BinaryStream

White Paper:

Centralized Processing versus Intercompany Transaction Solutions; Finding the Right Solution for Multi-Facility Organizations -

A Microsoft Dynamics-GP Solution Paper

Microsoft Partner
Gold Independent Software Vendor (ISV)
Gold Enterprise Resource Planning

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Executive Summary

Many multi-location / multi-facility organizations struggle with the challenges of optimizing operational efficiencies and control within their distributed organizations. Many current software solutions do not have the structural design to enable organizations a “centralized processing” approach – these solutions force customers to utilize multiple databases and intercompany transaction solutions which add unneeded cost and complexity but more importantly become “after-the-fact” audit trail transactions versus up front, proactive control tools.

This paper determines that the true solution for multi-location organizations is a centralized processing software solution. Allowing an organization access and control of data from a single database, sharing a common set of Master files, a facility-driven security model and transaction allocation uniformity for all facilities are all essential components to a true centralized processing solution. At the same time, this solution should enable organizations to determine the right amount of centralization versus decentralization that is optimal for their organization.

The **Binary Stream Software Multi-Facility Processing** solution addresses these critical areas and more. With a solution that combines the needed structure of a true centralized processing solution with the traditional transactional functionality of an intercompany product, Multi-Facility Processing bridges and exceeds the expectations of many multi-location organizations.

Objective of this Document

The field of centralized processing/ divisional accounting has become a popular area of investigation for many multi-location / multi-facility organizations who struggle with the challenges of optimizing operational efficiencies and control within their distributed organizations.

This paper will analyze the current perception of centralized processing software solutions, look at the common solutions offered in the marketplace today and develop a framework for determining the critical components of centralized processing that is optimal for their organization. Finally, a solution to meet these challenges – **Binary Stream Software’s Multi-Facility Processing** - will be introduced and shown how it meets and exceeds the challenges that many multi-facility organizations face in their pursuit of optimizing operational efficiencies and control.

Who Should Read this White Paper?

This paper is focussed on the decision maker in a multi-location organization that has the challenges of optimizing operational efficiencies and control within their organization and is investigating software solution alternatives in order to meet these challenges.

This paper focuses on a mixture of high level operational challenges for senior management assessment but also drills down into the more fundamental accounting and control issues surrounding centralized processing. Accordingly, this paper will also appeal to the senior software solutioners in their quest of finding the right solution for their organization or that of their clients.

What is "Centralized Processing"?

When we hear the term "centralized processing", we perceive a complex, transactional engine that helps organizations centralize and more tightly control diverse company operations that tend to exist in different databases. This type of functionality is also sometimes referred to as centralized transaction processing. However, as in many things in life, perception and reality are entirely two different things. The sheer fact that organizations have been traditionally forced by software vendors to create different databases for different locations runs contra to their desire to centralize their data and better control overall company operations from different locations.

The traditional solution for these organizations has been to abandon better centralized data control and concentrate on implementing software solutions that track intercompany transactions between locations / entities. These intercompany transaction products concentrate only on transactions which automatically generate the necessary "due-to" and "due-from" journal entries. So while the necessary journal entries have been created after-the-fact, the reality for many multi-facility organizations is the following

- They still tend to operate as separate entities,
- Operations, administration and decision-makers do not have overall data access and control at any time,
- The cost maintaining numerous databases is significant and
- Monthly consolidations of numerous databases for reporting is time consuming.

Why the Need for Centralized Processing?

The need for centralized processing arises from organizations that require the realization of operational efficiencies that come from the sheer scope of their operations as well as their need to control their operations as it grows into

multiple locations. For example, the volume derived from bulk purchasing from one central purchasing department versus smaller purchases from numerous branch offices can have the net effect of reducing per unit purchase cost down through out the entire organization.

