Understanding, Controlling, and Reconciling the Purchasing Accrual Account

Tammy Obermeyer
Aisin USA

Don Driggs
Solution Beacon, LLC

Aisin U.S.A. Mfg, Inc. is a Japanese transplant company founded in the United States in 1988 by our Japanese parent, Aisin Seiki. Aisin U.S.A. is located in Seymour, Indiana, a rural community in Southern Indiana, and was the first of twelve companies started in North America by Aisin Seiki and is now a leader in the creation and production of high-quality components and systems for some of the automotive industry's most demanding companies. These companies include the likes of Toyota, Honda, General Motors and Nissan. Our product line includes door frames, latching systems, trim molding, power closers and openers and seating for both the OEM (Original Equipment Manufactures) and their tier suppliers.

Over the past 18 years, Aisin has grown into a manufacturing leader in the community of Seymour. We currently employee over 2,000 full time employees and continue to expand our operations. Annual sales have topped over $600 million.

In 2003, Aisin began the task of choosing and implementing a new MRP system. Aisin was plagued by poor business practices and a lackluster system. With the rapid growth of the company, something had to been done quickly. Aisin purchased the Oracle business suite in November 2003 and went live with it at the end of May, 2004. The modules implemented then were many of the manufacturing applications, Inventory, Purchasing, Accounts Payable, Accounts Receivable, Cash Management and General Leger.

Throughout the rapid implementation process, several of our poor business practices were carried over to the Oracle set up. Aisin had one objective – "ship car parts." This mentality along with the desire to do whatever it takes to get the supplier paid, lead to several of the problems that surfaced in our accounts payable and accrued expenses.

Implementation

During the first six months after our implementation a lot of time was given to getting bills paid and very little attention to how we were paying them. This lack of attention to business procedures combined with no training on the system and a poor understanding of the impact the implementation setups had on our processes combined to create a huge backlog of unprocessed transactions. We were behind and struggling very hard to keep our head above water. As we were preparing for our first financial audit with the Oracle system it became very apparent that we needed some outside support that understood the Oracle system. We had to start making the system work for us and stop trying to work around it.

One evidence that something was wrong was the growing balance in our Purchasing Accrual account. The typical month-end accrual of items received but not invoiced was about $8 million dollars. With operations remaining steady, the total accrued amount Uninvoiced Receipts Report after a few months of being live was $15 million dollars and growing. We tried to reconcile and understand the account but couldn't. The Uninvoiced Receipts Report was over 5,000 pages long. Thousands of transactions were flowing through the account. We felt like we were being swallowed up by a business process we didn't understand.

Our struggle to get this account under control and to keep it under control is the purpose of this paper. We will discuss the problems we encountered in getting it under control, how we resolved them and to identify some of the business practices that would have prevented those problems from arising in the first place.

At this time, we brought consultants from Solution Beacon on board to educate us and to review our setups and business processes. During the investigation it very quickly became apparent that our previous accounts payable methods would not work in the Oracle world. We came from a system that did not have any ties between the sub-ledger and general ledger and were now in a world that required no differences between our sub-ledger and

corresponding GL account. It was at this time that we finally acknowledged that our previous policy of doing "whatever it takes to get the supplier paid and customer billed" was no longer an option.

First, we worked on preventing the problem from getting worse. We recognized that we had to change our poor business practices. Some of them were:

Poor Business Practices

- No receiving inspection was taking place.
- All items were stocked irrespective of quality or physical count
- All items were paid irrespective of pricing and purchase order matching based on order or receipt.
- Accounts payable staff was given free rein. This resulted in a sub-ledger that was full of errors such as:

    1. Items were being coded and not matched to any PO or receipt.
    2. Items were being matched to purchase orders that had not been received and were being paid with no acceptance that the parts actually arrived.
    3. Items were being overbilled.
    4. No acknowledgement of PPV or IPV was taken into consideration. We were paying what the vendor charged no matter what, with no follow-up from our purchasing staff.
    5. We had a receiving department receiving items on any purchase order/release they could get their hands on. They had no concept of the importance of their receipts and the impact that those receipts had on our perpetual inventory, the accrued AP balance and the workload of our AP staff.
    6. Receiving an item on numerous receipts causing several receipts per line item on the purchase order. This meant it could take 3-5 hours to enter one invoice because the AP clerk has to guess which receipts were those that made up the total of the invoice line item.
    7. AP was matching to the first valid receipt they saw and only later did they realize that they needed that receipt for another invoice and then instead of reversing it they just coded the invoice to inventory or even the Accrued AP account.

