Preparing Competition Office

After the competition preparation has been completed, you should take some time to set up the competition office network before the first competition of the season (or perhaps the first competition with TAF 3 at all?).

It is better that things go wrong in advance than that you are standing in the on site on the morning of the event and something does not work as it should.

In principle, you can distinguish between 3 types of event settings:

Type 1

A (very) small competition that can be done with a single computer.

Here, no network is necessary and you can simply take the computer on which you did the preparation to the venue. Ideally, the same printer is connected there that you used at home/office for preparation - and nothing can really go wrong now, since you have already worked with your equipment in this way.

However, I can hardly imagine this scenario any more.

If only because it is "normal" that the results from the field all come in at the same time - and then it is quiet again for half an hour, but at the same time the judges want to have the lists for the next technical events and also the final runs of the sprints have to be set.

Here, a second person (on a second computer) in the competition office can bring noticeable relief. Which brings us to type 2:

Type 2

A competition that is run with two (or more) computers in the competition office.

The computers are connected to each other via LAN.

With this type of competition it is possible for 2 (or more) users to process different events, create start lists, record results, print certificates etc. at the same time.

It is possible to strictly separate e.g. male and female age groups or results and start lists - or everyone can work on what is needed at the moment.

The latter has proven successful in our club at competitions of all levels, from the district championship to the state championship up to German championships.

However, we usually use type 3:

Type 3:

A competition where not only several computers are used in but also clients outside the competition office.

The client computer that can relieve the competition office of most of the work and at the same time ensure an accelerated process and higher data security is the timing client (TiC) for the connection and data interchange to the electronic timekeeping. And this is where the most important difference between types 2 and 3 becomes apparent: If it is sufficient for type 2 if there is a router with an integrated switch in the WKB to which the 2 (or more) computers (and possibly also network printers) are connected, the connection of the timing system may be somewhat more difficult, as it is often located at some distance from the competition office.

In the municipal stadium in Wetzlar, for example, the competition office is located on the north stand at the 200m start, and the timekeeping is outside the track at the finish, some 150m distance over the air. The situation is often similar in other stadiums. For example, the competition office in the Bürgerpark Nord stadium in Darmstadt is in the basement of the grandstand, about 25m from the start. The timekeeping is usually set up in a pavilion inside the field at the level of the finish line. The situation in the athletics stadium in Rostock, on the other hand, is ideal. Here, the timing and the competition office are located next door to each other in the same building.

Whereas in Wetzlar the stadium is wired with CAT5 LAN cable and there is a data line with an interconnected switch that makes it possible to connect the competition office and timekeeping without any problems, in Darmstadt you would first have to run a cable outside to the stands and then use a WLAN bridge (wireless wire) to bridge the running track and connect the TiC. Unfortunately, the local conditions are very different here - and if you only have one competition a year at a venue, it may not be worth the effort. However, it is probably advantageous for the smooth running of the event.

Other devices connected outside the competition office can be technical clients (TeC) at the event venues at the field and also the registration manager at the TIC. Depending on the size of the competition or the local conditions, computers for controlling the scoreboard (liveboard), delivering Informations for the announcers or even computers for generating TV graphics can be added.

Technical requirements

In order to use TAF in network mode, the computers used must be connected via a network. Normally, this is an Ethernet connection under Windows. We recommend using a wired network (LAN).

Ideally, you should always use the same hardware for your competitions. This should then also include a (WLAN) router. An (older) Fritzbox that has been decommissioned at home or in the company is quite sufficient. But a cheap new device would also be an alternative for which you don't have to spend more than 50 euros.

This router should then also be configured as a DHCP server so that the connected computers can obtain their IP address from it.

If you only want to network a few devices, the switch integrated in the router (usually with 4 connections) is sufficient. Otherwise you will need an external switch. Here you should use a device with gigabit connections.

If your computers have fixed IP addresses, you can do without the router (with its DHCP server) and work with just a switch instead.

When you start TAF for the first time in your competition configuration, you may be asked by your software firewall in which network types TAF is allowed to exchange data. Please mark both public and private here so that there are no problems later with the visibility of the TAF server or when a client connects to the server.

For the use of TAF in the network you do NOT need any shares on the server. However, in order to be able to provide document layouts or graphics for printing in the network, it is advisable to share an appropriate directory on the server.

This should NOT be the directory where the competition databases are located.

How does TAF work on the network?

To be able to use TAF in the network, you must select one of your computers to take on the role of the server.

It makes sense that this should be the most powerful computer. However, you can ignore minor differences in performance.

It is not necessary that you declare one computer as a dedicated server where no data is collected. At larger events with many clients and when using the WebTeC, however, it may make sense to do this. So you can control the network WebTeC status without problems from this (free) computer.

The TAF server is the only computer in the network that can

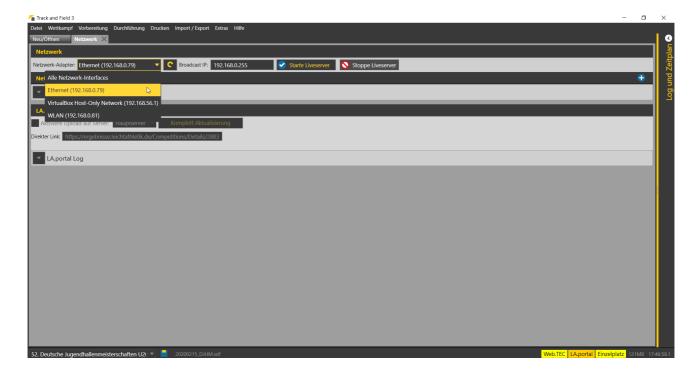
- can upload data to the LAP server (live) results
- can upload data to and receive data from the WebTeC server
- displays the network overview
- receives data from clients and distributes it to them again

The first two points are also the reason why only the TAF server needs an internet connection - and only, if you like to publish live-results or you want to use mobile devices for data entry (WebTeC).

