# THOSE SUPPORT People

SUPPORT GROUP

Volume 5, Issue 4

# How to Have a Successful APS Implementation.

By Jeff Naden

Advanced Planning and Scheduling (APS) is a set of technologies, business processes, and performance metrics that enable manufacturing companies to compete more effectively in the global marketplace. The technologies involved are computer software and hardware that enable manufacturing companies to change the way they plan, schedule, forecast, distribute, and communicate with customers and suppliers. The APS marketplace is a \$1.3 billion business growing at 50% a year. Those figures represent a large investment by manufacturing companies, and more importantly, a huge amount of change that must be managed effectively in order to ensure return on that investment.

In a successful APS project the business objectives are achieved. The manufacturing company becomes self-sufficient in the use of the technologies, business processes, and performance metrics. This is all achieved in a reasonable amount of time and at a cost that makes sense given the magnitude of the business benefits.

Veteran project managers will say that successful APS projects have the following characteristics:

- The project is undertaken for the correct reasons.
- The software selected is well matched to the needs of the manufacturing company.
- The project is well managed with the entire management team of the manufacturing company playing a role.

You might consider undertaking an APS project if your company needs to replace old and antiquated systems (perhaps to solve a Y2K problem), standardize on a set of current best practices, or achieve some specific business result (e.g. improve customer service, increase pro**Summer, 1999** 

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# Trusted Advisor **Diversity**

You never know what you'll need to know tomorrow. Our friend Birket Foster tells his story about the Winter of '97 in which electric power was unavailable for 3 weeks and his entire town of a thousand people pulled together to help each other. It is amazing the skilled people you can find in a small community in rural Ontario.

It takes all kinds of different skills to run a business. The number of major, necessary, operational decisions is increasing and the attendant monetary investment decisions are coming more frequently. Who can you trust when everything changes every six months? That's longer than some managers have been at their new job in your company. Hopefully, getting productive quickly after changes will be one of their key capabilities. It certainly is one of ours.

> So how does diversity come into it? More chances of survival in a hostile environment may come from having more paths

## From Shaggy's Desk

I'm Back! I made it to HP World in San Francisco on Tuesday, just in time for the SIGMANMAN meeting and the earthquake. (Isn't it just like me to make an earth moving entrance?) I was glad to see a lot of our support customers there, but a little miffed to learn that some of them don't read my articles in the newsletter. They were surprised to see my platinum blond hair, didn't know that it was a wig, and had no clue as to why I was wearing it.

For those of you who understand, here's an update on my dance with cancer. I had my last Chemotherapy treatment on the 20th of July. My hair is now 1/4 inch long and my eyelashes & eyebrows are coming back (I sure missed them). The Doctors want to do a mastectomy because of dirty margins left after the Lumpectomy but I have told them I want to research different types of alternative treatments. If you know of any success stories with any other treatment please let me know. I am interested in all of them and I know there are a lot out there. I believe the Chemotherapy took care of the few remaining cancer cells and I will be just fine as soon as I build my strength back up. I'm going swimming in the lake twice a week and plan to start working out again at the fitness center. Now back to our regularly scheduled program...

San Francisco's weather was a welcome change from the 102-degree Texas heat. After the SIG meeting we had a great time at dinner with a group of 32 hungry people. It was the best Italian food I have ever tasted. They just brought out tray after tray of this wonderful food! Sorry you missed it. I sat by Ben Bruno from STR software and he kept saying it was just like his grandmother made. Since we had such a good time at dinner, let me start my spiel by reminding you of what great products they have.

As I've mentioned in previous articles, STR Software provides document delivery solutions for both the HP3000 and Unix environments with FAX/3000 and FaxCommander. Someone asked on the SigMANMAN list-server about software that allows forms to be signed online and then e-mailed. STR's products can easily place a signature anywhere on any page regardless of whether the document is simple ASCII text, PCL forms, or pre-printed forms. Their latest product, named Deliver.e, is an option on FAX/3000 and FaxCommander. Using pre-printed forms, electronic forms, memos, correspondence, or letters, Deliver.e permits the delivery of any document as an e-mail message. Therefore, any document printed on any printer from an HP3000, Unix or PC desktop can be easily faxed and/or e-mailed with this product. That includes forms with a digitized signature! They are then e-mailed or faxed.

