Sage 500 ERP

Owner's Manual

For your safety and comfort, read carefully and keep inside your business at all times

Everything You Ever Wanted to Know About Sage 500 ERP

A comprehensive guide for maximizing your Sage MAS 500 business system for IT Administrators and Financial Executives



Important information about this manual

Document Library

This owner's manual is filled with links to Sage documents and spec sheets. All underlined headings and words are hyperlinked for more information.

Safety and business damage warnings

Throughout this manual, you will see safety and business damage warnings. You must follow these warnings carefully to avoid possible injury or damage to your business.

The types of warnings, what they look like, and how they are used in this manual are explained as follows:



Caution

This is a warning against something which may cause injury to your business if the warning is ignored. You are informed about what you must or must not do in order to avoid or reduce the risk to yourself or your business.



Don't Do This

When you see this symbol it means "Do not..." "Do not do this" or "Do not let this happen"



Do This

When you see this symbol it means "Do this..." and represents things you should do for your Sage 500 system.

Important information about your Sage 500 ERP system

ERP Warranty

Your Sage 500 ERP system may be covered by a Sage Software maintenance and support plan. The warranty entitles the owner to Sage support and product updates. Your company may not have an active maintenance and support plan which prevents you from upgrading to recent versions with new functionality and bug fixes to ensure optimal performance. You may also have a maintenance and support plan for custom software and third party products developed by e2b teknologies providing extended maintenance and support options for your business system.

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Accessories, spare parts, and modification of your Sage 500 ERP system

A wide variety of non–genuine spare parts and accessories are available for Sage 500 ERP available in the e2b teknologies Sage 500 ERP solution marketplace. You should know that Sage Software does not warrant these products and is not responsible for their performance, repair, or replacement, or for any damage they may cause to, or adverse effect they may have on, your Sage 500 ERP business system. In other words, Sage probably won't support your system even though you have to make modifications and add-on third party products to meet your business needs. e2b teknologies provides direct support and maintenance for your Sage 500 ERP business system to ensure that these modifications and spare parts are fully supported and maintained.

Your responsibility for maintenance

It is the owner's responsibility to make sure that the specified maintenance is performed. This document gives details of these maintenance requirements. Also included is general maintenance.

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Introduction

Perhaps you're the new IT director or the new CFO at a company using Sage 500 ERP, or you're a consultant trying to help a Sage 500 ERP customer with their business system. Congratulations, you're working with a fantastic ERP business system, but you probably don't know how little of the system your company is actually using, and your predecessors may have failed to implement the system properly. This guide was developed to help you understand what you have, how to make it better, and which additional modules, third party products, and services are available to extend your system even further.

About e2b teknologies



e2b teknologies traces our roots to Haitek Solutions, the original publishers of the Sage 500 ERP manufacturing modules. We've worked with Sage 500 ERP since it was called Acuity Financials back in the late 1990s, and we've helped literally hundreds of companies to implement Sage 500 ERP to improve every aspect of their business. In addition to Sage 500 ERP consulting, implementation, support, and development services, we also provide dozens of add-on products to extend Sage 500 capabilities. Our engineers not only wrote the manufacturing modules but we also helped develop the RMA system, data migration utilities, and other features in the product after we were acquired by Sage. It's safe to say that we've been inside the Sage 500 ERP code more than any other company outside of Sage Software themselves, and we know Sage 500 ERP better than anyone.

I am writing to tell you how impressed I am with what e2b teknologies has done for us in the last few weeks.



- They have cleaned up our database issues that were caused by a previous reseller this after we had paid another reseller to "correct" what was done.
- Within an extremely short time they determined the problem with our Short Stock Report. It turned out to be a 30 second fix and I think less than an hour was spent determining the cause of the negative inventory showing on our Short Stock Report.
- They have identified and have a fix that is being tested right now on the Integrity Check that runs every night. This utility had failed continuously for almost a year and no-one was able to get it working.
- Upon their initial review of our system they identified issues that we have had for years, and fixed them in record time.

I could spend hours telling you all the things that have been corrected, and in such a short time, and with minimal business interruption, but I don't have the time and don't want to bore you with the details. All I can say is to quote what our IT department said to me today, "They are fixing things so fast, we can't keep track of all they have done, let alone keep up with all the fixes they have made!" I have had employees tell me how much better the system is running since these fixes have been made. Instead of 6 screens, they can do their work using only 2 screens – because it is now working the way it should have been all along!

