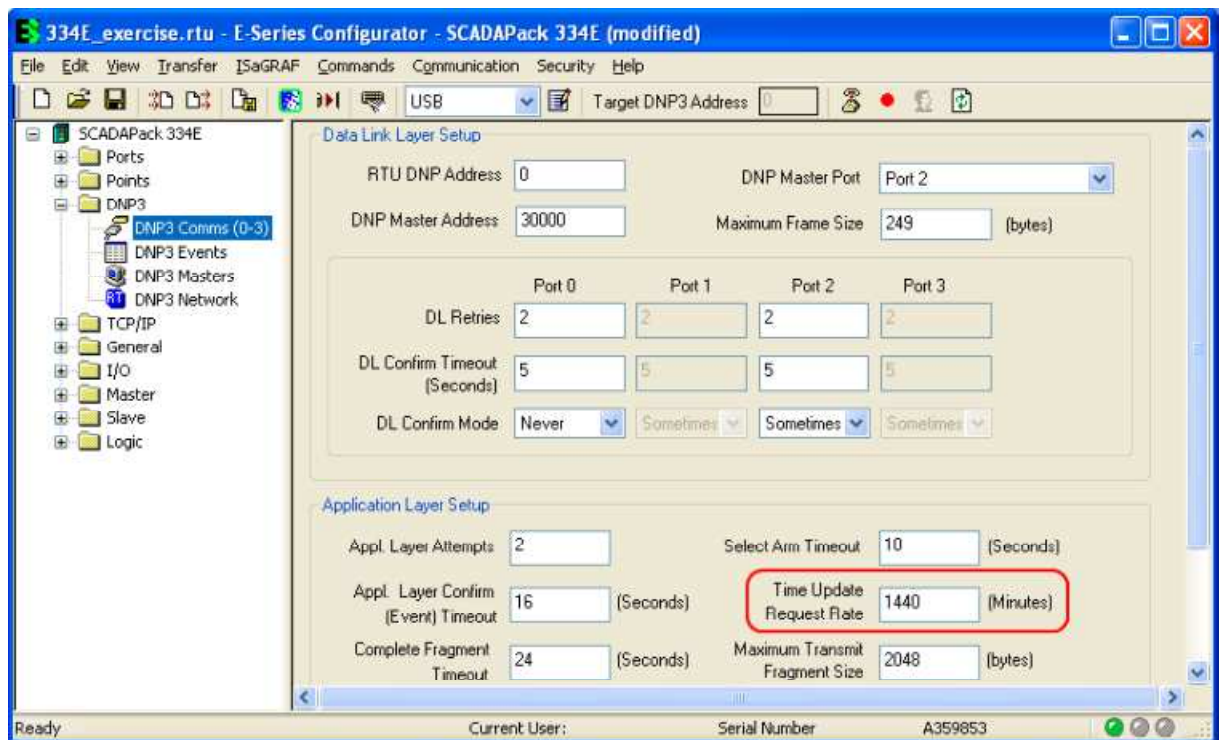


ClearSCADA and ScadaPack RTU Time synchronization.

In order to time synchronize scadapack RTU from Clear Scada kindly follow below procedure.

1. When using DNP3 serial time sync or DNP3 LAN time sync, use the E Configurator first to set the *Time Update Request Rate* parameter. The RTU will request the time from the Master at this interval to keep its clock synchronized.

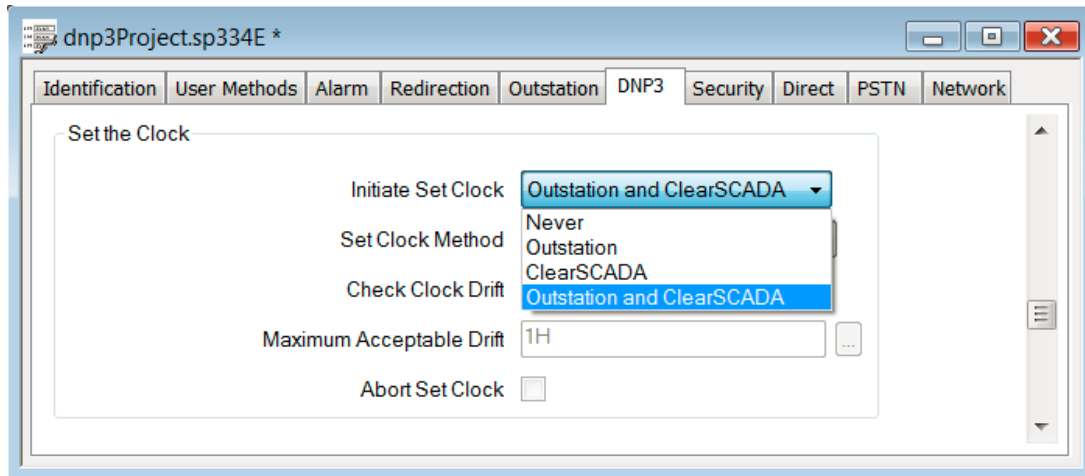
- Open the RTU's Configuration file and select the DNP3 property page *DNP3 Comms (0-3)* as shown below. Confirm the default value of 1440 minutes (or once per day) is set. (A value of 0 disables RTU time requests.)