On the other hand, larger organizations with more than one location also need to find a balance of how much centralization is optimal for their organization. While this is a highly subjective trade-off to measure, the fact that most multi-facility organizations require some decentralized autonomy to run more smoothly is not a revelation. The irony of this concept leads organizations to two critical questions

1. How much centralization / decentralization is "right" for the organization, and
2. Are there software products that support both a structural as well as transactional base to facilitate proper centralized processing?

The answer to this last question is yes. Binary Stream Software is proud to introduce **Multi-Facility Processing** which addresses the short comings of using intercompany solutions for true, centralized processing environments.

How much Centralization / Decentralization is "right" for an Organization?

On the surface, this is a highly subjective question but one that every multi-facility organization must address in the course of their corporate development. To make the issue even more complex, the amount of centralization / decentralization is not a static concept for organizations over time. It will change and evolve through out the organization's life cycle. The reality of many multi-location organizations is that optimized operations have a degree of both centralized and decentralized control.

So, if the issue is subjective or hard to quantify and is in a constant state of change, what are implications for a software solution to address these needs? The answer is simple – it is a moving target. The implications for a software solution rest with the fact that the best solution is one that is flexible and will allow for change. For example, user access to data can change quite frequently in many multi-facility organizations. A flexible solution must allow organizations to restrict or open data access to users as time and business requirements change.

Multi-Facility Processing by Binary Stream Software addresses this issue in a number of ways. By allowing users to be associated with one or many facilities, data access can be made as open or restricted as possible. And as business conditions change within an organization over time, these same users can have their facility access changed quickly and seamlessly through out the solution.

Structure versus Transactions in Centralized Processing Design

We have already described how the lack of centralized data control structure from many software vendors has necessitated many organizations to revert to only enable intercompany transactions between different company databases. While these transactions are usually automated with the proper due-to and due-from general ledger accounts, they are after-the-fact result of creating the necessary audit trails for a transaction.

In other words, there is little primary "up front" control to these transactions – people in different company locations can enter into transactions which may be acceptable in one location but not so for the overall organization. For example, using the centralized purchasing example above, how does the organization benefit if one location purchases a small amount of an item from a vendor at a smaller volume and higher price versus a large centralized purchase of the same item at a lower unit cost? Or how can an organization ensure that consistent GL distributions are generated from one location to another in different databases?

The solution thus becomes a question of structure – a true centralized processing product must provide the structure to ensure that an organization's goals of operational efficiencies and control are met before-the-event rather than after-the-fact.

Multi-Facility Processing addresses the issue of structure right at the heart of the transaction – in the Chart of Accounts. With pre-defined segments in the Chart of Accounts for facility and departments, all transactions take on the appropriate facility / department coding. As well, using facility as a "filter" for user access allows **Multi-Facility Processing** to provide the "up front" control lacking in most multi-location / intercompany database situations.

Single Database versus Multiple Databases

We can now see that many of the problems that arise in multi-facility processing occur because the structure of many vendor software solutions assumes that each location / facility resides in a separate database. And in each separate database, there exists a standalone rule set that is more or less independent from the other company databases.

If then, we determine that company data which resides in many databases is a root structural cause of multi-facility pain within an organization, does a single database design approach solve any or all of the issues inherent to the multiple database approach?

To answer this question, let us look at the four issues we described previously that still occur with organizations who use intercompany transaction solutions with multiple databases:

