TabScore Installation

Prerequisites

A server PC with Windows 10 (which includes Internet Information Services (IIS) 10), .NET Framework 4.6.1 and ASP.NET 4.7

A local wireless (Wi-Fi) network, ideally using a dedicated network and router not connected to the internet

Tablets, phones or other devices with an internet browser that supports Javascript (ie any mainstream browser). For an Android full-screen locked-down browser, Fully Kiosk Browser (https://www.ozerov.de/fully-kiosk-browser/) has been used successfully.

A scoring program that creates a Bridgemate-compatible scoring database (.bws file).

TabScore has 2 installer files (TabScoreIISSetup.msi and TabScoreSetup.msi) for an automated installation or a zip file (TabScore.zip) for a manual installation of the necessary files.

IIS Installation

IIS provides the framework to run a web application on the server PC. It is a feature of Windows 10, but it is not installed by default. To install IIS, either:

- Run the installer file TabScoreIISSetup.msi. If you have proprietary security software installed, please see the section on Windows Defender Firewall.

- Install IIS manually by following the steps below.

IMPORTANT: In either case, it will be necessary to restart the PC once this part of the installation is complete.

Manually Install IIS Features

To install the necessary IIS features on the server PC:

- Control Panel – Programs – Programs and Features - Turn Windows features on or off (requires Administrator privileges)

- Ensure that the following are selected:

  - .NET Framework 4.7 Advanced Services/ASP.NET 4.7

  - Internet Information Services

  - Internet Information Services/Web Management Tools/IIS Management Console

  - Internet Information Services/World Wide Web Services

  - Internet Information Services/World Wide Web Services/Application Development Features/ASP.NET 4.7

Manually Configure Windows Defender Firewall

You need to enable Port 80 on the server PC for incoming browser requests. If you have proprietary security software installed, then you may need to make the changes in that software. If using just Windows Defender Firewall, then:

- Control Panel – System and Security – Windows Defender Firewall

- Advanced settings (requires Administrator privileges)

- Inbound Rules – New Rule.

- Port, TCP, Specific Local Ports = 80

- Allow, Private

- Name the rule something meaningful (eg Tabscore Port 80) and Finish

Configure and Test Network

Configure Network

Various network configurations are possible. The essential requirement is that the tablet browsers can find the server PC across the router network. One approach is to use a static IP address for the server PC:

- Log on to the router and set a DHCP device reservation (static IPv4 address) for the server PC. If there is no other network, an IP address something like 192.168.0.100 is probably suitable

- Setting a DHCP reservation may require the PC's physical MAC address. This can be found by opening a command prompt (cmd.exe) and typing 'ipconfig /all'

It is possible to have the server PC connected to the internet via one network and TabScore connected via another. This would require 2 networks cards (Wi-Fi or Ethernet). A configuration that has worked successfully is internet on Wi-Fi (using subnet 192.168.0.xxx) and the TabScore router on Ethernet (using subnet 192.168.2.xxx and a static IP address of 192.168.2.100 for the PC)

Test Network Connection

Connect a tablet to the router network. Enter the IP address of the PC in address bar (or default URL) in the tablet browser (so it should look something like http://192.168.0.100) If IIS is working correctly, the tablet browser should display the default IIS webpage.

TabScore Installation

TabScore comprises 2 main components: a web application that runs under the default IIS website; and a Windows executable (TabScoreStarter.exe) that is called by the main scoring program. Again it is possible to do either an automated or manual installation:

- Run the installer file TabScoreSetup.msi. This copies the necessary files and configures IIS to run the web application.

- Install TabScore manually by following the steps below.

Manually Copy Files

Unzip TabScore.zip and copy files and folders to the following locations, creating folders if necessary:

- TabScore folder to C:\Program Files (x86)

- TabScoreDB.txt to C:\Public\TabScore

Manually Configure IIS

Open the Internet Information Services (IIS) Manager:

- Application Pools – Add Application Pool...

  - Name = TabScoreAppPool

  - Start application pool immediately

- TabScoreAppPool – Advanced Settings...

  - Enable 32-Bit Applications = True

- Sites – Default Web Site – Add Application...

  - Alias: = TabScore

  - Application pool: = TabScoreAppPool

  - Physical path: C:\Program Files (x86)\TabScore\WebApp

  - Start Website immediately

Complete Set-up

Test the TabScore Web Application

Enter the IP address of the PC in address bar (or default URL) in the tablet browser, followed by /TabScore (so it should look something like http://192.168.0.100/TabScore). If IIS is working correctly, the tablet browser should display the TabScore start screen.

Modify Scoring Program

The scoring program needs to start TabScoreStarter.exe as its wireless scoring software. How this is done varies considerably by scoring program.

In EBUScore, this is done from the TabScore (or ArcScorer or Bridgemate) Scoring/Admin tab and BCS Scoring Program – Browse button. Point it to:

C:\Program Files(x86)\TabScore\TabScoreStarter.exe

Configure the Tablets

The tablets do not need any form of special configuration to run TabScore. However, to give a good user experience, it helps to configure and lock down the tablet to some extent. Bedford Bridge Club uses dedicated tablets with the following software: Fully-Kiosk-Browser-v1.28.1; Nova Launcher_v5.5.4 and Icon Changer_v2.0. This has been configured as follows:

- Set Nova Laucher as the default start app.
- Set the following settings in Nova Launcher:
    - Desktop/Desktop grid 4x4
    - Desktop/Icon size/Font size = about 75%
    - Desktop/Wallpaper scrolling off
    - App & widget drawers/Frequently used apps off
    - Dock/Enable off
    - Look & feel/Normalize icon size off
    - Look & feel/Screen orientation Force Portrait
    - Look & feel/Show notification bar off
- Using Icon Changer, set the Fully icon to TabScore.png (included in zip file) and set label to TabScore.
- Delete all icons from desktop except TabScore
- Set wallpaper to something suitable
- Set Fully start URL to static IP address of laptop + /TabScore
- Set Fully/Web Zoom and Scaling/Set Font Size = 150%