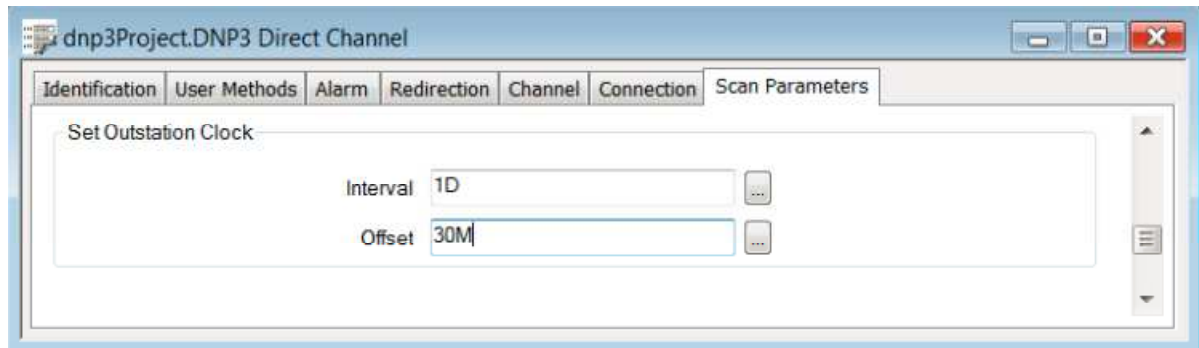
2. Choose the method to use in ClearSCADA by opening the ClearSCADA project from the last exercise and double-clicking the outstation object **sp334E** to edit its properties.

3. Select the object's **DNP3** tab and scroll down to the section **Set the Clock**.

4. The **Initiate Set Clock** list box selects who initiates setting the clock: the Outstation, ClearSCADA or both.



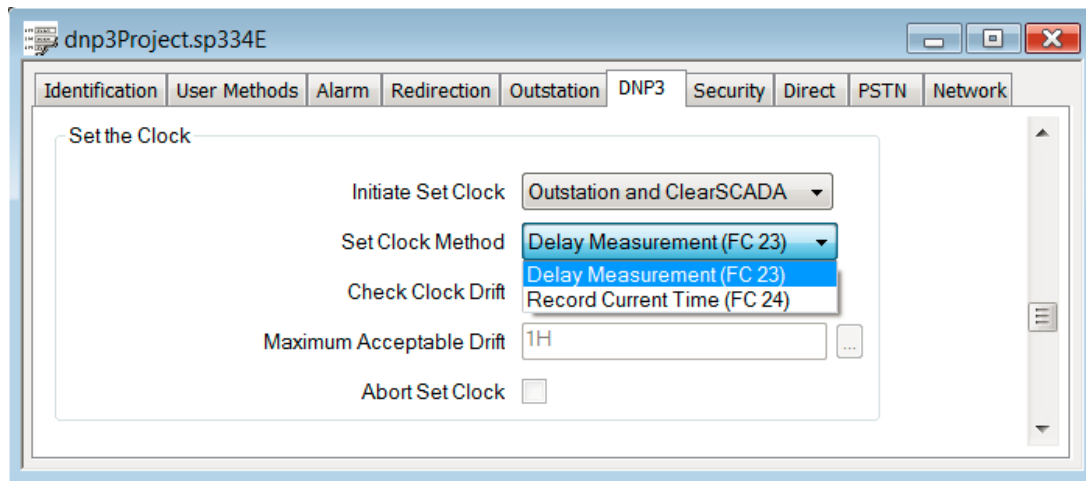
5. If **ClearSCADA** is selected from the list box above, then ClearSCADA will use the settings defined in the channel object, **DNP3 Direct Channel**, under the **Scan Parameters** tab in the section titled **Set Outstation Clock**. In the screenshot below, ClearSCADA will synchronize the clock of all RTUs on this channel once per day starting at 30 minutes after midnight.



If **Outstation** is selected from the list box, then ClearSCADA will rely solely on the RTU to request the time at the interval set by the **Time Update Request Rate** parameter set in step 1 above.

- If **Outstation and ClearSCADA** is selected from the list box, then both methods are used. Choose this default selection.

6. Now choose the **Set Clock Method** from the next list box:



- Select **Delay Measurement (FC 23)** for an RTU communicating using serial lines or near-deterministic remote communication networks.
- Select **Record Current Time (FC 24)** for an RTU communicating on a LAN.