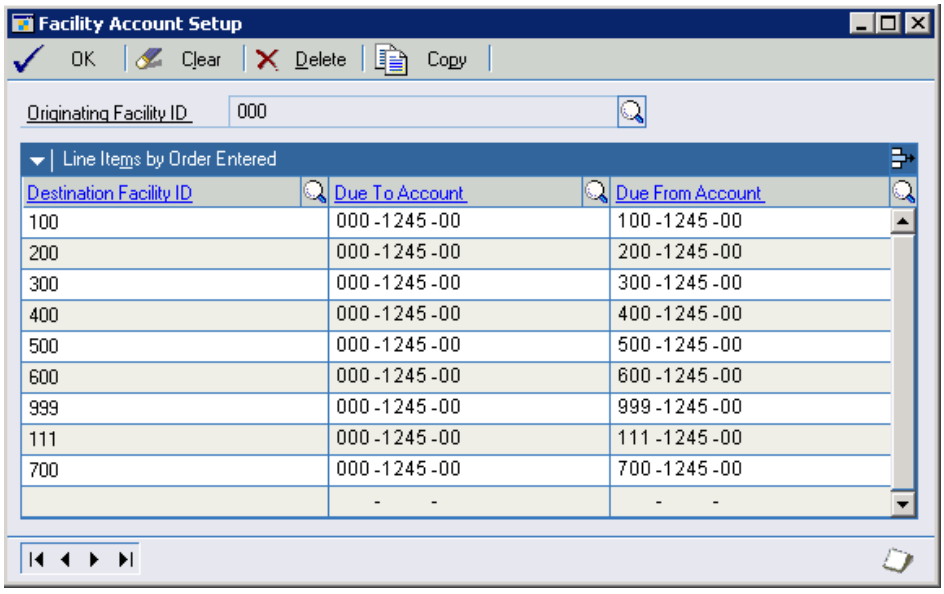
- Organizations with Intercompany software tend to operate as separate entities – Will a single database receptacle solve whether or not an organization operates more centrally? On the surface, one would have to think so. With all of the data in one place and all rule sets / security centralized into the only database, a higher level of organizational control can be achieved.

- Operations, administration and decision-makers do not have overall data access and control at any time – This problem is overwhelmingly eliminated with data in one central database location where all users and transactions are monitored against a standard set of rules.

- The cost maintaining numerous databases is significant – Additional decentralized accounting costs and staff needed to maintain numerous databases from different locations is now eliminated.

- Monthly consolidations of numerous databases for reporting is time consuming – With different databases having potentially different charts of accounts, a single database with all data compiled under one chart of accounts greatly simplifies period end reporting and saves critical report compilation time.

We must therefore conclude that where possible, a single database structure containing all data from all locations offers organizations a better solution to proactive operational efficiencies and control over the traditional multiple database / intercompany module solution.



Multi-Facility Processing was specifically designed to handle multiple entities within a single database. However, it should be noted that even in a single database environment, intercompany transactions between entities still need to be accounted for after-the-fact. Accordingly, **Multi-Facility Processing** provides standard intercompany due-to and due-from transaction functionality needed for transactions between entities in its database.

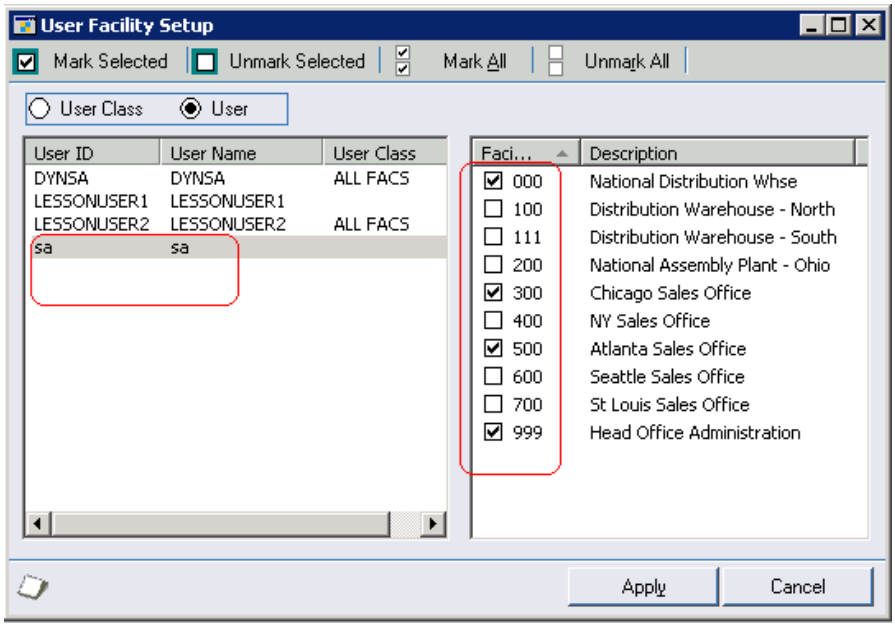
User / Data Security

Inherent to the argument where users of different facilities and responsibilities access one database, the issue of database security becomes critical in several key areas.

