

NCR APTRA™ VISION & INETCO® Insight

Real-time transaction alerting from Insight to Vision
Know your cardholder's experience at the ATM



Is the experience you offer your consumers keeping you up at night?

From an ATM operations perspective, identifying and reacting to problems in your ATM channel, including your authorization network is paramount to providing high quality service to your customers. The ability to view and understand transactional history, trending, and statistics at the ATM or fleet level is of critical importance and ensures you are managing your ATM network as a highly effective self service delivery channel.

NCR has integrated APTRA Vision with INETCO Insight to provide a more comprehensive view into the performance of your ATMs from a transactional perspective. **This document contains a list of common transaction alert focus areas, along with commentary as to why its important.**

The value of real-time transactional alerting

Monitoring and reacting to ATM hardware faults is only one area to review when trying to understand consumer experience at the ATM. Additional areas to consider include:

- Real-time alerting for transactional issues
- Network availability
- ATM hardware Incident status
- Transaction volumes and trending
- ATM Inventory
- Cash and media status



ATM Transaction Performance Issues

ATM placed in supervisor mode for too long a period of time

This sometimes occurs and may indicate that a branch person or service team forgot to bring the ATM back into service after replenishment or service activity. In some cases the status message monitoring may not pick this up. This has a direct impact on availability and the customer experience at the ATM.

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Decline rate high on an ATM

When higher than expected your card holders are negatively impacted. As a consumer there is nothing worse than having your transaction attempt declined when you know it shouldn't. Many existing authorization systems don't have an automated real-time method to alert technical staff to isolate/resolve the problem.

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Reversal rates

Recurring reversals of transaction attempts at an ATM may indicate a problem with the switch or authorization host, or the ATM itself. Reversal Rates of 5 in 60 minutes on an individual ATM is a good baseline for an automated alert.

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Why is this important?

This is totally preventable, especially if an alert can be created to notify the branch, vendor or operations team to quickly return to rectify the problem. If the time in Supervisor exceeds a certain limit it may indicate either a training issue, or that someone servicing the ATM has forgotten to return the ATM into service. The frequency and availability impact of this can be reported in Vision and can be used to better evaluate branch and vendor service.

When the decline rate for transactions increases unexpectedly it may be an indication of several things:

1. that there is an issue with the authorization network;
2. possible fraudulent activity may be occurring;
3. card bin issues.

Insight can be easily configured to detect and alert Vision when this occurs. Vision can automate the process of alerting necessary internal parties of the occurrence so it can be addressed before the issue lingers. Insight can also alert Vision when the decline rate is reduced and the ATM's performance is back to an acceptable level so the technical team can be alerted that the problem has been rectified.

Excessive reversals at an ATM are a critically important situation to monitor and react to. It may indicate a problem with the authorization network, but it may also indicate that the ATM doesn't have the cash, or ability to dispense the cash, to fulfill the transaction request.

ATM Transaction Performance Issues

Cassette insert errors

Depending upon the methods of fault detection used, these occurrences may be very difficult to detect in an automated way.

Automatic alerting based on Check or Cash Deposit transaction inactivity, or high activity, patterns

Based on transaction type and ATM designation we know historically that this machine should be taking x number of deposits during peak hours. Conversely if the ATM is accepting deposits at a much higher rate than historically expected it is just as important to know.

INETCO Insight can be configured to raise alerts based on too many or too few check and/or cash deposits within a set amount of time. The alerts can be set up to focus on high volume time periods of the day to maximize visibility to transaction patterns when card holders usually access the ATMs. Vision can be configured to react to **deposit transaction inactivity** by:

- Recognizing there is already a hardware deposit fault raised and ignoring the inactivity alert
- Dispatching/notifying the FLM team to check the ATM
- Capturing the inactivity event as a statistic for reporting purposes

Vision can be configured to react to **deposit transaction high activity** by:

- Dispatching/notifying the Branch or CIT team to anticipate that deposits may need to be picked up
- Capturing the high activity event as a statistic for reporting purposes

Why is this important?

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If cassettes with different denominations are inserted in the wrong bins it can have a disastrous outcome to both the card holder as well to the financial institution's balancing team.

Understanding cheque and cash deposit activity is important to know. These automated deposit ATMs help to drive costs out of the branch by migrating deposit transactions away from the teller line. Plus, these ATMs are more complex than traditional envelope dispensing ATMs and fully managing their performance includes understanding the deposit availability.

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If this amount goes to zero during this period then perhaps someone has jammed the deposit gathering mechanism, and there may be no hardware fault being raised by the machine.

Creating real-time alerts and capturing them in APTRA Vision for dispatch/notification/reporting gets the financial institution closer to the true customer experience at the ATM. All ATM related behavior/performance are all captured in one single solution, providing a unified view of the ATM channel's performance.