About the Author



James Mallory

James Mallory is Director of Marketing for e2b teknologies, an enterprise business application provider. James was one of the original employees at Haitek Solutions, the original publishers of the Sage 500 manufacturing modules which Sage acquired in March 2001. While at Sage, James worked in product marketing and product management roles for Sage 100 ERP and Sage 500 ERP (then MAS 90 and MAS 500). He has worked with e2b teknologies for the past eight years with most of the original Haitek Solutions team and former Sage Software employees building and promoting new products for the Sage 500 ERP product.

During his four-year employment with Sage following the acquisition, James held various positions including a vertical marketing role as a shared service provider across the organization consulting with channel partners and all of Sage's internal business units regarding distribution and manufacturing industries. He also published dozens of competitive guides and industry research helping Sage and its channel to fully understand the distribution and manufacturing industries, niche market segments, and how to position Sage's diverse product portfolio. These responsibilities were related to Sage's vertical strategy announced in 2011.

Career experience includes journalism, public relations, product marketing, product management, and channel management with success using traditional marketing and new inbound marketing strategies such as search engine optimization (SEO), social media, and calls to action. James has authored and published hundreds of articles, white papers, videos, and webinars published in major consumer and business trade media. James specializes in premise and cloud SaaS business applications for supply chain management, accounts receivable credit and collections, business to business ecommerce, enterprise resource planning (ERP), and customer relationship management (CRM).

He is a former board member for the APICS Cleveland Chapter and volunteers with Little League Baseball and the Boy Scouts of America. James enjoys hiking, camping, bicycling, and spending time with his family. James is passionate in life and love, and believes in doing the right thing to make the world a better place. You can find him on <u>Google +</u> or <u>LinkedIn</u>.

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Sage 500 ERP History

Acuity Financials - A Replacement for MAS 90

State of the Art Software (SOTA) developed MAS 90 in the early 1980s as one of the first accounting systems available for personal computers. By the early 1990s, the underlying technology in SOTA's flagship product was starting to show its age. SOTA, realizing the growing importance of Microsoft's Windows platform and new Microsoft SQL and Visual Basic technologies embarked on a major rewrite and redesign of MAS 90 which was originally intended to be a replacement for the aging product.

However, MAS 90 sales never dropped off so State of the Art instead decided to continue developing the new product as a high-end solution for larger MAS 90 customers and prospects. Instead of a replacement product, this new solution was branded as Acuity Financials and was launched in 1996 with four main modules – General Ledger, Accounts Receivable, Accounts Payable, and Cash Management. Additional modules were added for Purchase Order and Multicurrency. Meanwhile, State of the Art continued developing MAS 90 eventually rewriting much of the product in a new Business Application Framework completed in the early 2000s.

Professional Service Automation (PSA)

Acuity Financials was one of the first business applications of its kind built from the ground up on Microsoft SQL Server technology in Visual Basic 6.0. This cutting-edge technology and scalability soon attracted third party software developers as an integration platform. An early adopter of the platform was Proamics which was later acquired by Niku. Proamics and Niku provided professional services automation (PSA) software with robust project accounting applications. State of the Art heavily promoted Proamics/Niku and was soon winning business in the PSA market which was dominated by Solomon Software who was struggling at the time with their own rewrite to newer Microsoft technologies. The Proamics/Niku relationship with State of the Art faded as a new alliance was formed with Intellisol International, a North Dakota firm which selected Acuity as a platform to develop a new version of its own PSA software. Unlike Proamics/Niku, the Intellisol product was written from the ground-up in the Acuity Visual Tools as a native Acuity business application. Sage acquired the Intellisol product in October 2001 making it available as the Project Accounting module as it exists today. The original Intellisol eTimeSheets module has since been replaced by Sage Timesheets which Sage sold to Insperity in 2012. Intellisol, having another product tied to Microsoft Dynamics GP (Great Plains) was acquired by Microsoft in 2012 and folded into Microsoft's ERP business unit.

Wholesale Distribution

Acuity became a viable solution for wholesale distributors in 1999 with version 4.0 which introduced three new modules – Sales Order, Inventory Management, and Inventory Replenishment. The inventory applications were designed by distribution expert Jon Schreibfeder and developed in part off-shore. Sage brought the development back inside its organization. Schreibfeder and Sage wrote a book outlining how to use Acuity in a distribution environment. The original Effective Inventory Management book for Sage 500 is no longer available from Sage but copies of it are still floating around in hard copy from resellers and early users of the software. Schreibfeder has since updated his methodologies which are available in the latest edition of his book, <u>Achieving Effective Inventory Management</u>. While not specific to Sage 500, this is an incredible resource for any Sage 500 user – especially those in wholesale distribution. Schreibfeder is available for personal consulting engagements for Sage 500 customers through his company, <u>Effective Inventory Management</u>.