Approach to Solving the Problem

Some of the things we did to correct the problem involved training our employees, working with our suppliers, changing some setups, and changing some procedures. For example, we:

- Educated our receiving department to understand the importance of receiving everything that came in the door on the correct release/purchase order and to only receive items that we actually received.
- Educated our receiving department on the importance of tracking items already received so duplicate receipts did not take place. We asked that they enter Packing Slip or Bill of Lading numbers in the receipt screen. By doing this we not only eliminated duplicate receipts, but we enabled our AP staff to more accurately match the invoice line item to the item on the correct receipt.
- Made the invoice hold, "Qty billed exceeds Qty received" a hold that is non-releasable. This meant that items now had to be matched to a receipt and that the quantity billed from the invoice had to equal or at least be less than the quantity received.
- Required suppliers to list the purchase order number and release on the invoice and packing slip.

- Required one invoice per truck from the suppliers and required our ordering department to create one release per order (truck).
- Started auditing the general ledger for any subledger accounts that had non-subledger activity.
- Disciplined our AP clerical staff to understand the importance of no invoices entered without an appropriate purchase order and audited activity to assure they were following the new procedure.
- Educated our AP staff on the option of match to purchase order instead of only matching to receipt. This is only for non-inventory items.

We felt like we were getting our hands around the problem but we still had no way of substantiating the balance in our purchasing accrual account.

Purchasing Accrual Setups

A few of the setup features that control the activity in the purchasing accrual account are similar to most manufacturing companies, in that Aisin USA accrues inventory items on receipt and accrues expense items at period end. The match approval level is 3 Way meaning that before invoice can be validated, the invoice quantities must match the purchased and received quantities within tolerances. Unlike most companies, AISIN chose Receipt as its Invoice Match Option. This option was introduced with release 11.5.8 and is independent of the Match Approval Level.

The Invoice Match Option determines that Payables will match the invoice to either the Purchase Order or to the Receipt. Matching to the receipt is a more specific or detailed way of making sure that an invoice is paying the correct item. It helps companies enforce better control over how they account and pay for their inventory. More significantly and the reason Oracle introduced this option was to allow companies to update exchange rate information on the receipt or if you want the accounting to use the exchange rate based on the receipt date. It enables more accurate accounting where receipts are taking place in a multi-currency environment.

Accrual Reconciliation Report

We were continually told by both Oracle and our implementation team that if we wanted to get a grasp on our accrued AP balance that we needed to analyze the Accrual Reconciliation Report for any incorrect transactions and fix the transaction. This report documents activity one month at a time and it did agree to the journal entries but it doesn't provide any support to document our ending accrual balance. Though useful, it didn't help us explain to our management or auditors why we were making large adjustments to this account.

Uninvoiced Receipts Report

The Uninvoiced Receipts Report seemed to have the purpose of substantiating all the invoices that remain uninvoiced so by running it at the right time with the right parameters, it should substantiate the balance of the purchasing accrual account.

However, we had problems with the report. It uses parameters that aren't clearly explained and produces different results depending on the choices used in those parameters. The results also vary depending on the timing of the report with relation to the Receipt Accrual – Period-End Process. The parameters require a Yes/No entry and they are:

Accrued Receipts: Refers to items with the Period End option

Include Online Accruals: Refers to items with the Accrue at Receipt option

Accrued Receipts: If the Uninvoiced Receipts Report is run before the Receipt – Accrual Period-End Process, then select No (because they haven't been accrued yet) for Accrued Receipts to include them in the report. If you run the report after running the Receipt – Accrual Period-End Process then select Yes to include them in the report.

The Include Online Accruals refers to items accrued at receipt. The Purchasing Options identify the above accrual options for both Expense Items and Inventory Items.

An example of the parameter selection and the before or after is illustrated below. The report was run four times before the Receipt – Accrual Period-End Process and four times afterwards using the different possible combinations of the two parameters. This example assumes that Expense Items ($1,000) are accrued at period end and that inventory items ($6,000) are accrued at receipt.

Uninvoiced Receipts Report Parameters: Before the Receipt Accrual–Period-End Process

	Accrued Receipts	Include Online Accrual	Report Totals
1.	Y	Y	6,000
2.	Y	N	-
3.	N	Y	7,000
4.	N	N	1,000

Uninvoiced Receipts Report Parameters: After the Receipt Accrual–Period-End Process

	Accrued Receipts	Include Online Accrual	Report Totals
1.	Y	Y	7,000
2.	Y	N	-
3.	N	Y	6,000
4.	N	N	-

As you can see, the timing of the report is important. If you want to use the report to capture and substantiate all uninvoiced receipts, then you have to understand where in the process the accruals stand.

We understood that we had to analyze the Uninvoiced Receipt Report for anything that should be written off and write those items off. This would have been the answer to our problems, but the report was almost 5,000 pages with no logical way to bring it into Excel for sorting. It did not list receipt numbers or receipt dates. The receipts were not aged in anyway so we couldn't tell if something was accrued yesterday or six months ago. How would we know which items to write-off? Would the write-off features even work? We quickly discounted that process as the solution to our problem.

