

# **Electronic Invoicing – Stop the Double Entry**

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*Abstract*

*Invoices are often keyed twice, once in an auxiliary system, then once again into the Enterprise Resource Planning (ERP) software. Not only is this a duplication of effort, it also mandates that additional copies of invoices are made to be mailed to the Accounts Payable (AP) office; wasting physical resources and delaying the invoices from being processed.*

*To alleviate these issues we created processes within our ERP to import the invoices electronically from any auxiliary system. Files containing the invoices are created in the auxiliary areas, uploaded to a centralized server, and then processed by a job run within the ERP.*

*This saves hours of labor every week, reduces paper use, and allows invoices to enter the ERP sooner.*

## Introduction of the Organization

Nestled in the Blue Ridge Mountains of North Carolina, Appalachian State University offers a challenging academic environment, energetic campus life and breathtaking location.

Appalachian combines the best attributes of a small liberal arts college with those of a large research university. Known for its value and affordability, Appalachian enrolls about 18,000 students and offers more than 150 undergraduate and graduate majors. Small classes and close interactions between faculty and students create a strong sense of community, which has become an Appalachian hallmark. Appalachian, located in Boone, N.C., is one of 16 universities in the University of North Carolina system.

Appalachian State University employs nine hundred and one full-time faculty; ninety nine percent of whom have doctorate, first professional degree, or other terminal degree. There are 1,178 total full- and part-time SPA staff and 1,714 full- and part-time EPA faculty and staff, for a total of 2,892 employees. Helping to keep our costs as low as possible, this best practice falls in line with the values and goals of the university.

## Statement of the Problem/Initiative

Auxiliary units such as Food Services and the Bookstore have their own ERP software to manage their operations. The invoices they receive from vendors need to be keyed into their own ERPs; however, operating under the umbrella of the university they also need to be added to the university's ERP. To accomplish that, once the invoices were keyed into their own ERP these auxiliary units would make photo copies of the vendor invoices, batch a set of invoices together, and create a total sheet summing up the total cost of all the invoices. That stack of papers would then be put into an envelope and mailed across town to our accounts payable office. The accounts payable staff would then key the same invoices in to the university's ERP ensuring that the total of the invoices they entered matched the batch total on the cover sheet.

There is also another set of auxiliary units that don't have full blown ERPs of their own, but still need to invoice other departments on campus for the services they provide. Some examples of these are the post office, printing office, physical plant, and warehouse. These units used to create their own inter-departmental invoices, keeping a copy themselves, and sending a copy to the accounts payable office to be entered into the university ERP using the same batching procedure mentioned before. The charges would have already been agreed to by the individual departments either from a standing order or an email.

## Design

The solution would need to meet the general accepted accounting principles to pass inspection from a state auditor and also to ensure accurate results. It should be easier than the paper based process for both the auxiliary units and the AP office; reduce costs in labor and materials; and be possible to replicate for similar areas.

To ensure we met those requirements we met with the accounts payable office and a few of the auxiliary units to understand each step of what they do. Then we met with the programmers to design a process that is easily maintained and duplicated for multiple areas.

## Implementation

We did not want to overwhelm ourselves, so we piloted the new process only for a couple of auxiliary units. Once we worked out the issues, we started to move more units to this type of auxiliary billing. That is still ongoing, but we are getting close to covering all the areas that this would work for. For each unit we take the time to understand how the auxiliary unit operates to ensure that this is still a good solution for them and to tailor our instructions so it is easily understood in the light of their old process. In some cases the auxiliary unit was different enough that we created a different program to more easily fit into their processes. So this has been an ongoing process for several years.

## Benefits

We have prevented having to re-type over 307,000 invoice lines, representing \$251,124,850 for over 17 different auxiliary units.

## Retrospect

The file layout we use could have been easier to create. Originally it was decided that we should use a fixed width field. That can be cumbersome to create for some users. A delimited file would be easier. Other than that, things have really worked well. The process is efficient, auditable, and accurate.