

# Handling Windows Updates

Microsoft regularly comes out with updates to their latest operating system, Windows 10. On previous versions of Windows one could control these updates--even turn them off if they wanted to. But that kind of control has, for the most part, been taken away with Windows 10. Microsoft says this is for security reasons. Apparently, they don't want anyone mucking about or hacking into their code.

## How Updates Affect You

Your T Box (the little black Zotac box we shipped when your cowbell and efficiency arrived at your place of business) is a mini PC with the Windows 10 operating system installed. Naturally, that means it's at the mercy of updates. Which means we all are.

## Problems That Could Arise With Updates

Here at Thrive, we like security. We give it a big, efficient thumbs up. So we don't sneer at Microsoft's insistence on constantly updating their OS. Well, it's not a *big* sneer, at least. Security does usually come with a cost. And this is no different.

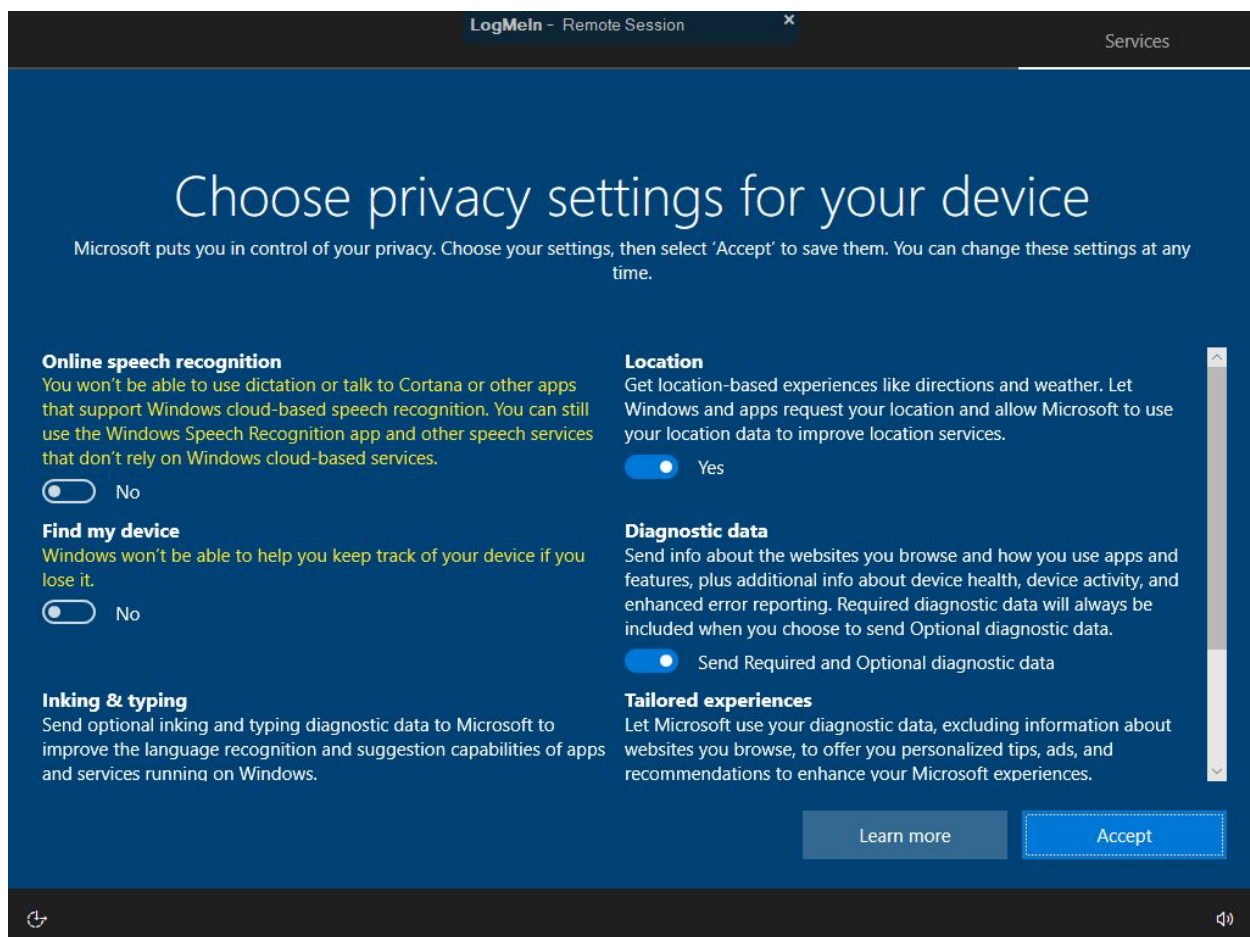
On your T Box, we run a program called T Com. T Com acts as a middle man between your PLC (or Wago) and our servers. That is, it reads the data coming off your PLC and relays it to our servers so that you can see your numbers on your interface.

