

IP Counter API Test Statement

Statement

All samples provided by Irisys are not to be treated as production ready code. They are provided as is, for testing purposes, and to demonstrate ways in which an application **could** use the API only. The samples provided by Irisys are intended to give a general idea of the code only, and Irisys do not warrant their accuracy or accept any liability for any reliance on them. Irisys have a policy of continuous product improvement and reserve the right to change, or withdraw the samples at any time. The samples are not supported by Irisys.

50 Unit Test

Each of the current APIs has undergone a 50 unit simultaneous connection test using the samples provided with the API. Each sample shows different ways of handling the 50 units including:

- One thread per connection where each thread schedules the collection of data (all connections held open)
- Single thread that schedules the collection of data from each connection (all connections held open)
- One thread per connection where each thread schedules the collection of data (connection dropped after data collected)

Other samples are variations on the theme above just wrapping and using the API in different ways. Each test was run for around 2 hours with 45 of the units having a 120 second connection retry timeout and 5 units having a 1 second connection retry timeout.

Tests were also done to simulate large numbers of units all connecting at the same time after a power outage, this basically meant that all 50 units and their nodes would attempt to connect to the software at exactly the same time.

Using 50 units with nodes exercises the API more as when a connection is established nodes are enumerated and a certain amount of "house keeping" communications occur, thus requiring more resources and bandwidth.

Each test passed without issue and each test used 0% CPU usage when monitoring task manager in windows.

Test Setup

50 IRC3000 series IP Masters (IRC3010) with 1 node each (IRC3000)

Intel Dual Core 6400 @ 2.13GHz

2GB RAM

Windows XP Pro SP3 (all latest windows update patches applied)