ARBITER TIME SERVICE INSTALLATION INSTRUCTIONS¹

1 Introduction

These instructions cover the installation of Arbiter Time Service (ATS), version 1.5. Please read through these instructions before installing ATS.

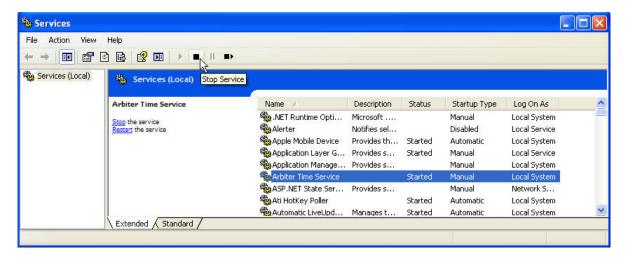
NOTE: When installing, or uninstalling Arbiter Time Service, there will be short intervals where you will see the Command Prompt (DOS Prompt) appear. This is normal; it usually persists for only a few seconds while installing or uninstalling ATS.

2 Uninstall Current Arbiter Time Service

Prior to installing ATS, version 1.5, you must first uninstall any earlier version of ATS. If you do not uninstall the earlier version, the installation program of ATS 1.5 will give you a message reminding you to uninstall earlier versions. If ATS is not already installed on the computer, you will not be asked to uninstall ATS.

2.1 Stop the Service

Before uninstalling Arbiter Time Service, you must first stop the service. Select Control Panel > Administrative Tools > Services, and select Arbiter Time Service. Click the Stop button. You should see a progress bar indicate that the service is stopped. Also, under the Status column in the services window, the label, "Started" should disappear.



2.2 Uninstall Arbiter Time Service

After stopping ATS as described above, you can uninstall it.

1. Select Start (menu) > All Programs > Arbiter Time Service > Uninstall Arbiter Time Service.

 $^{^{1}}$ PD0041300A

2. You should see a window that says "Are you sure that you want to remove 'Arbiter Time Service' and all of its components?" Just click "Yes" and a window "Remove Programs from your Computer" should indicate that all of the components were removed. See screen shot below. After completion, click "Close".



3 Installation

- Download a copy of Arbiter Time Service to your pc. The file is named, "arbiter_time_service_setup_v1500.exe".
- 2. Double click the ATS setup file (named above) to start the installation. You should see a window suggesting an installation location.

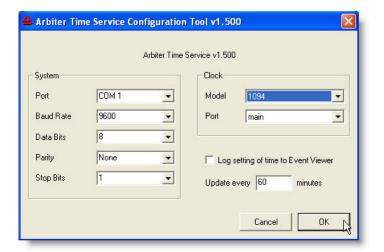


3. Click "Next" to accept the suggested location, or choose "Browse" to find an alternate location, and click "Next".

4. Select any of the Install Options in the next window – either Launch Configuration Tool, and/or Read Important Install Information, and click "Next".



5. If you chose "Launch Configuration Tool" on the Install Options window, the installer should next launch the ATS Configuration Tool – window shown below. If you did not choose "Launch Configuration Tool" on the Install Options window, you will be able to choose this from Start > All Programs > Arbiter Time Service.



4 Starting Arbiter Time Service

Before starting ATS, make sure to review and edit the values in the configuration window shown above. If you chose to not launch the Configuration Tool at the time you installed, you should start it now to set up the time service options. Each of these options will be discussed below.

To open the Configuration Tool, choose Start > All Programs > Arbiter Time Service > Arbiter Time Service Configuration Tool.

4.1 Configuration Tool, Setting Definitions

- System Port: select the appropriate serial port on your server.
- System Baud Rate: select the matching baud rate of your server as selected on the clock.
- System Data Bits: select the matching number of data bits of your server as selected on the clock.
- System Parity: select the matching parity of your server as selected on the clock.
- System Stop Bits: select the matching number of stop bits of your server as selected on the clock.
- Clock Model: select the Arbiter clock model.
- Clock Port: select either "main" or "option". These are the serial port names on clock models 1092A/B/C, 1093A/B/C, 1084A/B/C and 1088A/B. For Model 1094B, "Main" refers to "Serial 1" and "Option" refers to "Serial 2".
- Log setting of time to Event Viewer: checking this box chooses to add a record to the Event Viewer every time the system clock is adjusted. This may be good for testing the service, but most likely would not be selected for daily use.
- Update every () minutes: choose the amount of time between setting the system clock. Usually, this is set too short. This value should be based on the stability of the system clock. An hour (60 minutes) may be a good starting point.

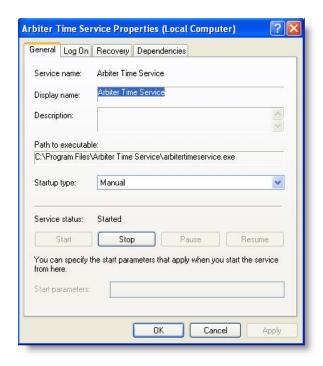
4.1.1 Logging Events

If you select to not log to the Event Viewer for each setting of the system clock, ATS will still log events that deserve attention. For example, if there is a problem reading the time from the GPS clock, or the clock loses synchronization, ATS will log these events. If you monitor event logs remotely, this would be an ideal way to know if the clock needs attention.

4.2 Setting the Startup Method – Manual or Automatic

These settings are made in the Services window in Administrative Tools.

- 1. Open Services as explained at the beginning of this paper. See Section 2.1, Stop the Service to review how to open the Services window.
- 2. Select Arbiter Time Service > Action > Properties. You should see a small window as shown below.



- 3. Select "Startup Type" as either Manual or Automatic to run. Select "Disable" if you do not want the service loaded when you boot the computer. Choose Automatic if you want ATS to start each time the computer/server is restarted. If you choose "Disable" it will not start unless you choose the Startup Type as either Manual or Automatic.
- 4. Start and Stop the service from the Properties window, the task bar at the top of the Services window, or by selecting the service and right-clicking to start or stop.
- 5. When you start or stop ATS, you should see a progress meter appear that indicates whether or not the system can complete this task.

4.3 Setting Up the Clock

A few last-minute checks should assure that ATS operates correctly.

- 1. Before starting the service, it would be good to make sure that you have a serial null-modem cable connected between the server and chosen serial port on the clock. The important cable pin connections (DB-9) are as follows: pin-2 to pin-3, pin-3 to pin-2, pin-5 to pin-5.
- 2. Press the SETUP button on the clock and check the clock COM settings to verify that they agree with those on the server.
- 3. Make sure that you have chosen the correct port as described in the Configuration Tool.
- 4. Start Arbiter Time Service from the Services window.
- 5. You may want to check the Event Viewer for any important messages. By changing the "Log setting..." check box in the Configuration Tool you can effectively test the service.