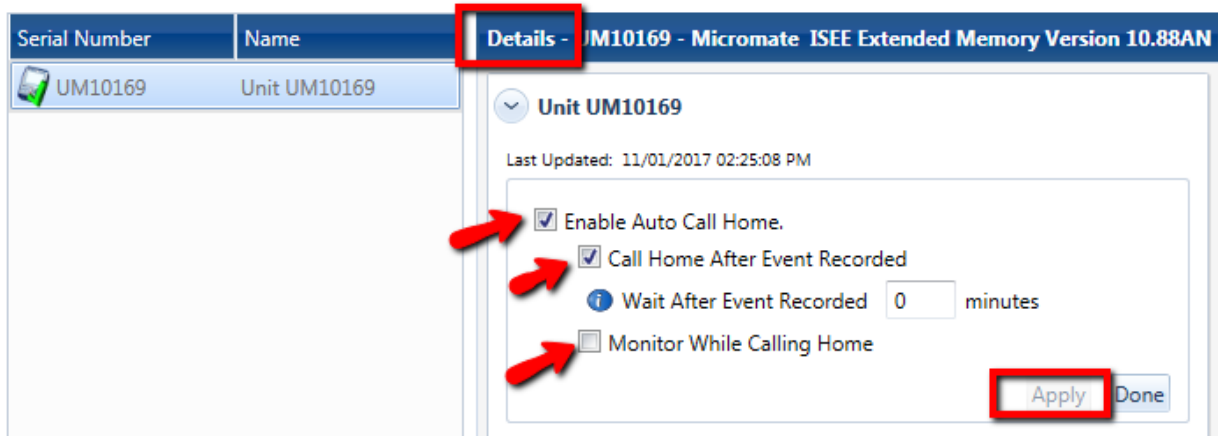
NOTE: See THOR Operator manual for details on how to Add and connect to a unit in THOR


- 6 In the **Unit Details** area in THOR, under the **Unit** tab, click the **Auto Call Home Setup** button. Then select if the unit is to call home after each event and/or if the unit is to call home while monitoring.



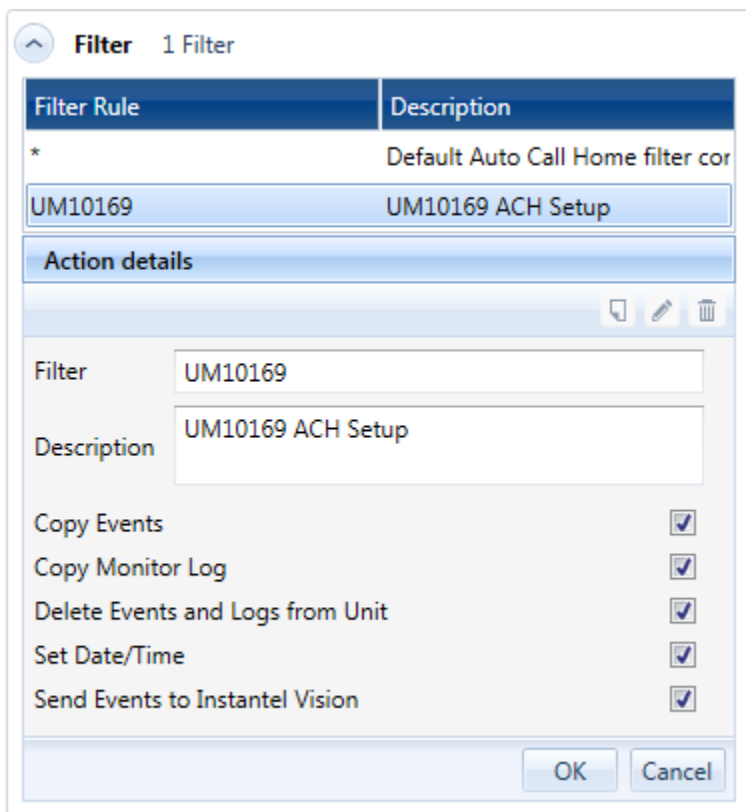
- 7 Click **Apply** to send this setup to the unit.

Manage Units



- 8 Set up Auto Call Home Filters. In the **Filter** section under the **Auto Call Home** tab, click the **Add** button . Enter the serial number and description for your Micromate. (In the example below, Serial No. *UM10169* and *UM10169 ACH Setup*.) Please see the THOR Operator Manual for detailed description of Auto Call Home Filters.

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Click the applicable **Check box** to configure the operations that are to be done for this unit.

Filter Rule	Description
*	Default Auto Call Home filter cor
UM10169	UM10169 ACH Setup

Action details

Filter: UM10169
Description: UM10169 ACH Setup

Copy Events

Copy Monitor Log

Delete Events and Logs from Unit

Set Date/Time

Send Events to InstanTEL Vision

OK Cancel

- 9 Set up **Communication Settings** under the THOR **Auto Call Home** tab. If you are using TCP communications for auto call home then enter the **TCP Port** number so THOR knows where to listen for incoming communication/data from your modem. For Serial and USB communication, the Micromate unit will show up under the Active COM Ports (Not applicable for TCP protocol) which indicates THOR will accept incoming data from the Micromate unit.