ATM Transaction Performance Issues

Automatic alerting based on Cash Withdrawal transaction inactivity, or high activity, pattern

Anticipated transaction volumes can be anticipated based on historical transaction data. Alerts can be configured to create awareness when the ATM is not doing any transactions, or is far below anticipated usage. Conversely, if the ATM is experiencing far more transactions than historically expected then alerts can also be raised.

INETCO Insight can be configured to raise alerts based on too many or too few (or no) cash withdrawal transactions within a set amount of time. The alerts can be set up to focus on high volume time periods of the day to maximize visibility to transaction patterns when card holders usually access the ATMs.

APTRA Vision can be configured to react to **cash withdrawal inactivity** by:

- Recognizing there is already an ATM hardware fault raised, which explains the inactivity, and ignore the inactivity alert
- Dispatching/notifying the FLM team to check the ATM
- Capturing the inactivity event as a statistic for reporting or thresholding purposes

Vision can be configured to react to **cash withdrawal high activity** by:

- Dispatching/notifying the Branch or CIT team to anticipate emergency cash or cash replenishment may need to be scheduled
- Capturing the high activity event as a statistic for reporting purposes

Why is this important?

The simple cash withdrawal is the most common of transaction types and as such represents the core cardholder expectation of the device's purpose. Knowing when simple cash withdrawal activity is or is not occurring is very important to know.

Many host systems may support simplified inactivity status messaging. However, these host-generated inactivity messages often look at any type of transaction (i.e....balance inquiry) to restart the inactivity count. Also, many of these host-generated inactivity alerts only have a global setting that is applied to all ATMs, regardless of historical transaction patterns.

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ATM Transaction Performance Issues

Mag Stripe vs EMV Chip Card transaction patterns

Being able to report separately on mag stripe vs. chip based card transaction attempts may indicate fraud activity.

Being proactive when it comes to potential fraudulent activity is very important to protect the financial institutions brand and maintain trust with customers.

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Device faults and device warnings

Often these messages can be captured by APTRA Vision either through direct ATM monitoring, using the Vision Unified Agent or SNMP Agents. Or alternatively forwarded to APTRA Vision from the host system.

INETCO Insight can also provide alerts on device faults and warnings, passing these alerts to APTRA Vision in real time for ATM monitoring purposes.

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High dollar value withdrawals and/or deposits

Especially when done with foreign cards might indicate fraudulent activity

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Why is this important?

APTRA Vision's Inventory Management capability can help financial institutions know and track which ATMs have mag stripe card readers, and which ATMs have EMV card readers. However, what if the EMV card reader has been replaced by a mag stripe card reader? This could indicate fraudulent activity.

INETCO Insight can capture situations where an ATM with an EMV chip card reader begins to perform mag stripe transactions. APTRA Vision can automatically take the ATM out of service and dispatch FLM, SLM, Branch, or Security teams to the ATM when this occurs

Monitoring of the basic hardware functionality of the ATM is a core requirement. There are different approaches to how status message data is captured and sent to APTRA Vision. INETCO Insight provides one new optional source of status messages.

INETCO Insight provides a bi-directional view by seeing the host's interaction with ATM, as well as the device faults generated by the ATM and sent to the host. The ATM's status and how the host manages the ATM's availability for the consumer are all captured by INETCO Insight.

INETCO Insight can be configured to alert on all cash withdrawals and/or deposits over a certain value. Thresholding can be set up to look at recurring similar transactions. The alert can be sent to APTRA Vision, where an automated ticket can be generated and dispatched to the branch, security personnel, or ATM Operations team for investigation.

Latency—when do ATM transactions take too long to complete?

Network Latency –time for messages to flow through the network

Network latency will cause degraded ATM transaction performance—transactions taking longer to complete or timing out.

Node latency time for messages to flow through the switch

Time for the switch to respond to message request. Node latency is a factor of the network latency. As the transaction traverses the Authorization Network, each hop may have its own node latency.



Why is this important?

Card holders become accustomed to a certain level of service through the ATM channel. The financial institution needs to be proactive when that ATM experience is negatively impacted.

Is it known how long certain transactions should take to complete when things work well? When actual transactions take longer than expected times it can be a symptom of problems within the authorization network.

There could be many causes to this problem and it is important to alert the network and/or application support teams to research this problem. ATM Operations may want to watch this ATM for transaction activity and patterns to determine the card holder impact.

If there is slowness in any node (or hop) then the ATM transaction may be impacted and INETCO Insight may pinpoint who the culprit is for slowness in the network. The typical transaction process is as follows:

1. Requested transaction message goes to switch.
2. Response message back to ATM from Switch includes transaction authorization
3. ATM sends status message with confirmation of transaction completion.

If the time between response message and status message is too great it could mean there is an issue with ATM.

Why NCR?

NCR Corporation (NYSE: NCR) is the global leader in consumer transaction technologies, turning everyday interactions with businesses into exceptional experiences. With its software, hardware, and portfolio of services, NCR enables more than 550 million transactions daily across retail, financial, travel, hospitality, telecom and technology, and small business. NCR solutions run the everyday transactions that make your life easier.

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