With the introduction of Inventory, a number of third party developers were soon attracted to Sage and Acuity Financials. Among these were Radio Beacon, a warehouse management system (WMS) software developer in Canada that is now part of <u>Accellos</u>. Another was EDI-provider <u>eBridge</u> which had a lock on EDI with Sage 500 for many years until it was unseated by <u>TrueCommerce</u> (now part of HighJump Software). Radio Beacon's integration is still available for Sage 500 through Accellos but there are several other WMS solutions available on the market including <u>Scanco</u> (previous private-labeled WMS solution available through Sage for Sage 500), DCWarehouse by <u>DCSC Corporation</u>, and O2 Mobile Warehouse by <u>Escape Velocity Systems</u>. The Scanco and DCWarehouse solutions are both developed in the Sage 500 Application Framework.

WMS and EDI Vendors Through The Years













The next page contains the press release from Sage announcing the release of Acuity Applications 4.0.

Sage Software Announces General Availability of Acuity Applications Version 4.0 Distribution Suite.

IRVINE, Calif.--(BUSINESS WIRE)--May 4, 1999--

Offers Middle Market Companies Powerful Inventory Pricing and Replenishment Capabilities

Sage(TM) Software Inc., a leading provider of accounting software, Tuesday announced general availability of its Acuity(R) Applications Version 4.0 distribution suite (Version 4.0).

This version features several unique and highly flexible capabilities intended for a wide range of middle market enterprises. Designed exclusively for the Microsoft(R) SQL Server(TM) and Windows NT(R) platforms, Version 4.0 broadens the Acuity product line with sophisticated Sales Order, Purchase Order, Inventory Management and Inventory Replenishment modules. Version 4.0 includes powerful new inventory pricing and inventory replenishment capabilities that can enable businesses in the middle market to optimize profitability and improve client satisfaction.

"Today, distributors are under more pressure than in any other time in history. There are more competitors, reduced margins and more demands from customers. A major key to success in distribution is accurately forecasting the product needs of customers," said Jon Schreibfeder, president of Effective Inventory Management Inc., and author of the Effective Inventory Management Guide series. "Acuity provides one of the most comprehensive sets of forecasting tools available in a distribution package today. With these tools, a distributor can maximize customer service while earning the highest net profit possible."

Version 4.0's powerful new inventory replenishment capabilities can help lower inventory carrying costs by reducing the quantity of inventory held, while avoiding missed opportunities through stock-outs. It does this by more accurately calculating reorder quantities based on a variety of factors including vendor lead times, historical and seasonal demand, required stock minimums, and unusual product demand.

"The Acuity product has met all our expectations. We wanted superior SQL-based software developed from the ground up, that would satisfy the needs of our unique music production business without complex and expensive programming from external engineers," said Lee Wiegand, vice president of special projects for Network Music LLC, a Sage early installation site. "After going through training and on-site evaluation, we're even more confident that Acuity can provide the best accounting base of any of the packages we evaluated."

Acuity 4.0 fits in with a distribution business' existing line of business applications. Version 4.0's strong integration capabilities allow users to implement Acuity without having to replace other systems that already perfectly match their requirements.

To complement Acuity's strong core distribution and inventory replenishment capabilities, numerous third-party vendors are integrating their applications with Version 4.0. Features like enterprise e-commerce, automated data collection, and advanced warehouse management solutions can integrate seamlessly with Version 4.0.

"The comprehensive distribution capabilities of Version 4.0 open up new markets for the Acuity product line," said Richard G. Lull, vice president and general manager of the Enterprise Systems Division of Sage Software. "Acuity now has the functionality and technology required to become the market leader."

About Acuity Applications

Acuity Applications is a family of business software solutions designed exclusively for the Microsoft SQL Server relational database and the Windows NT operating system. The Acuity product line includes Acuity Financials(TM), Acuity Distribution, Acuity Visual Tools and Acuity Projects software. Acuity Financials is a three-time winner for Best Technology Integration at the Microsoft Industry Solution awards.

The product name has changed multiple times through the acquisition of State of the Art by Sage Group in the UK and multiple rebranding efforts to make sense of Sage's growing global portfolio of accounting applications. The chart on the next page shows how the company and product names have changed over the years.