If you have visited our web site lately you have seen the special we are offering — three years of support for the price of two! If you pay for two years of support you receive the third year for free. We wouldn't be the Support Group if we weren't giving something away for free and all the free Y2K date fixes are completed now. So if you want to take advantage of our generosity, give us a call. Of course this offer also applies to support customers that already have a contract with us. Take this opportunity to extend your coverage.

We also have a different discount that Terry wants to offer you. HP started customer tests for MPE/iX certification at HP World. Now, if you are a support customer we will offer you a discount for being a company with HP Certified people. The \$60 test can be scheduled at any Sylvan testing center in the US by calling 888-895-6162 or on the Sylvan site at www.2test.com . Check this out, it's a good deal!

## **Trusted Advisor**

(Continued from page 1) traveled in more different directions toward opportunity or away from danger. It's called covering all your bases.

That's one of the reasons you should call us first when you have IT related needs. We'll help you locate your options, even if they are offered by our competitors! We know a lot more about the other companies (partners and otherwise) in our marketplace than our competitors. We've been attending the national and international HP Users Group Conferences since way before the organization was named Interex! All of our years of networking give us an edge in this Hewlett Packard playground. We are focused on HP3000s.

Our company really believes that you have the common sense to make your own

decisions and we want to give you all of the opportunities to learn about all of the alternatives that we know about. That's what diversity is all about: variety and options. We are trying to open as many paths up the mountain of knowledge as can possibly exist.

You need all the options you can get, but sometimes it helps to know who is partnered with whom behind the scenes. Ask us. If we don't know, we can find out.



## **APS**

(Continued from page 1)

ductivity, decrease inventory). There is no single "correct" reason, however the reason for the project should be stated correctly. The objectives of the project should always be defined in terms of the business results to be achieved. Correct definition of project objectives goes a long way in helping the project team and the broader stakeholders to make the correct implementation decisions as the project progresses. For example, the same project team will act differently if the objective is to "Increase on-time delivery" as opposed to "get software package X implemented by..." Project teams will act differently depending on how the objective is stated

because, in this example, implementing software package "X" is only one condition for increasing on-time delivery. There are other things related to business processes and performance metrics that need to happen as well.

Regarding software selection, some advice offered in the past stated "make sure the software supports the companies' business processes." This is good advice that begs a question: Should the software support current business processes or future business processes? For the APS project to be successful, the manufacturing company must make a fundamental decision at the outset. Is the intent of the project to preserve or change the status quo? If the company desires to change business results in the areas of customer ser-

vice, manufacturing productivity, or inventory investment, then changing the planning, scheduling, procurement, lot sizing, and performance measurement business processes is required. This is because the current business results come from the current business process. If the business results are to change, then the business processes must change as well.

Once the project objectives have been stated in terms of the business results to be achieved, and the software has been selected to support the business processes that will deliver the desired results, then the project plan must be executed by the project team and the executive steering committee. At this point the single most important decision the manufacturing company can make is the staffing of the project team. The project team and steering committee include the roles of Executive Sponsor, Project Manager, Steering Committee, Knowledge Experts, and Project Team Members.

The Executive Sponsor provides the project team the resources needed, helps overcome the inevitable organizational resistance to change, and ensures that the team gets appropriate feedback from sources external to the project. The Executive Sponsor is generally responsible for achieving the business results envisioned for the project. In a manufacturing setting, where significant improvement in business results is desired, the Executive Sponsor must be the plant manager because the individual department managers won't be able to drive the change required to impact the overall plant performance.

The Project Manager deals with the actual day-to-day sequential execution of the structured tasks that make up the project. While it is ideal for the Project Manager to have past experience managing projects of similar size and content, a search inside and outside of the company may not reveal such a candidate. A candidate who

knows the people and business of the company, who has experience motivating teams to the accomplishment of a common objective, and who has project management experience in projects that may be of smaller scope or differing content, is a good choice. This is a full-time position for the duration of the project.

The Steering Committee meets monthly and includes the Executive Sponsor, Project Manager, and other Managers in the organization who have a stake in the outcome of the project. The Steering Committee makes policy and business process decisions on issues that the project team escalates to the steering committee. Successful projects have the common characteristic of timely decision making at the

steering committee level. To be most effective, the software vendor should have a seat on this committee and take an active role in meetings and in setting project direction.