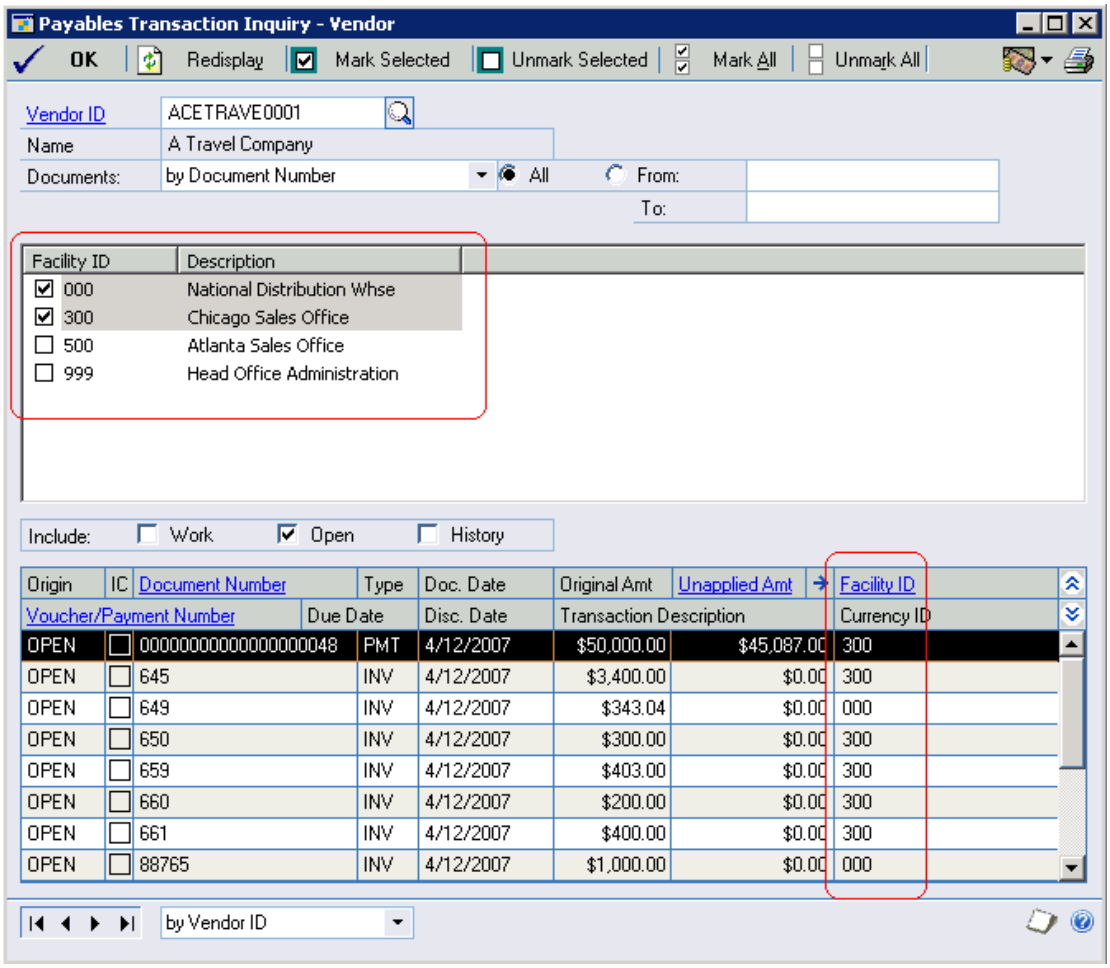
Within most organizations, there are some users – sometimes referred to as "super" users – who need extensive access of data and transactional control across all of the distributed operations of an organization. Alternately, there other groups of users that require only limited views of data and have only the security rights to create transactions in certain areas i.e. a buyer that purchases for his location only. These users are typically connected to specific physical facilities / locations within an organization.