Normally, Windows 10 will perform its updates quietly and insistently in the background. This doesn't affect T Com or T Box at all. Not the actual download part, at least. When it's finished downloading the latest update, it will want to apply the update. That often requires a reboot, which means it will shutdown your T Box and restart it again. That usually isn't a big deal, either. T Com is set up to automatically start again when the system boots up. Usually, the whole system will update and reset without you even noticing. Usually, you can continue your day without interruption or loss of data. There's a lot of "usually"s in this paragraph, so let's discuss the part that causes trouble, the *unusual*.

There are two things that could happen during a Windows update that will cause your Alive with Thrive to be. . . well, not so Alive.

**Your T Box shuts off** - Occasionally, updates will prompt the T Box to restart, and it will shut down, but not start back up. Without it being up, T Com won't be sending data to our server, which will mean you won't see Finished Goods numbers increasing, Downtimes won't appear on your OI screen, the line will look like it's up while it's down, etc.

**T Com isn't running** - Without T Com busily updating our servers with information it receives from your PLC, you're going to have the same problems as above. One of the reasons for this can be caused by a Windows update. On some updates, Windows will boot up with a sort splash screen like this:



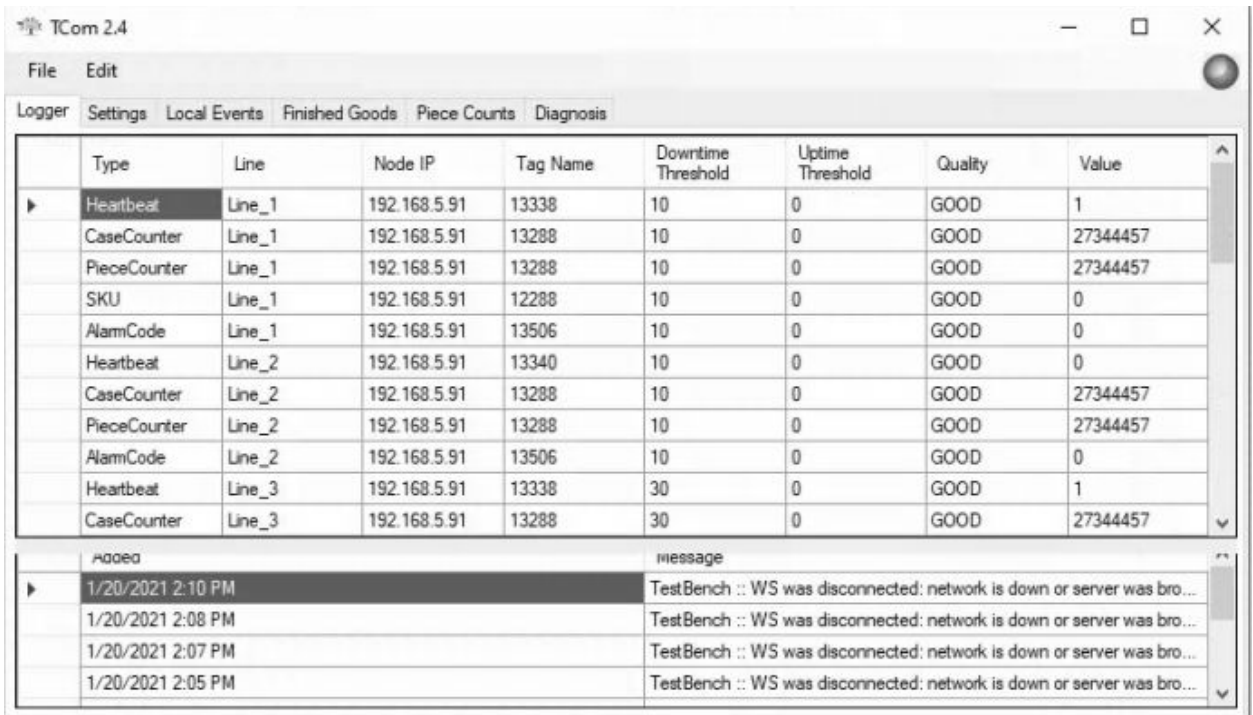
In the above, Windows is awaiting a response, and will stubbornly not finish booting up. That means T Com will not start running until that screen is cleared.