Knowledge Experts are a group of people external to the project team who are available on a part-time basis. Their role is to provide specific technical knowledge about various functional matters as needed by the project team.

The Project Team members should include two groups: knowledgeable users from each of the functional areas impacted by the project, and experienced technical professionals who are knowledgeable in the software and/or hardware platforms involved in the project. At a minimum, 50% of their time should be allocated to the project. The need to reduce the day-to-day activities of the users on the project team is essential. If the historical day-to-day work is not reduced, then participation adequate for a successful project will not occur. One way to make users available to participate on the project is the temporary pro-

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## **APS**

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motion of those people who would fill the traditional roles when the project team members are absent for family emergency, vacation, or some other activity that took them away from their job on an involuntary basis.

New hires, consultants, or contractors can fill any of the project roles except for that of the project manager. The ideal Project Manager is the person you cannot imagine doing without in their current role. Rather than hire outside and place a new person in the Project Manager role, reassign a star performer to the Project Manager role and back fill that person's previous role with a new hire.

Successful project management is as much an art as it is a science, and what the Project Manager does not do is as important as what is done. However it is not true to say that good project management skills are some special set of skills that only few people are lucky enough to be born with. Successful Project Management is a set of learned skills, summarized below in the form of a Best Practices checklist.

### APS Software Implementation Best Practices Check List

### **Definition of Project Success**

 Project success is defined in terms of the business results to be achieved.

### **Support of the Project**

- The intended users of the system have a strong emotional attachment to the success of the project.
- The project team, the user community, and the steering committee have a personal stake in the success of the project.

#### **Project Organization**

- A clear project organizational structure exists.
- All the affected functional managers have a seat on the steering committee.
- Managers with no stake in the project outcome do not sit on the steering committee.
- There is a clear method for escalating issues from the Project Manager, to the Project Team, to the Steering Committee.
- The Project Team meets on a regular basis to effectively deal with issues and make decisions in a timely manner.
- The Steering Committee meets on a regular basis to effectively deal with issues and make decisions in a timely manner.
- The software vendor has a seat on the steering committee.
- The project has an Executive Sponsor who is able to operate as essentially equal with the various people heading the functional departments that will be most affected by the outcome of the project.
- The project has a full time Project Manager.
- The project team has access to functional knowledge experts as needed.
- The project team includes knowledgeable users from each of the functional areas impacted by the project.
- The project team includes experienced technical professionals who are knowledgeable in the software and/or hardware platforms involved in the project.
- The members of the project team have sufficient time to perform their project responsibilities as well as any other responsibilities they may have (e.g. the project

team members are not overloaded resources).

#### **Project Communication**

- Project status reports are published at least monthly. Status reports clearly communicate:
  - Has the scope changed?
  - Will target dates be missed?
  - Are there estimate problems?
  - Are there technical problems?

New hires, consultants, or contractors can fill any of the project roles except for that of the project manager. The ideal Project Manager is the person you cannot imagine doing without.

- Are there review/approval problems?
- Are there personnel problems?
- Are there budget problems?
- Are there open issues?
- A project newsletter or web page exists and is updated regularly.
- Team members understand their short-term assignments and long term objectives.
- The project work plan high level tasks and due dates are posted in the project war room.
- A Project Change Request Form is used to formally document project scope change decisions.
- An Issue Log is being maintained and guides the creation of the agenda for project team meetings and steering committee meetings.
- An open environment for communication exists and a means is provided for anyone to raise a red flag when corrective action is required.

#### **Project Planning and Management**

• The project work plan shows



## **APS**

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results to the users roughly in keeping with the effort invested by them.

- Management has realistic expectations for the project team.
- The project has adequate resources.
- The project team has a feeling of team spirit and a shared feeling of personal responsibility for the success of the project.
- A structured implementation methodology is being used to conduct the project.
- Microsoft Project or a similar tool is used to create, monitor, and manage the project plan.
- The Project Manager has experience with the applications being implemented.
- The Project Manager has knowledge of the culture or environment within the company implementing the software package.
- The Project Manager reviews the project plan at least weekly.
- The project timing is managed by managing the critical path tasks.
- The progress of the project is monitored in terms of milestones defined as specific deliverables.
- Appropriate milestones, evaluation points, and go/no-go decisions have been placed in the project plan and are reviewed by the steering committee on a regular basis.
- The project management approach pays meticulous attention to detail. For example all of the following are documented:
  - Business processes
  - Job descriptions
  - Intended results
  - Sample Schedules

- Data Flows
- Technical processes
- User procedures
- The software model design
- Data feeds
- A sample model with sample data is put in front of the users as soon as possible.