Most organizations see the access or viewing of data much the same as they see the act of giving the rights to create data transactions. Usually, if a user within an organization is not allowed to see data from one area, they are normally restricted from making any transactions that touch those areas as well.

Hence, an overall centralized processing solution should address an organization's need for user security at both a view and transaction access level.



Multi-Facility Processing allows users to be associated with one, many or all facilities depending on their role with the company. Transaction rights and viewing are associated to each user by the facility(s) associated to that user.



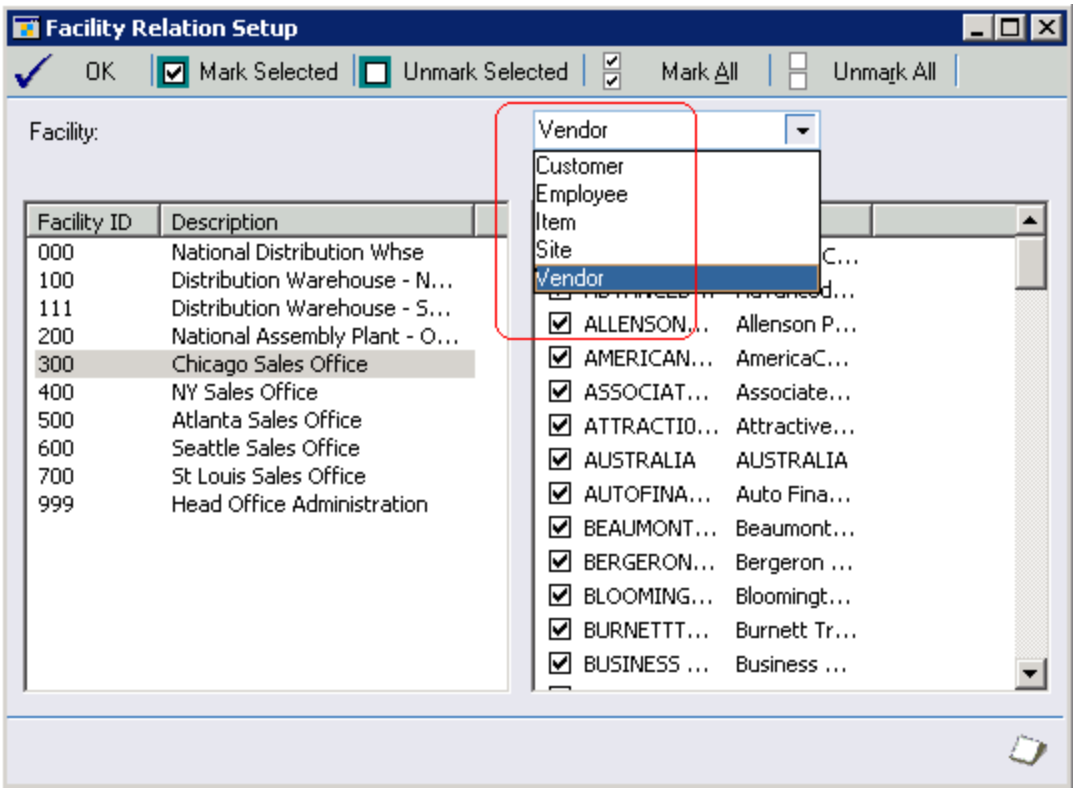
Multi-Facility Processing "filters" the access users have to view transactions. In this example, a user with security for four facilities chooses to view only transactions from two facilities. This user does not have the rights to view any other facility transactions other than the facilities shown above.

Filtering Master File Data

Further to the above argument that a true centralized processing solution can restrict what transactions a user can see, can the same argument hold true for the visibility of master files such as the chart of accounts, customer, vendors and item inventory?