## Solutions!

We wouldn't want to ruin your day by dropping some potential problems in your lap, then walking away. So here some things you can do about Windows updates.

Since your T Box is nothing more than a mini PC, you can hook up a keyboard, mouse and monitor to it, just like you would a desktop computer. With that, you'll be able to see what's going on. Then you can follow these steps:

- If your monitor shows nothing but a dark screen, then your T Box is not running and needs to be powered up.
- If you see a big message from Windows filling the screen (it will have a blue background with white lettering like the image above), then appease it by doing what it asks. Once it's satisfied, it'll continue booting up. T Com should then start up automatically. It will look like this:



The screenshot shows the TCom 2.4 application window. The main area contains a table with the following data:


Type	Line	Node IP	Tag Name	Downtime Threshold	Uptime Threshold	Quality	Value
Heartbeat	Line_1	192.168.5.91	13338	10	0	GOOD	1
CaseCounter	Line_1	192.168.5.91	13288	10	0	GOOD	27344457
PieceCounter	Line_1	192.168.5.91	13288	10	0	GOOD	27344457
SKU	Line_1	192.168.5.91	12288	10	0	GOOD	0
AlarmCode	Line_1	192.168.5.91	13506	10	0	GOOD	0
Heartbeat	Line_2	192.168.5.91	13340	10	0	GOOD	0
CaseCounter	Line_2	192.168.5.91	13288	10	0	GOOD	27344457
PieceCounter	Line_2	192.168.5.91	13288	10	0	GOOD	27344457
AlarmCode	Line_2	192.168.5.91	13506	10	0	GOOD	0
Heartbeat	Line_3	192.168.5.91	13338	30	0	GOOD	1
CaseCounter	Line_3	192.168.5.91	13288	30	0	GOOD	27344457

Below the table is a log window with the following entries:

Time	Message
1/20/2021 2:10 PM	TestBench :: WS was disconnected: network is down or server was bro...
1/20/2021 2:08 PM	TestBench :: WS was disconnected: network is down or server was bro...
1/20/2021 2:07 PM	TestBench :: WS was disconnected: network is down or server was bro...
1/20/2021 2:05 PM	TestBench :: WS was disconnected: network is down or server was bro...

## Proactive You

There's another option to handle Windows updates: manually running them yourself. Normally, Windows will run the updates and apply them as it sees fit. If you run them yourself, you can keep ahead of the game and reboot T Com when it's more convenient for you. That way, you can make sure the T Box boots up correctly, and can correct any Windows messages right on the spot.

To manually run an update, click the Windows icon in the lower left corner of the desktop (  ), click Settings, and go to Update & Security. From there you can choose to restart to to apply an update, install any pending updates, check for updates, etc.

You would have to do it often. Once a month, or even bi-weekly will do.

If all else fails, feel free to contact our support team. You can submit a ticket by emailing [support@thrivemes.com](mailto:support@thrivemes.com).

Also, feel free to call us: 888.449.7772 ext. 3. We love to hear your smiling voices.