A review of some of the receipts in the Uninvoiced Receipts Report showed that some didn't belong on the report because they truly had been invoiced. So why were they there? Of all the many transactions in the Uninvoiced Receipts Report and with the volume constantly going through the accrual account how could the problematic transactions be identified? How could this report be reliable? AISIN USA needed to trust this report, we wanted to use it for management and auditors as documentation and support for the balance in the accrual account.

We were able to classify the transactions on that report into three categories.

- Those that truly represented receipts that were uninvoiced.
- Uninvoiced receipts that were invoiced without being matched.
- Problematic receipts due to errors in receiving or accounts payable.

The only distinction between the first two groups was an arbitrary decision that any uninvoiced receipt over six months old was no longer a valid liability and needed to be removed from the report. With so much improper activity in the early days after go-live, many invoices were paid without being matched at all. This justified our decision to remove all the old open items from the accrual.

The way we removed them from the report wasn't sophisticated at all. We created dummy invoices and matched them to the open receipts. We also added one other distribution line and entered a negative amount so that the invoice would net to zero. The charge account for the reversing distribution that we entered was the accrual account so the net impact to the general ledger was zero as well. (This worked because our inventory accrual option was "Upon Receipt" which means the system uses the accrual account as charge account for all matched inventory items).

This effort removed over $8 million dollars and more than 1000 purchase orders and releases from the Uninvoiced Receipts Report. This effort also had the benefit of removing a lot of clutter from the Uninvoiced Receipts Report and shortened it by nearly 2,000 pages. More importantly, the total on the report was more realistic. It wasn't correct, but it was a lot closer.

The only negative result of this fix was to create zero dollar invoice entries on the payment stubs we sent to our suppliers. To this date, we haven't received any complaints from any of our suppliers about the way we handled this.

We knew we still had other problems and we knew that resolving them wouldn't be so simple.

We still needed to isolate the problematic transactions so we ran some SQL scripts that listed all of the purchase order lines that had a billed quantity that was different than the received quantity and exported the results to MS Excel. We also ran the standard Oracle Uninvoiced Receipts Report at the same time and exported the results to another Excel spreadsheet. Using some spreadsheet commands and techniques we were able to bring the two spreadsheets together and isolate all the lines with discrepancies in the quantities remaining to be invoiced.

As we reviewed and analyzed these remaining receipts we found various problems. In a few cases we found duplicate receivings so the solution was simply to reverse the receipt. None of the remaining solutions would be so simple.

The problems we found were astounding. There were line items with billed quantities significantly higher than the received quantities. Lines and purchase orders that were Finally Closed with received quantities still waiting to be invoiced. We saw some lines that had been matched and reversed, re-matched and reversed again and them matched to another invoice. We saw matched quantities with unimaginable fractions. To this day, we don't understand how they got to be this way. We only assume that in desperation to get things matched and validated, our AP Clerks were trying anything and everything. The only way to fix the remaining problems was to reverse the invoice distributions and match it to the proper receipts but that was easier said than done.

Finally Closed

One set of problems required us to reset the Final Closed status to Closed for the Purchase Orders. The system allows no updates to purchase orders that have a status of Finally Closed. Oracle Support suggested some scripts that we used to change the closed code for the po_headers_all, po_lines_all, and po_line_locations_all. See the appendix for SQL scripts that Oracle gave us to do this. In most cases, this allowed us to reverse the invoice distribution and re-match the invoice.

Invoices Matched but Receipt ID Null

The last and final set of problems involved transactions that were matched but the receipt ID was null. In all these cases, the billed quantity was greater than the received quantity and when attempting to validate our solution in the Test environment, we saw erratic behavior when we reversed the distributions. We saw negative quantities on our Uninvoiced Receipts Report that became positive. In fact, the quantities displayed on the report were not accurate and when compared to what the system displayed.

When we queried these items in the database we learned that in every case, the quantity billed in the po_line_locations_all and the rcv_transactions was wrong. They were the same as each other but they were wrong. When we looked at the quantity billed for the same transactions in the po.distributions_all table and we observed that those quantities were correct. We have no idea how they became different.

After much analysis and testing the fix for this problem was to:

A. Identify the invoice or invoices that were matched to that po line and shipment (these were invoices that were somehow matched to a purchase order instead of a receipt).

B. Reverse the invoice distributions. This changed the quantity billed in all three tables but for reasons still unknown to us left an amount in the quantity billed in the po_line_locations_all and rcv_transactions tables. Sometimes this amount was negative and in other cases it was positive.

C. Verified that the quantity billed in the po_distributions_all table was zero.

D. Ran a script that set the amount in the quantity billed in the po_line_locations_all and rcv_transactions tables to zero.