A computer becomes a server when you start the "live server" feature when your competition database loaded by clicking on "Extras" → "Network".

Before doing so, you should select the network interface which connects this computer to the others in your "competition LAN".

I.e. if you are connected to the internet via WLAN and the competition network is connected via cable, select the Ethernet interface.



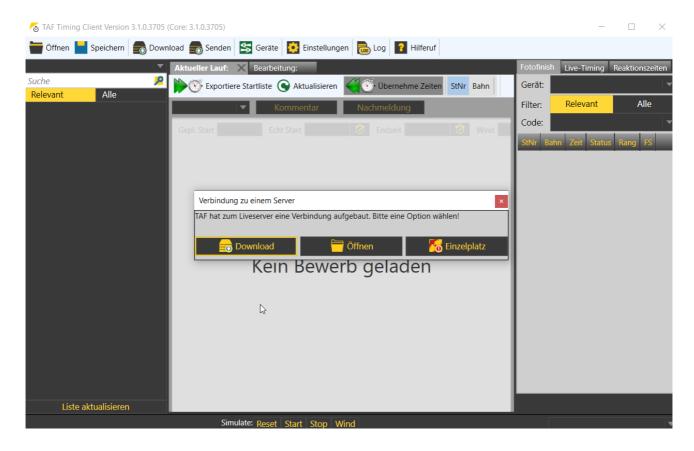
After starting the live server, TAF3 sends out a "sign of life" to the selected network at regular intervals, to which the clients can then react.

If the live server is running, you will see a status field at the bottom right, which should normally read "Server" against a green background.



If you now start TAF3 (or any other client, i.e. TeC, TiC, LiveBoard, Registration Manager,...) on another computer in the competition network, the programme should recognise that a live server is active in the network. You will now be asked whether you want to download the competition database from the server, open a database or start the programme in stand-alone mode. Normally, select "Download" here.

After you have selected the location of the database, TAF3 loads a COPY of the competition database from the server.



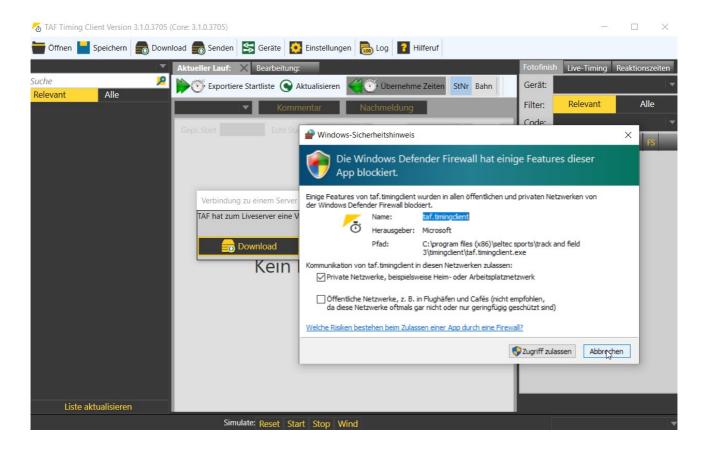
This copy should be saved LOCALLY on the respective computer. For example in the documents folder where the TAF settings are also stored (c:\users\username\documents\TAF). However, you can also select any other directory as long as it is placed on a local disc on this computer.

There are two reasons why this should be a LOCAL directory: Firstly, access to a local file is usually much faster than access to a file stored in the network. Secondly, this creates security through redundancy.

Since each client connected to the server has its own LOCAL database, in the event of an incident (e.g. damage to the server) another computer can quickly take over its role. This means that you effectively have as many backup copies of your competition during the event as there are clients computers in use.

When you start the client for the first time, you may receive a message window from the Windows firewall (or by another software firewall installed in this computer).

Select both private and public networks here. This is the only way to ensure that the clients can connect to the server.



IIf a client is connected to the server, every change to its local database is transmitted to the live server, which then distributes it to all connected clients.

This process is usually triggered by a change in the round status.

For example, if you open a competition to set the start list, you must first set the status to "Edit start list".

This status change is transmitted to the server together with the current data stock of this round. The database is updated at the server and this update is distributed to all the connected clients in the network again.

If you have set the start list and now print it out, the printing process triggers a status change (to "start list set") and the data is transferred again to the server and distributed from there.

There is a "trap" in this concept:

A round of an event can be processed by several users at the same time - and whoever changes his status first is the winner: Her or his data is then transferred to all the other computers.

In my trainings I demonstrate this by having all participants open the schedule and select a competition to set the start list. It then happens to some participants that they don't have to change the round status to "Edit start list" because another participant has already done that. And then it happens that a user is finished with his start list and changes the status. Then it goes "pop" and this list is transferred to the server. The status "start list set" is also transmitted - and the other users who have this round open for edditing are confronted with a greyed-out picture.

What sounds dramatic here is usually not a problem in practice!

Start lists for a round are normally set by only one person in the competition office. The same applies to the recording of results. For this, you need the completed protocol form - and usually only one person has that in front of them.

If you nevertheless open a round and notice that it is already ready for editing, you should leave it again WITHOUT changing the status, because someone else is already working there...

Now the network is prepared, you are informed about possible pitfalls: The competition can begin.