# Technology Infrastructure (applies to client/server projects)

- The organization has previous exposure to operating system(s), and operating system administration skills are available to the project team.
- The organization has previous exposure to relational databases, and database administration skills are available to the project team.
- The organization has previous exposure to networks, and network administration skills are available to the project team.
- All hardware, operating systems, networks, and application software has been migrated to the recommended version. A new release or upgrade on the project's critical path is something to be avoided.
- Separate computing environments have been provided for development and testing, training, and production.
- A test plan has been created that tests the client/server infrastructure.

#### **Training**

- A training plan has been created.
- Resources have been provided to execute the training plan.

#### Change Management

 Management understands that the project includes an organizational change management aspect in addition to the technical aspects, and has a formal or informal change management program in place.

About the Author — Jeff Naden is Director of Customer Service at STG, an international provider of APS software and business processes based on the practice of constraint management. He can be reached at 972-720-1000 or jnaden@stgamericas.com

About STG — STG is a private company formed in 1987. STG has three operating divisions: Americas, EMEA (Europe, Middle East and Africa), and Pacific, with offices around the world including: Dallas, London, Sydney, and Johannesburg. In addition, STG has distributors in Norway, Sweden, France,

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Benelux, Italy, Germany, Brazil, Mexico and Japan. This worldwide presence and support capability in the advanced planning, simulation, and scheduling arena speaks to STG's position as an experienced, global leader of supply chain simulation, planning, scheduling and synchronization solutions.

STG software products have been implemented by hundreds of manufacturing organizations worldwide in industries as diverse as Steel, Electronics, Chemicals, Plastics, Food Processing and Automotive. This degree of experience and modeling capability across such a wide range of industrial applications, in addition to our proprietary, constraint based resource management techniques, provide the foundation for the "benefit value" that STG delivers to all its clients.



# HP3000 Call Accounting Software for MANMAN/HP™

tSGi has entered into an agreement with Telenomics of Temecula, California to resell and interface their PWARE software products to MANMAN/HP™s General Ledger module. This is further evidence of our commitment to helping you with the growing telecom responsibilities that your company is facing. For the past year, the Support Group has been offering to help decrease your telecom expenses by providing an auditor to review your expenditures (basically an A/P function) and recommend negotiation strategies with your carriers and providers. Phone expense is probably one of your company's largest expenditures; we want you to save some of that money for better utilization on your other critical IT related needs.

Now, we are moving more into our own field of expertise by selling Telenomics' Telephone Management Software which runs on MPE/iX using HP's Image/SQL DBMS. This software will help you manage your telecom expenses by combining the data from all of your PBX or Centrex systems to provide centralized information available to your users right from your HP3000 server. The services include call detail reporting of telephone billing, online telephone directories, traffic reporting, accounting bill-back data, and reporting through your e-mail system. Toll Fraud Paging detection and optional ACD statistics reporting round out the complete package. Rick Hupe, Telenomics' vice president of sales, told us that his software can even detect pirated phone calls placed through your phone system.

We can help you break out your phone bill any way possible and upload information into your MANMAN/HP™ G/L to do departmental budgets and provide detail

cost control data. Stop telephone abuse, do detailed trunk analysis, track incoming calls and your own company's sales calls with PWARE, the latest in Telenomics software.

One of the most exciting announcements at the recent HPWorld '99 Conference in San Francisco was Hewlett Packard's second eServices offering for the HP3000: web access to Telenomics' PWARE on a pay-per-transaction basis. This new eService, billed via transactionbased fees of cents per use, is what Hewlett Packard has named "apps on taps." It is the beginning of a new era in which users get their data from the Internet and IT Mangers can focus on their strategic core IT competencies while renting everything else. Call us to see why you should be investing in these technologies that save you money!

## 3kworld.com

(Continued from page 1) hardware, software, training, and consulting needs.

Also, you can view the latest news events, user listings, e-stores and community support sites. Communicate with other 3K members through message boards and chat rooms. Post resumes and review other job listings to make searching a convenience rather than a hassle. You and other HP 3000 users can exchange ideas, share experiences, and find information quickly. Your needs no longer have to wait until you finally hit the link you wanted.