ERP System Check-Up & Software Evaluation Template

Our ERP check-up will evaluate your system from several perspectives providing a calculated grade for each area of your Sage 500 ERP business system:

- General Features
- Finance/Accounting
- Human Resources
- Sales/Marketing

- Inventory/Warehouse
- Manufacturing
- Information Technology
- Partner Services



Year	Company	Product	What Happened
1996	STATE OF THE ART	Acuity Financials.	State of the Art Software (SOTA) develops a replacement product for MAS 90 but instead introduces it as Acuity Financials.
1998	sage software	Acuity® (also Acuity Applications)	Sage Group acquires State of the Art, publishers of Acuity Financials, MAS 90, and BusinessWorks. By this time the product has grown beyond accounting and is branded simply as Acuity. The product was also marketed as Acuity Applications for a brief time after the Sage Group acquisition. Interesting side-note – rumor has it that Sage was considering calling the new company Sage of the Americas (SOTA) similar to State of the Art's former name.
2001	sage software	Sage Enterprise Suite	Sage acquires Best Software (Abra and FAS human resources, payroll, and fixed asset software) in 2000 and rebrands Acuity as Sage Enterprise Suite in 2001 – Acuity with Best's Abra and FAS products combined.
2002	best	BEST ENTERPRISE SUITE	Sage loses rights to the Sage Software name in the USA to Quick Technologies of Texas and rebrands as Best Software in 2002. Sage Enterprise Suite rebranded as Best Enterprise Suite. The product is rebranded as MAS 500 later in 2002 positioned as the next step for companies outgrowing the MAS 90 product.
2005	sage software	Sage ERP MAS 500	Sage Group acquires the rights to the Sage Software name from Quick Technologies and rebrands the product as Sage ERP MAS 500. For a brief period of time the product was also branded Sage MAS 500 ERP.
2012	sage	Sage 500 ERP	Sage Group adopts a global name "Sage" and announces a major global rebrand resulting in Sage 500 ERP.
Future	???	???	Sage continues to add new features to Sage 500 ERP. The product has a long and storied life and who knows what the future will bring.

Manufacturing / ERP

Sage 500 was progressing toward ERP rapidly. Consider that the application was launched in 1996 with distribution capabilities added in the 4.0 release in 1999. As the Acuity team was busy writing distribution, two other companies were writing manufacturing applications. One of these companies was trying to integrate an existing product (not in the toolset) to Acuity's accounting modules while the other was developing applications in the Acuity toolset on top of the entire Acuity suite – accounting and distribution. Below is an overview of what happened next and how this led to Acuity Financials becoming a true ERP application.

Enterprise Resources Planning (ERP) Definition

It wasn't until 1999 that Acuity Financials (Sage 500) became a true ERP business application. ERP is an extension of manufacturing resource planning (MRP II) and material requirements planning (MRP) which originated in the 1960 and 1970s through the efforts of Ollie Wight and early ERP pioneers. The term ERP was first used by industry analyst firm Gartner Group in 1990. ERP software provides integration between all aspects of a company's business – accounting, distribution, manufacturing, human resources, customer relationship management, and more. One of the fundamental differences between MRP II and ERP is the use of relational databases and fourth generation programming languages. ERP software originally defined manufacturing software but is now generally used to define the main business management system used in many different industries even if there is no need for manufacturing and production planning.



Mis-Steps by Monitor

A niche ERP provider in the 1990s was Monitor Systems, a software publisher located in Michigan focused almost exclusively on the automotive supply chain. The company announced that it would develop and deliver an integration to Acuity Financials (accounting integration only) but failed to do so and was later acquired by Computer Decisions International (CDI). CDI canned the integration project and later focused on rebuilding its legacy Microshop ERP software on the SAP BusinessOne platform. CDI was acquired by Quantum Ventures of Michigan in 2011 and is now operating as Quantum Software. The Microshop product was renamed as Shop Blocks and is still sold today through the SAP BusinessOne community. Quantum Software also owns legacy ERP vendor InMassMRP. The Monitor ERP solution is no longer available.

Monitor's failure to deliver a manufacturing solution for Acuity Financials opened the door for other developers – especially after the 4.0 release of Acuity Applications which introduced distribution functionality. This paved the way for a new wave of third party developers providing vertical solutions and add-on products developed specifically for manufacturing companies. Acuity was on the brink of becoming a true ERP business application.