One of the premise concepts behind a true centralized processing solution is the idea that users / organizations benefit from the fact that only one set of master

files needs to be maintained. So why would we suddenly want to restrict or filter their visibility to users? The reasons can be many. For instance, some organizations do not want all users to have total access to the entire chart of accounts in order minimize coding errors. Other organizations have entities which may have competing interests such as products / sales which make them neo-competitors from time to time. In this case, not only should each different facility not have transaction access to another "competing" facility, but as well, each facility should not be able to share visibility of the same customer master records to close the "confidentiality" loop.



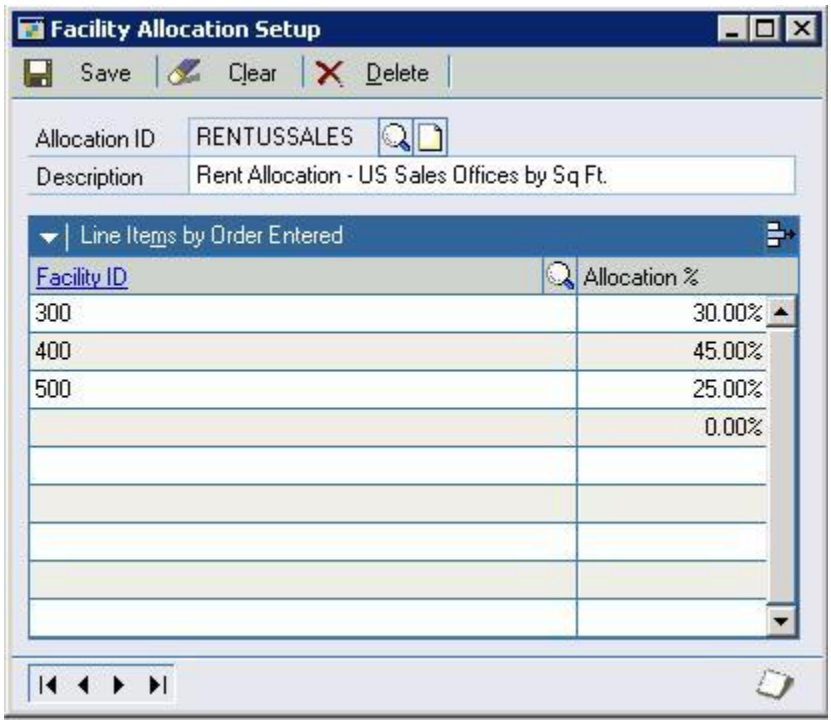
Multi-Facility Processing allows organizations the flexibility of either having the entire master file(s) visible to all users or "filter" exactly what specific records in each master file(s) should be visible to each user. Multi-Facility Processing currently filters the Chart of Accounts, Employees, Inventory Sites, Customer and Vendor files. Coming in mid-2007, the Inventory Item master will be filtered as well.

Transaction Allocation Uniformity

One of the common challenges facing a multi-facility organization is the consistent application of allocation methods throughout all users in all locations of an organization to allocate costs to different locations within the company.

Many organizations continually grapple with the issue where users from one location will create a different GL distribution than a user from another location. This is a common occurrence in multiple database environments.

Most organizations attempt to correct this occurrence through manual rule sets and user execution. However, what is usually lacking is software validation as a final control feature. Accordingly, a more comprehensive approach to monitor these allocation entries would exist when the software solution provides a recommended "template" of the allocation for any given intercompany cost allocation. Depending on the organization, the allocation template could be universally enforced on all such transactions or be over-ridden if allowed by the organization.



