

## Q: Why don't some POS tickets get to my A/R workspace?

**A:** Many users have asked this question, and the short answer is: **“Because something prevented the sales data from being sent to the accounting system immediately after they were finished on the register.”** But short answers always beg for longer explanations. This document can help you understand how it can happen and what to do about it.

What can cause this problem? A variety of factors or even a combination of factors, such as:

- **Network connection problem.** A constant physical connection to the main accounting system is necessary for the registers to be “aware” that the accounting system is accessible. By constant, we mean 100%. A connection that is 99% good sounds like it ought to be okay, but that could easily prevent some transactions from getting through on just a moderately busy day. Understand that a ticket that has ten different items on it is actually a ticket of *ten data transactions* and *all ten of them* must get through for the sending of the ticket to be “successful.” So on a light day when you have only 35 tickets, those 35 tickets could easily represent a couple hundred individual data transactions. If one or two of those data transactions are affected by an intermittent network connection, then the *entire* tickets that those transactions belong to are also affected and not sent to the accounting system.
- **Network busy problem.** When two registers try to send transactions to the accounting system at the same time, the Windows networking software on the main computer goes into overdrive and tells one register that it should “wait” until the other register is done. Our software is sensitive to this “wait” command, and it actually waits a couple seconds before it tries again. It actually keeps trying until its encountered ten unsuccessful attempts to send the transaction, after which it gives up on that one in favor of sending it at the end of the day after a register closeout when the main accounting system’s transaction database isn’t as busy. Remember that during the day, users in the business office may also be entering manual tickets or member payments into the A/R system, which also creates transactions in the same database workspace that the registers use. So it’s certainly possible that normal business office activity can also cause the network to look “busy” to the registers.
- **Anti-virus software and/or firewalls.** These computer security software products are designed to prevent certain types of data or information “from the outside” from being stored onto your computer. The design concept of these products is to filter the data on-the-fly as it’s coming into the computer and either allow it to pass through or reject it or possibly delete it altogether if it’s deemed to be dangerous. The various manufacturers of these software products use different methods for determining what is and what is not allowed to pass through, but in most cases, each has software configuration options the user can change to fit his/her specific security needs. Most of these products have some sort of “automatic update” feature built in that keeps the software security up-to-date so it is aware of newly-developed viruses, too. Sometimes, such automatic updates can be quite aggressive when they are activated and can cause networking situations similar to a connection or network busy problem as outlined above. Remember, these products work on-the-fly and evaluate the flow of data in REAL time. To do that, these products therefore use up some of the computer’s processing power, effectively slowing down the computer’s ability to store data and deal with network connection issues.
- **A/R Procedural Issues.** Certain procedures that you perform inside the Club Office A/R system can cause the registers to shift into a “don’t send” mode. One of these procedures is month-end processing. When you start the month-end A/R processing step that generates dues, late fee and other automatic charges, the Club Office system sends a command to the SQLPos registers that it’s in a month-end billing mode and that the registers should not send tickets to the main system until the billing has concluded. Conclusion in this case means performing the A/R Finish which finalizes all member account balances and corresponding monthly tickets and creates the journal entries in the

Club Office general ledger. When the A/R Finish procedure concludes, Club Office issues a second command to the registers so that they may resume sending data to the main accounting system.

- **Other Procedural Issues.** Other regular Club Office tasks can create situations that affect a register's ability to send its transactions to the accounting system. For example, when a backup is made, the backup module makes an internal backup of the Club Office databases prior to creating the ZIP archive on your chosen removable media. If a register attempts to send a ticket to the accounting system while the backup module is in the process of using the DAILY.MDB database in its backup operation, the register receives a "network busy" signal because Windows won't allow the register to add a ticket while a backup of the database is being made. If the backup hasn't completed by the tenth time the register has tried to send the ticket, the register gives up trying in favor of sending up the ticket at the end of the day during the register closeout when (theoretically) there's less opportunity for such conflicts.
- **Windows Server File Locks.** The Windows Server operating system is aware of not only which files are being accessed, but how they're being accessed, by which computers and usually the name of the user involved. It's quite smart. Server software controls file access by putting "locks" on the file(s) involved and releasing those locks when they are no longer needed. File locks protect the integrity of the data in a multi-user environment by preventing two computers from writing to the same data file at exactly the same time. However, if Windows Server puts a lock on a file while a register writes a ticket to it and the register subsequently is unable to complete the writing process (perhaps because of a poor or intermittent physical network connection), the server doesn't remove the lock right away – it holds onto it until the server's lock timeout is achieved. This can take anywhere from one to thirty minutes (or more!) and all the while, the file remains locked and no other registers or applications can write to that data file.

**Conclusion.** There are many things a user can do to enhance the operation of the POS system:

1. Install and maintain top-quality computing equipment, network wiring and other network components. Hire highly skilled professionals to install and maintain your computer systems. You may have a member who is "pretty good at networking," but realize that "pretty good" isn't the same as "expert." You generally get what you pay for and you'll find that you'll wind up paying for a 99% network solution over and over and over again. You want 100%.
2. Understand when the busiest periods of the day, week or month are for your POS users and plan office tasks that can affect POS operations so as to minimize their impact on the transmission of POS tickets to the accounting system. Examples:
  - a. Refrain from making backups at times when the POS system is really busy. Plan to make your backups at the least busy time of the day/week.
  - b. Don't start the month-end A/R billing process on a Friday afternoon, leave it that way over the weekend and finish it on Monday. Instead, once started, continue all the way through and finish it ASAP.
  - c. Communicate with your POS users when you have procedures that can affect them. Before you start a backup, put a sign on each register such as "System backup in progress - do not use POS until 9:30 a.m. today." And be sure to train your staff so that they don't just toss the sign away and start the POS system up anyway.
3. Get familiar with the anti-virus and/or firewall software on your computers and learn how to configure them. Also be aware of when the software is updated. Computer viruses and other "attack-type" software can be terribly damaging to not only the computer but to your data and new ones come out nearly every day. Keep your software up-to-date while keeping keenly aware of potential network connection problems that can occur out of the use of anti-virus and firewall software tools.
4. Install a dedicated Windows server that is *never* used as a workstation at all and only holds the central programs and data files that other computers use.