Envision ERP by Haitek Solutions

Headquartered in northeast Ohio, Haitek Solutions was an independent ERP software developer. Haitek's legacy product, Shop-IV, was developed in Thoroughbred business basic and integrated with Thoroughbred's Solution-IV accounting software. Bill Henslee, founder of Haitek Solutions saw the market moving away from Unix-based applications and proprietary databases to Microsoft Windows and Microsoft SQL Server in the mid-1990s and quickly sought out a new platf orm for the next generation of Haitek's manufacturing ERP products.



Haitek became a development partner for Acuity Financials in 1996 and rewrote Shop-IV from within the Acuity Visual Tool software development kit. The new product was called Envision ERP which extended Acuity with new features for manufacturing work orders, job costing, MRP, advanced planning and scheduling (APS), estimating, and product configuration.



Envision ERP was officially introduced in 1999 and was wholly-acquired by Sage in March of 2001. The product lives on today as the eight manufacturing modules available for Sage 500 ERP – Light Manufacturing (aka Advanced Kitting), Advanced Manufacturing, Material Requirements Planning, Advanced Planning & Scheduling, Product Configurator, Estimating, Engineering Change Management, and Shop Floor Control. The original joint press release from Sage and Haitek announcing Envision ERP is provided on the following page.

Sage Software and Haitek Solutions Announce Native SQL Server ERP Manufacturing System

IRVINE, Calif.--(BUSINESS WIRE)--June 29, 1999—

Envision ERP Seamlessly Integrates With Sage's Acuity Accounting and Distribution Applications Offering a Total Automation Solution for Manufacturers

Sage(TM) Software, a leading provider of accounting software solutions, and Haitek(R) Solutions of Concord, Ohio, an Enterprise Resource Planning (ERP) software developer, Tuesday announced the development of Envision(R) ERP, a suite of manufacturing applications developed solely to run on Windows NT(R).

Envision seamlessly and exclusively integrates with Sage Software's Acuity(R) accounting and distribution applications for manufacturers.

Envision ERP is the only ERP system written exclusively for Microsoft(R) SQL Server(TM), and includes Routings, Bill of Materials, Work Orders, Job Costing, Labor Reporting, Shop Floor Control, Bar Coding and several other modules. These applications provide the infrastructure for managing jobs from raw materials to finished goods.

"Most ERP systems support multiple databases such as SQL Server, Oracle(R) and Sybase(R), sacrificing software performance because the application interface has to be generic enough to work with each database," said William Henslee, president and founder of Haitek Solutions.

"Envision ERP is optimized to harness the true power of the SQL Server database, which is the leading database for the Windows NT platform. Envision ERP can scale from small 10-user implementations to large, worldwide projects -- something that other ERP products cannot accomplish on Windows NT."

Envision uses only Microsoft technology including Visual Basic(R) and Microsoft BackOffice(R), and was developed using Sage's Acuity Visual Tools. Acuity Visual Tools and Acuity accounting and distribution applications comprise two-thirds of Sage's complete Acuity product line.

"Envision provides the flexibility and functionality that manufacturers need to generate products in the real world," said Richard G. Lull, vice president and general manager of the enterprise systems division of Sage Software Inc. "Our reseller community can finally address the continually increasing demand from their manufacturing clients for an ERP solution built for Acuity."

At the heart of the system is the Work Orders module. Multimedia applications (such as audio, video, or imaging) are linked directly to the Work Orders and Routings modules. The Work Orders system includes a built-in CAD viewer, providing instant access to engineering drawings throughout the production process from any point in the enterprise.

Hyperlinks can be placed on each drawing to link part drawings to other component item drawings. Envision also includes standard drill-downs to detailed transactions. A visual schedule board can be accessed directly from the Work Orders module, as well.

Envision ERP and additional modules are scheduled for release in the fourth quarter of 1999. The product will be sold through Sage Software's worldwide Acuity reseller channel.

No major rewrite goes without hiccups and the task ahead of Haitek was truly a wild ride. An interesting set-back happened when the company hired a SQL programmer to help with the project. He worked for a couple weeks and then disappeared. When they finally caught up with him we found out that he was back in his home country of China helping his family recover from a natural disaster. Haitek continued to work on the massive rewrite and announced Envision ERP to State of the Art's global reseller channel in 1998 around the same time that Acuity Financials 4.0 was released with the much-needed distribution modules.

Haitek knew there was a pent-up demand from the growing Acuity installed base but they never could have predicted that the first sale would come from half-way around the world a year before the official product release. As soon as Haitek announced Envision ERP to the channel they received a call from State of the Art notifying them that one of their Acuity resellers in Australia had "pre-sold" Envision ERP – sight unseen. That company, Daniel Robertson Brick of Australia, became one of the first customers. They dumped Great Plains because Envision ERP supported multiple parts produced per work order without having to define what products were being manufactured. This was a unique feature in Haitek's legacy Shop-IV application that was retained in Envision ERP.