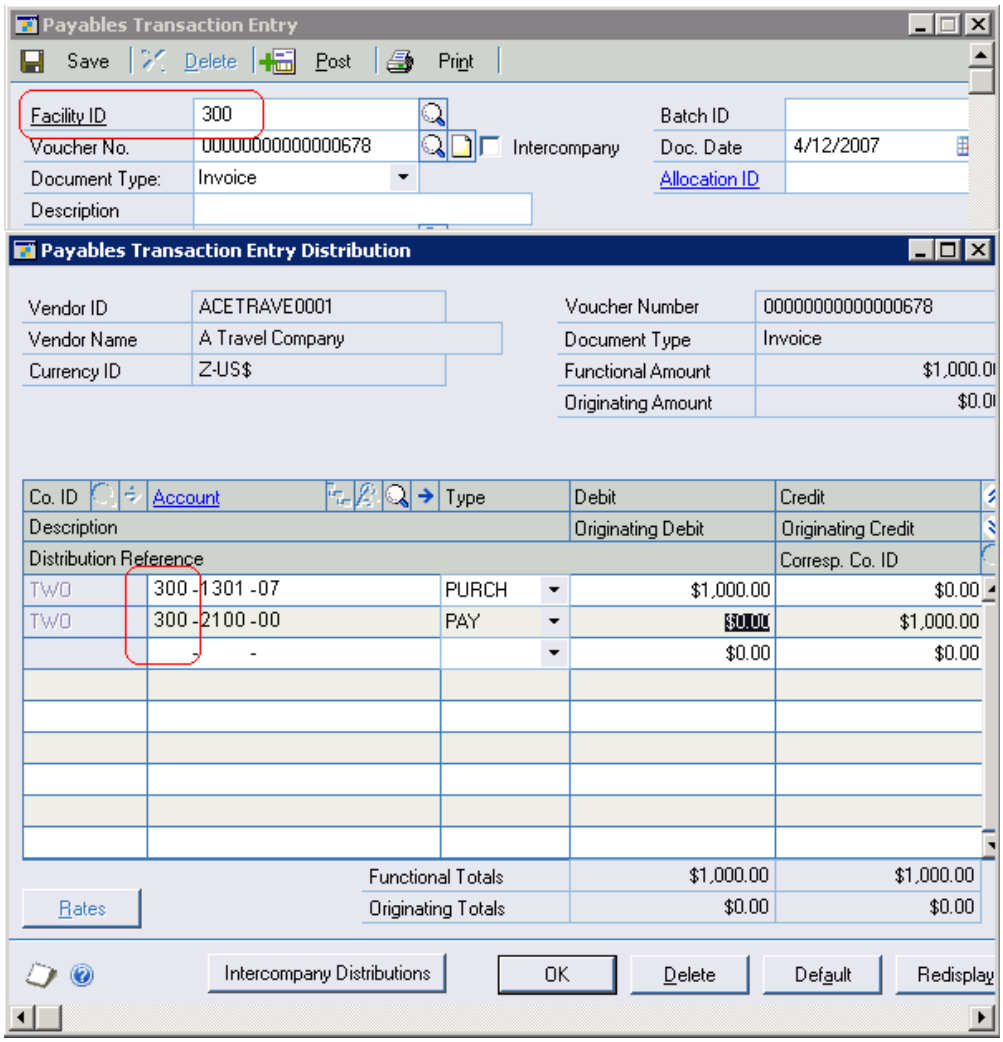
Multi-Facility Processing allows organizations to set up allocation "libraries" – templates that can be apportioned to any intercompany transaction and uniformly allocate costs on a consistent basis. Users can use the allocation template as such or over-ride when necessary.

Eliminating Transaction Coding Errors

One of the greatest workability issues surrounding multi-entity accounting is the sheer size of the consolidated Chart of Accounts and the chances of transactions being miscoded. It is an area of major concern in high volume accounting departments. And unfortunately, these errors are usually discovered at the worst

time for an accounting department – when producing and reconciling financial statements when time is scarce.

While organizations can enforce different workflow solutions to minimize these coding errors in multi-entity organizations, the best solution always seems to be to make software “smarter” – let the system make a reasonable assessment of how to code a transaction and allow the user to change it if incorrect.