#### Where does the Support Group fit in?

See what tSGi is and why we aim to become an important resource for you and your company. Become a member of the Support Group, inc. site at 3K World.com and see what our growing on-line community can do for you.

Our home-site will let you post questions and messages on message boards. Visit our newsroom to get our latest information. Receive our newsletter online or chat live with other on-line members. See upcoming events and get answers to questions you may have regarding your manufacturing needs. Most importantly, learn what services and products we can offer you.

The Support Group feels strongly about giving companies the best resources and solutions possible. And it doesn't matter where you fit in your company. Whether you're an IT Manager, Applications Engineer, Systems Programmer or even President of your company, the Support Group can find an answer for you. Come join our site and see what our company

can provide for you!

Here are the steps to becoming a member of the Support Group inc. site:

- 1. Go to www.3kworld.com
- 2. Locate the Support Group, inc. in the company directory and visit our homesite.
  3. Fill in the information to become a member of our site. That's all you have to do!

Become an official member of our site today!

## Note of Thanks

This is the end of our 5th year of producing this newsletter. Thanks to everyone who has helped, particularly Caren Floyd, Dottie Lentz, and Cheryl Lucker. Thanks also to all the writers and contributors who have helped us over the years. Let's do another 5 years even better! Send us your ideas... we like to print unusual solutions.



# Hey, All You Bean Counters Out There...

By Charles Anton

One of the services offered by the Support Group inc. that a lot of our readers don't know about is a chart of accounts conversion utility. Most of the clients that I have visited during my tenure with the Support Group may have had excellent consulting help setting up bills of material and routings, but they made some real tactical errors in establishing their Chart of Accounts. Now after using MANMAN $^{\text{\tiny MM}}$  for X years (you can fill in the X for your company), many accounting types have come to the conclusion that the account numbers used don't make a lot of sense.

For those of you who don't know what a chart of accounts is, you can relate it to a bill of materials in manufacturing. The way account numbers work in MANMAN $^{\text{\tiny MM}}$  is that account numbers for so-called posting account types can be summed into account numbers for total account types. The problem that I see at so many companies is that some of the real power of the MANMAN/GL $^{\text{\tiny MM}}$  application is not utilized because account numbers (a.k.a. the chart of accounts) were not established with three common attributes.

- 1. Meaningful, inherent logic should be built into the account numbering scheme. Unlike part searches in MANMAN/MFG™, you can search the GL with complex wildcard searches such as @100@. Also, many different report structures can and should be developed. There is extremely powerful report-writing functionality in the GL module, if it is set up and used wisely.
- 2. The account numbers should be as short as possible and do not all have to be the same length. I have seen companies with 5 section account numbers and 15 positions in length with three thousand accounts and most of the account numbers' "digits" are zeroes. Remember that a 15-position account number with 4 separators (dashes or dots) leaves 11 significant numbers, which translates to 100 billion combinations if only numeric values are used.
- 3. There should be room for growth in the chart. What does this mean? Let me explain using an example of what it doesn't mean. Some companies have a chart of accounts which defines one section of the account as a

company, but only has one company in the MANMANÆ/GL™ database. Every single account has two positions that are exactly the same for every account in the chart of accounts. The MANMAN/GL™ database should only be established for one legal entity. If you have more that one legal entity, use multiple GL databases and MANMAN™/Consolidations to consolidate. What I mean is that you should not sequentially assign account numbers (a.k.a. natural accounts) or departments or divisions or any other section you are trying to account for.

Suppose you come to the conclusion that the chart of accounts could be improved and actually try to change it. In MANMAN/GL $^{\text{\tiny M}}$  it is a daunting task. There are no utilities that convert all that data. And all the sub-ledger applications (i.e., MANMAN/MFG $^{\text{\tiny M}}$ , MANMAN/OMAR $^{\text{\tiny M}}$  and any of the other applications that use account numbers) must also be changed.