E. Re-matched the invoice to the receipt.

This was harder than it appears because in most cases this involved blanket purchase orders with lots of activity and invoices with lots of lines and in some cases, many invoices matched in small quantities to the same release and shipment.

However, this had the desired results of clearing these transactions from the Uninvoiced Receipts Report and resulted in a report total that was more in line with our expectations.

The SQL scripts that we used proved so effective that we modified them a little to give us the receiving detail of the uninvoiced receipts in a usable MS Excel format and registered it as a custom report that we can run at any time. We now use this output to monitor weekly activity in the account and address any issues as they arise instead of waiting until they get completely out of hand. With the SQL output it is very easy to identify duplicate receipts. These receipts are then reversed; allowing us to better control our inventory values and keep our accrual balance under control. A monthly process has been implemented that requires us to compare current statements from the supplier to the output from Oracle to validate any items that are included in the accrual that should not be included. These items are then cleared off by one of the methods previously mentioned.

Conclusion

As a result of our current activity and changes we have made since implementation it appears that the Oracle standard report is indeed performing as it should. It is very evident that several items in the beginning had a significant impact on the output of this report and that importance should be placed on working with and understanding the system if you are to ever trust the output of this process.

The balance in the purchasing accrual account is now under control and the account balance though not 100 % accurate yet it is very close. We have just completed an external financial audit and the accrued accounts payable balance is no longer suspect in the eyes of our auditors. Shortly we will be undergoing a systems audit by the same audit firm and we have confidence that the lessons we have learned and changes we have made will make this audit much easier.

From a financial perspective, it appears that the accrual process within Oracle is a very good process. However, the lack of documentation on the subject led us to question the validity of the process. It required a lot of effort and time to investigate and understand the ins and outs of the process in order to be able to trust the system. This understanding is somewhat complicated by the fact that so many modules have an impact on the accrual balance. This entire process acknowledges the fact that Oracle is an integrated system. This being said, it is very important to understand the benefits and limitations of an integrated system in order to completely understand this process.

Besides learning more about the accrual account than we ever cared to know, we did learn a few things in the course of this effort.

- We learned that training is important, it can't be short changed.
- We learned that understanding business flows and procedures is important and they should be defined and tested during the implementation.
- We learned that setups matter. Use them to control processes and enforce policies
- We learned that no problem is insolvable.

About the Authors

Tammy Obermeyer is the Director of Finance for Aisin USA and supervises an accounting staff of eight people.

Don Driggs is a Senior Consultant at Solution Beacon and is a frequent presenter at OAUG. Don has 23 years experience in supporting financial applications with ten of them using Oracle applications and eight as a consultant. He also maintains an independent consulting company, Driggs Consulting Services, LLC

Appendix

Relevant MetaLink Notes

Note:111927.1 Purchasing FAQ: Uninvoiced Receipts Report

Note: 198310.1 Reconciling A/P Accrual Accounts

Oracle Supported SQL Scripts

****

Finally Closed

Resets the status of Finally Closed PO's to Closed. (We tested this with the po header id of 3431 to close one purchase order). Once tested, we used a list of all the purchase orders in the SQL script).

****

```
select po_header_id, segment1, closed_code,
from po.po_headers_all
where po_header_id = 3431

select po_header_id, po_line_id, line_num, closed_code
from po.po_lines_all
where po_header_id = 3431

select po_header_id, po_line_id, line_location_id, closed_code
from po.po_line_locations_all
where po_header_id = 3431
```



```
select po_header_id, po_line_id, line_location_id, po_distribution_id
from po.po_distributions_all
where po_header_id = 3431

select *
from po.po_distributions_all
where po_header_id = 3431

update po.po_headers_all
set closed_code = 'closed'
where po_header_id = 3431
```

****

Quantity Billed Discrepancies

These queries verify if a discrepancy exists between the quantities billed between PO distributions, PO line locations, and PO receiving transactions and indicate a liability incorrectly reported on the Uninvoiced Receipts Report. We found that the quantity in the PO distributions table was correct, we also found that the quantities in the other two tables were equal to each other but wrong. To correct this we reversed all related invoice distributions (so the PO distributions quantity became zero), then we used a SQL script to update the quantities to zero. Then we re-matched the invoices to the correct receipts and the problem was fixed.

****

```
select po_header_id, po_line_id, line_location_id, distribution_num, quantity_billed, amount_billed
from po.po_distributions_all
where po_header_id = 1142
and po_release_id = 103
and po_line_id = 30894
and line_location_id = 1357

select quantity, quantity_billed
from po.rcv_transactions
where po_header_id = 1139
and po_release_id = 65440
and po_line_id = 30843
and po_line_location_id = 89919
and transaction_type = 'RECEIVE'

select quantity_received, quantity_billed
from po.po_line_locations_all
where po_header_id = 1139
and po_release_id = 65440
and po_line_id = 30843
and line_location_id = 89919
```