Multi-Facility Processing, through functionality called **Account Substitution**, takes the guess work away from multi-entity transaction coding. By defining which facility a transaction belongs to, Multi-Facility Processing can infer what coding to use based on the facility and Microsoft Dynamics-GP default and posting accounts.

In the case above, both the debit and corresponding accounts payable are coded to the same facility. Should the payable get coded to a central payables facility versus this default, Multi-Facility Processing also provides an over-ride which is

ideal for hard coding such transactions to a centralized accounts payables account.

Reporting

While security and transaction rule sets of a database determine the up front control aspect for an organization, reporting allows management the scorekeeping it requires to assess its financial success.

Reporting in all organizations is generally a function of how an organization is managed – either from a functional, location, product or a combination of the three approaches. Departments can exist within each facility. And the same departments can exist within multiple or all facilities. For example, a sales department may exist in every facility through out an organization. Multi-location organizations usually have the added challenge of needing reporting by facility / location in addition to whether they are functionally or product managed only because facility costs are usually better controlled and managed in that fashion.

Accordingly, multi-facility organizations need the flexibility to define the management areas of its organizational approach in the software solution whether it be functional, location, product or some combination of the three.

Examples of Organizational Areas by Management Approach		
Functional	**Product**	**Location**
Sales	Home Entertainment	Chicago
Administration	Computers	New York
Warehouse	Telephones	Dallas

The above table shows some basic examples of control areas in each management approach. Regardless of the approach or combination of the approaches used, the design of a true centralized processing solution should allow organizations to set up the control areas that represent their management approach and also allow them to report in that manner.

Multi-Facility Processing allows organizations the flexibility they need to set up control areas depending on their management approach. The above example shows a combination location / functional management reporting style however a logical style representing functional areas or product orientation can be set up as well. Lastly, **Multi-Facility Processing** also defines an account segment for departments within each facility to add departmental controls within each facility.

Ease of Workability in a Single Database Environment

One of greatest issues surrounding the operation of multiple databases is the sheer time it takes to run transactions separately in each. On the flip side, how much time is spent in multiple databases consolidating transactions back to one database?

Lets look at a common workability issue many organizations face – that of **Centralized Accounts Payables**. When common vendors are spread across many databases, the process of cutting checks to one vendor can be time consuming. Some companies write one check from each database which is very time consuming. Other organizations use smaller, intercompany transaction products and consolidate transactions into one database so that one check can be run. However, extra time is spent creating this intercompany transaction from each database back to one central consolidated database for a check run.

Multi-Facility Processing provides the most expedient solution in this common payables scenario. With all vendor transactions for all facilities already in database, one check can be run paying the invoices for many facilities.

By defining a parent facility that can pay invoices on behalf of itself and many child facilities, one check can be run from a centralized payables location quickly and efficiently.

What else do you need to know about Multi-Facility Processing?

⇒ Binary Stream Software's Multi-Facility Processing is only available for the Microsoft Dynamics-GP ERP platform at this time. Pricing is also dependent on the number of Microsoft Dynamics-GP users in the system.

⇒ The product does not require Microsoft Dynamics-GP Account Level Security to be purchased. Multi-Facility Processing has its own "light" form of this functionality called "Account Security". However, both Great Plains Account Level Security and Multi-Facility Account Security will work in tandem.

⇒ The Core Module for financials is mandatory – General Ledger, Accounts Payable and Receivable, Cash Management and Bank Reconciliation. The optional modules – Sales Order Processing, Purchase Order Processing, Fixed Assets, Payroll, Contract Administration and Project Accounting – can be added in addition to the Core Module.

⇒ Integration to Wennsoft Job Cost and Service Management modules is also available with Multi-Facility Processing.

⇒ Multi-Facility Processing can be implemented either as an initial phase one solution or can be added in later phases as required. Utilities are provided within the product to help make data transition onto one consolidated database a less time consuming task.

⇒ Multi-Facility Processing can only be purchased through your Microsoft Dynamics-GP Value-Added Reseller. However, Binary Stream Software will be happy to answer questions, requests and provide demos as required.

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