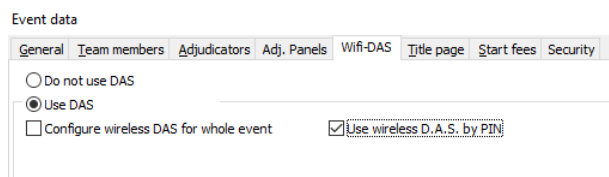# Working with TopTurnier Wifi D.A.S

This guideline describes how to host and run a competition in TopTurnier having Wireless/Wifi Digital Adjudicator Sheets (DAS). For this document we assume that you have setup a TopTurnier event, which means that the event data is entered, including officials and adjudicators, and starters have been imported from the WDSF database.

To run this setup you need at least one DAS per adjudicator and a wireless Router that is configured to connect to the DAS in addition to the scrutineer computer with a licensed version of TopTurnier installed on it.

If you want to enable DAS within TopTurnier, go to "Event data" and select the tab "Wifi-DAS". There you can activate DAS in two different modes. Usually, the option "Use Wireless DAS by PIN" is the most suitable option. With this option, you use a personally assigned PIN to authenticate each adjudicator, respectively. The other option, to "Configure wireless DAS for whole event" is tailored for events in which you have only one single panel of adjudicators and where the event is short enough to fit into the battery lifetime of the devices (typically <10-12h).

1. Preparation of wireless DAS and wireless router

As first step, connect the wireless router to the scrutineering computer by cable. Do not use the port labelled "WAN" or "Internet" for this. Next you should check the network configuration at the scrutineering computer. Usually it is sufficient to select automatic IP configuration via DHCP for the network adapter.

The network configuration can be found under "Control Panel" -> "Network and Internet" -> "Network Connections". Right-click on the respective network connection and select "Properties". From the listed elements select "Internet Protocol, Version 4 (TCP/IP)" and click on the "Properties" below. Here the option "Obtain an IP address automatically" should be selected to use DHCP.
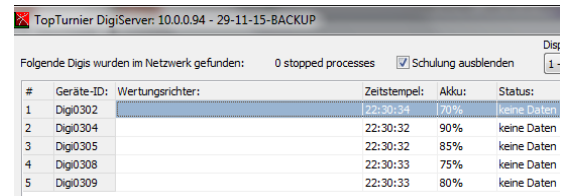
To avoid potential problems caused by other networks deactivate all other networks adapters (especially concurrent connection to wireless networks). After this, the network connection to the wireless router should be the only network adapter/connection that is active and connected.

Another measure to avoid potential problems is to check the Windows Firewall for allowing communication for TopWDSF.exe, turnier.exe and digiserver.exe. Additionally, the network to the wireless router shall not be classified as "public network" (see Troubleshooting section for further information).

2. Setup DigiServer application

Next you can power on your DASs. They should automatically connect to the wireless router. If this is the case, the display shows "Wifi Online" as status. Then start TopTurnier on the scrutineering computer and open your event. When an event is opened, start the application TopTurnier DigiServer and select the event that is opened in TopTurnier (by selecting the respective TT8 file).

The TopTurnier DigiServer should display all active DAS. Please note, that DAS in power safe mode might not be listed. At the same time the status on the DAS should change to "Digiserver connected". If the DAS PIN option is enabled (see above), the button "Enter PIN" should also appear at the bottom right of the DAS display.
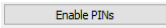
At this point, the scrutineering computer and the DAS are ready for use. If you are using the PIN option, you should print and hand out the PIN list to all adjudicators, so that they can login for their assigned competitions. The PIN list can be found in "Print" -> "Adjudicators PIN listing".

3. Run a competition with DAS

The following section describes how to run a competition with the help of DAS. Please note, this guideline will focus on aspects that are different when using DASs (as compared to classic paper sheet based scrutineering).

Click on "Start competition" and select the upcoming competition. The first page shows some information on officials and adjudicators. If everything is correct, click on "OK next". If the program anticipates problems, it will warn you with a red background and a warning information. The next page defines parameters for the coming round (preliminary and number of marks / final round), followed by another page to define details for the coming round, such as the number of heats. Click on "OK next" when the details are selected correctly[1].

The page "Lists" shows all documents that are relevant at this stage of the competition, where you can display or print all documents that you need for this round. Click on "OK next" to continue to the page "DAS communication". This dialog shows the active DASs that are connected to the router.

Click on Enable PINs to allow the adjudicators to login for the respective round. As soon as an adjudicator logged in, the respective DAS will show the adjudicators name and status of the DAS (e.g. which page is displayed or how many marks have been given).
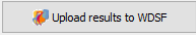
Once all adjudicators have logged in, it is recommended to deactivate the PINs by clicking the button PINs active! Deactivate? . Now you should wait until the round is finished and all adjudicators have completed and confirmed their work with the signature. When an adjudicator has finished judging, the data is automatically transmitted to TopTurnier and the status for the DAS/adjudicator changes to "Completed." If the status for all adjudicators is "Completed", click on "OK next".