This brings me the point of this infomercial. tSGi has a utility that will allow you to develop your new chart of accounts with all the attributes mentioned above. You can set up a cross-reference table on our GLXREF database or in MS/Excel. When you are happy with your new chart of accounts layout and are ready to provide it to us, we will do the following for you:

- Using your cross-reference file, we will convert your existing GL database(s) to the new accounts (one-to-one account relationships only, cannot map more than one old account to the same new account).
- We will convert to this new format all the history you have in MANMAN/GL™ for as far back as you have it.
- We will convert all the accounts in the sub-ledger applications, including mnemonics used in MANMAN/MFG™.
- We will provide you with an online utility in GL which will allow the user to enter the old account number and the new account number will be returned or the user can enter the new account number and the old account number will be returned.

If you have considered changing the chart of accounts your company uses but have avoided doing so because it would be too much work, give your account executive rep at the Support Group a call and ask for pricing on this very powerful service.

# CHECK OUT OUR NEW IMPROVED WEB SITE: WWW.SUPGRP.COM



# A Day in the Life

By Terry H. Floyd

About a year ago I brought everyone in our company together and we talked about an interesting little project I had just completed for the second time. A FORTRAN modification to a standard MAN-MAN/MFG™ command which I had done for one company a year earlier had been requested by another company. I used the situation as an example to discuss with our staff how much work I thought it would be to turn a simple mod into a shrink-wrapped (no training-required) software product.

The modification is simple and basic to many companies who use Work Orders in MANMAN/MFG™: allow assemblies to "move through" several operation sequences with just one data entry stroke. In other words, in TR302, after entering "10" for the "From" Sequence prompt, enter "40" for the "Next" Sequence prompt, and have the program act as if the user had moved the assemblies from 10 to 20, 20 to 30, and 30 to 40. If you are not reporting labor, just wanting to "earn the standards," this could save a lot of data entry time.

The users had discovered soon after I did this mod that they could make all the components consumable, enter "10" for the "FROM" Sequence prompt, and respond "STOCK" for the "Next" Sequence prompt and, essentially, backflush a Work Order. After learning that (above Release 8) if a Work Order's components are all consumable, AD300 (Add a Work Order) will set the status to "Kitted," they realized they didn't ever have to even run TR310 to Kit those Work Orders. We can make Release 8 do that too, fairly easily.

Well, anyway, back to the story: It is my opinion that it is five times as much work (total effort) to create a "product" as it is to implement a mod for a particular customer. For one thing, the particular customer requested the mod, which means they are smart. It also means they truly understand how the requested functionality is meant to be used. It also means they may not care very much about a manual or procedures or training. To them, it's just intuitive.

Our approach to these kinds of "repetitive mods" is to do them with job streams. By repetitive mods, I mean ones we do over and over for many different MANMAN™ sites (nothing to do with the Repetitive module of MANMAN™). Here's the deal: we don't own the rights to the MANMAN™ FORTRAN source code. You do. We can help you modify your code anyway you want us to, but we don't always think we should mod the code on one machine and ship it to another one. Only if both companies agree and are on the exact same release can we do that. So, we always do mods again on your exact FORTRAN source code that matches your exact subversion of MANMAN™.

That's where the job streams come in. We learned by performing

over a hundred Y2K Fiscal Period fixes for MANMAN™ that job streams were the best way to do the "repetitive" task of editing and compiling those changes to more than a hundred programs on more than a hundred different systems.

But getting the code changed is just a small part of the total effort required to be able to just "ship a floppy or CD" with this enhancement to a customer. Documentation for the end users and support staff, installation procedures and instructions, testing, versioning, and marketing literature are just a few of the many items and tasks that have to be done.

All of this for ten lines of code. Ah, but where you have to put those ten lines of code! Would you believe renaming 5 or 6 different subroutines?! That's kind of unexpected, but to be able to provide defaults and a new warning that says something like:

Operations Sequences are being skipped... Move assemblies through intervening operations? (Y)

... you have to be several levels down under TR302 itself. This stuff is just always more work than anyone would expect who merely uses TR302!

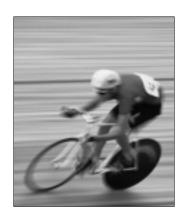
Call your tSGi sales rep to learn more about our "Three-eighty Move-Thru" product. Or is it just another mod? Either way, that internal code name refers to the fact that we rename TR302 to TR382 and Thru rhymes with Two and... never mind, just ask your account exec to arrange a demo.





# How does your ERP information get around?





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Call tSGi to find out how you can have the world's fastest-growing ERP company's software on your HP3000 TODAY.