Intermittent and Continuous Connections

The Omni Server supports two connection modes. The connection mode is controlled by the various Timeout settings. Each mode is described below.

Intermittent Connection Mode

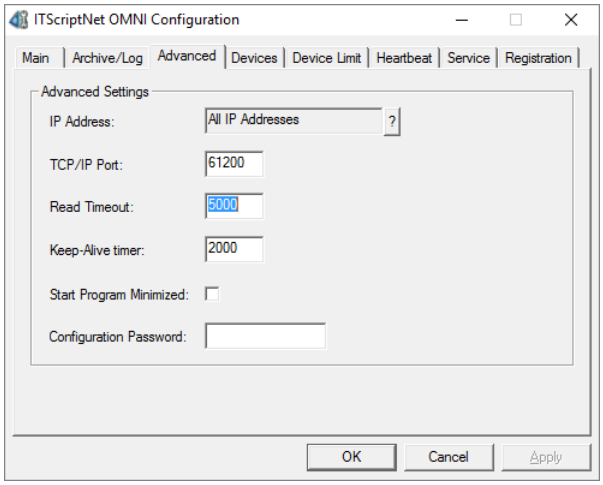
The default connection mode is for Intermittent Connections, in which a connection is only established to the Omni Server when a request is to be made. This mode allows for the maximum scalability and the largest number of devices to connect without degrading the overall performance of the Server. However, it is slower for individual devices to connect to the Server.

Read Timeout

This is the maximum time that the Server will wait for a message from a device when connected. If no message is received in this time, the connection will be broken.

Settings for Intermittent Connection Mode

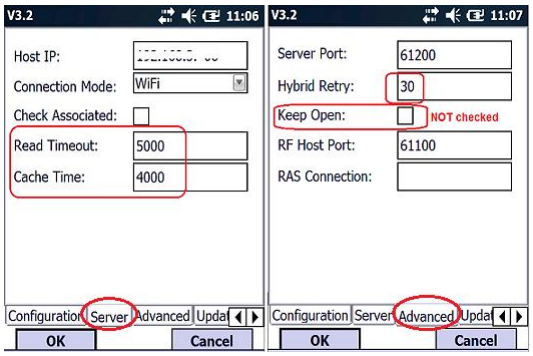
This mode is activated if the "Keep Open" setting is "Off". You will want to set the **Omni Server's Read Timeout** to a reasonable value that allows the Server to detect when a device is no longer responding. The default for Intermittent Connection mode is 5000 milliseconds (5 seconds).
You also want to set the **device's Omni Timeout** to a similar value.
Lastly, you want to set the Connection Cache time to a value *slightly smaller than the Omni Timeout*. The ensures that the device will drop its connection to the Server first. The default value for the Omni Timeout is 5000 milliseconds, and the Connection Cache is 3000 milliseconds.



Recommended settings:

- Omni Server
  - Read Timeout: 5000ms
  - Keep alive: 2000ms
- Device
  - Keep Open: Off
  - Hybrid Retry Interval: 30
  - Omni Timeout: 5000ms
  - Connection Cache Time: 3000ms

Set the Timeout on the PC in Omni Config, and on the device in the ITScriptNet configuration screen; these should be *about* the same, but: **the PC/server should be about 1 second longer than the device.**



You should not need to increase these values for an 802.11 (WiFi) connection. For a GPRS connection, you may need to increase the Read Timeout and Omni Timeout values to 30 seconds (30000ms) in order to account for the slower response time and longer latency of a GPRS connection. The Connection Cache time can remain the same.

Leave the cache time at 3000 ms.
Make sure Keep Open is Not set (is off).

If you need to extend the timeouts a little:
Remember: The Server's Read Timeout needs to be slightly longer than the device's Omni Read timeout.

Try setting the Server's Read Timeout to 10000 and the device Read Timeout to 9000.
If this does not work, try: Server 15000 / device 14000.

Advanced Tab (along the bottom of screen)**:**
Keep Open = If this is Checked ON, then this will cause the mobile device to periodically send a message to the server to keep its connection open. **TURN THIS OFF (UNcheck) if the device keeps timing out. Rarely is this needed.**
Advanced Tab: Hybrid Retry: 30 : Number of seconds to send a message to the server to keep the connection open.
"Connection Broken" messages indicate that the Mobile timed out waiting for a response from the server. That could be due to the Keep Alive setting, 30 seconds is a long time to be waiting for a response.

If there is still an issue, ***check the memory on the device*** *to see if it's full.*
Also *set the* ***Logging to maximum*** in the Omni Configuration window on the PC/Server – this will create a log file in the ITScriptNet folder on the PC which can be read for troubleshooting purposes.