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[1] Please note, that TopTurnier gives default values that are usually in accordance with the WDSF regulations. However, the officials should check and adjust the values if necessary.

For all but the final round, the received data is displayed. Click through the pages without changing anything. You will then see the result of the finished round. Set the number starters to be recalled as determined by the chairperson. After that, the next round is prepared as described above (starting with selecting the parameters for the round and so on).

For the final round, the "Lists" page is shown with all relevant documents to be displayed and/or printed. Usually this includes the results of the final round, table of results, marks of final round and skating report and diplomas.
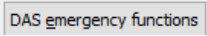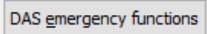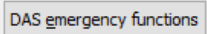
4. Uploading of competition results

Latest when a competition and its price presentation is finished, you shall immediately upload the result data to the WDSF database. For this use the button [Upload results to WDSF].
If your Chairperson allows it, you may upload the intermediate "live" results round by round on dialog "Lists".

5. Troubleshooting

Problem	Solution
The DAS show only "Wifi online" as status or The DAS are shown on DigiServer, but not on the DAS observation dialog in the competition	Check if the DigiServer application is running on the scrutineering computer. If this is the case, check, if the Windows Firewall is blocking network access for DigiServer.exe and Turnier.exe.
The "Enter PIN" button is not displayed on the DASs.	Check if the option "Use DAS by PIN" is selected in the event data menu.
The login process for a round on a DAS fails for an adjudicator.	Give the adjudicator another device and restart the DAS device that caused the problem.
When an adjudicator tries to login, the DAS shows the message „Actually no Job found".	Check if the PINs are active/enabled for the next/upcoming round. This can be done on the DAS communication page. Check if the adjudicator is part of the adjudicator panel that should judge the upcoming/next round.
When an adjudicator enters per PIN on the DAS, the display shows the message "Already assigned to…"	The adjudicator has already logged in for this round on another DAS. Please find the respective DAS.
One or more DAS are not updated on the DAS communication page in TopTurnier and/or the DigiServer application.	Press and hold the power on/off button of the DAS for 2 seconds. From the displayed options select to activate the flight mode. Alternatively, open Android menu by pulling it down from the top of the screen and deactivate the WLAN

	function.
	The DAS should automatically reconnect. If this does not help, restart the respective DAS.
	If all DASs are not updated on the DAS communication page and/or the DigiServer application, please check your wireless router.
	It may have crashed or been accidentally disconnected from the power supply or network. It may also help to change the WLAN channel.
The DigiServer application does not react to any user interaction (= the application seems to be "frozen").	Open the Task Manager and kill the DigiServer application. For this, right-click on the process related to the DigiServer and click on "Kill Process". Then restart the DigiServer application.
The round has to be changed after one or more adjudicators have logged in (e.g. the heat list has to be changed) and therefore the data on the DAS needs to be changed.	First, deactivate the PINs. Then delete the data for this round that is stored on the DAS. To do so, go to the DAS observation dialog in your competition and right-click on the DAS with the incorrect data. Select "Delete data on DAS (NOT on PC)".
	This deletes the data and the DAS returns to the login screen.
A couple shows up late for a round and the adjudicators have already logged in for it.	Click on the button [DAS emergency functions] on the DAS communication page. Select the function "Re-activate absent starter and add him to this round".
	The couple will be added to the last heat group in all dances and will be added to the DAS in a few seconds.
After a round is started, a couple does not show up for the round. The couple is included in the heat list and on the DASs.	Click on the button [DAS emergency functions] on the DAS communication page. Select the function "Remove starter from the competition" and select the respective couple.
An already started round has to be modified. This means that the data of the DAS has to be deleted.	Click on the button [DAS emergency functions] on the DAS communication page or the DigiServer application. Select the function "Delete data on all DAS (AND on PC)"
	Please use this function only after careful consideration, since you may have to repeat already danced rounds.
When an adjudicator wants to login on a DAS, the display repeatedly shows the message "Receiving failed".	Try to load the adjudicator's data manually on a specified DAS. For this, right-click on an empty device in the list and select the option "Load data manually onto DAS". Then select an adjudicator and hand the DAS over to the respective adjudicator.

	Please note that this function could be used to load several devices with the same adjudicators data, which should never be the case.
	If the above process does not solve the problem, please call the hotline of Rath Software. You can find the telephone number in TopTurnier under Help -> Info.
There is a technical problem, which is not described in this document or which we cannot solve.	Please call for support from Stephan Rath Software. The respective hotline number can be found in TopTurnier under *Help -> Info*
You want/need to update the DAS app on your devices.	Connect the wireless router to the internet. Usually this is done by connecting the WAN/Internet port to the internet (e.g. to a router that is connected to the internet).
	If you power on the DAS they should recognize the internet connection and ask if new updates should be checked.
	Note that this check will only be performed once every 24 hours. To manually trigger the update search, push the button "Adj. Briefing" and select the option "Search for Update" (at the bottom of the page).
	Then follow the instructions displayed on the DAS and finish the update with the "Done" button.

Acknowledgement

We would like to thank Dr. Markus Mühlbacher for his support in the compilation of this guideline.