General Auto Call Home is Stopped

Start Stop

Communication Settings

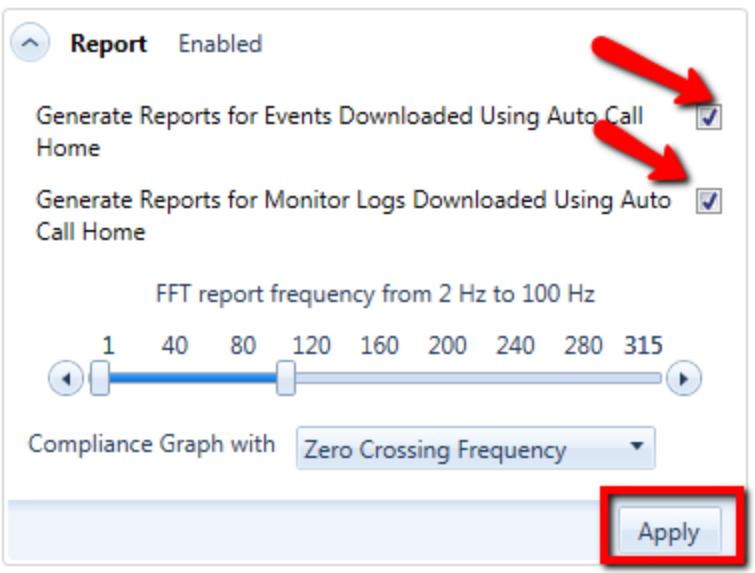
TCP Port 12345 Apply Cancel

Active COM Ports

COM Port	Serial Number
5	UM10169

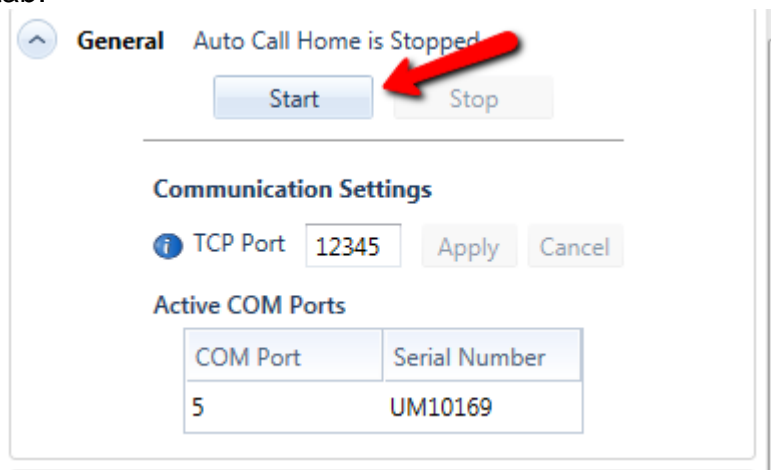
NOTE: For TCP communication, it may be required for IT to setup port forwarding so that data from the Monitoring unit is routed to the TCP Port where THOR is listening on (12345 in the above example)

- 10 Configure report options by selecting the applicable check box, then click **Apply** to save. Enabling “Generate Reports for Events Downloaded Using Auto Call Home” creates CSV, PDF, TXT, XML file formats as part of the auto call home process and is saved to the THOR project directory where the unit is added. No way to choose the file formats.



NOTE: All reports are post processed using this application. Measurement units selected in this report setup override the Seismograph's settings.

- 11 Start Auto Call Home by clicking **Start** button in THOR, under the Auto Call Home tab.



NOTE: The IP address and port number must match the address and port number set in the modem. Please see the THOR manual for more information.

- 12 To put the Micromate in monitor mode, press the Start Monitor button on the unit or click the **Monitor Mode** under unit details in THOR. To make sure Auto Call Home is running, check the bottom right corner of the THOR software, it should indicate “**Auto Call Home Running**”. If Auto Call Home is not running, see Step 11 above.

Auto Call Home is running.

- 13 To test the setup, with the Micromate in monitoring mode, create an event by shaking the geophone. Make sure the unit displays “Connecting” and “Transferring Data”. Also make sure that Auto Call Home receives the file.

Additional Options

To Schedule Monitoring

The Micromate can be configured to start or stop monitoring, or to call home at specific time during the day or week. This daily or weekly schedule can also repeat. For more information, please refer to the Micromate user manual.

Details - UM10169 Schedule, Micromate

Name: UM10169 Schedule

Description: Daily Monitoring Schedule

Unit Type: Micromate

Schedule Time Settings: 12:00 AM - 05:00 PM, Repeat Daily: Enabled

Repeat Daily:

Work Hours

Start Time: 12:00 AM

End Time: 05:00 PM

Day	Week	Daily Actions
		12:00 AM Start Monitoring
		1:00 AM Auto Call Home
		2:00 AM
		3:00 AM
		4:00 AM Stop Monitoring
		5:00 AM

OK Cancel