Robertson Brick had a very unique requirement. They would place clay and ceramic bricks into an oven and they would grade them after they were removed. The finished goods were then classified into different items based on the qualities of the bricks. Some were more orange than red and others had different characteristics. Envision ERP was the only product they had ever seen that allowed them to make the items and then define what in fact they actually produced from the work order.

The official release of Envision ERP happened in October 1999. The first company to implement Envision ERP was Indianapolis-based Escient. Escient was an innovative consumer electronics company whose products were antiquated with the growth of internet-based music sites in the early 2000s. Escient's TuneBase system connected to multiple CD carousel players and allowed the consumer to build play lists through a juke-box-like user interface on their television.

Haitek Solutions and Envision ERP gained a solid following among State of the Art's Acuity channel. Several early wins, positive customer reviews, and a successful marketing campaign launched Envision ERP onto the map. State of the Art (later renamed Sage



Software) took notice and wholly-acquired Haitek Solutions and Envision ERP in March 2001. Envision ERP lives on today as the eight manufacturing modules in Sage 500 ERP – Light Manufacturing, Advanced Manufacturing, Material Requirements Planning, Advanced Planning & Scheduling, Engineering Change Management, Estimating, Shop Floor Control, and Product Configurator.

The original Haitek Solutions development, consulting, and support staff are now back together at e2b teknologies along with other veteran Sage Software employees. Today e2b is the leading provider of Sage 500 consulting, development, and third party products for Sage 500 with a staff that includes 40 employees. e2b has developed more than a dozen product enhancements extending the original Envision ERP functionality. Sage recognized e2b teknologies as their Gold Development Partner of The Year in 2011 and 2013 for Sage 500 ERP and Anytime Collect. e2b has also expanded its product portfolio beyond Sage 500 to include three cloud applications available for Sage 500 and other ERP software. These include Anytime Commerce, and Anytime Commerce, and Anytime Supply Chain. The company supports some of the largest Sage 500 customers in the world having implemented hundreds of businesses since the earliest versions of the software.



Other Vertical Solutions

Through the years a number of software developers have built industry-specific solutions on Sage 500 while others have integrated their applications to Sage 500 for specific business features. Most of these never quite made it while others like Haitek Solutions, Intellisol, SingleSource and Escape Velocity Systems really helped the product gain traction in different market segments. The list below highlights most of the major solutions built within the Sage 500 software developer kit (SDK) or integrated with Sage 500.

Casino / Gambling

Techniedge Financial Integration (TFI) was one of the first developers of Sage 500 when Acuity Financials was initially launched. The company developed a vertical solution for the casino and gambling industry called Oasis Casino. The company continues to support the product today.

Retail Point of Sale / Rental Management

Mik & Associates was an early ISV partner for Sage 500. The product, Fusion Retail Solution (FRS), was developed in the Sage 500 SDK for retail point of sale and had some rental management capabilities. The company was on the brink of folding when it was acquired by a former employee in 2008. Point Solutions sold its Sage 500 ERP reseller business to SWK Technologies in 2013 but retained the retail solution which continues today as part of Point Solution's Retail Management System now known as <u>Fusion RMS</u>.

Non-Profit

Information Development Consultants (iDC) had fund accounting software product developed for non-profit organizations. iDC rewrote the application in the Sage 500 SDK (product was called <u>4-Gov</u>) but they failed to gain traction in the market. The Sage 500 version of the software may no longer be sold or maintained. iDC was acquired by ChinaDotCom (CDC Software) in 2010. Facing financial difficulties, CDC merged with Consona Corporation in 2012 forming <u>Aptean</u>, a holding company for former ERP products such as Made2Manage, Intuitive Manufacturing, Relevant Infimacs, DTR Software, Cimnet, Axis Axiom, Compiere, Onyx and Pivotal CRM, Encompix, and Ross ERP (to name just a few).

Catalog Sales

Another popular ISV solution for Sage 500 is <u>Direct 500</u>, a catalog sales solution developed in the Sage 500 SDK for companies that sell products through catalogs. Originally developed by Computer Solutions in Florida after the 4.0 distribution release, the solution has since been acquired by Sage 500 partner Accupointe who continues to develop and to sell the product today. Accupointe has extended the application considerably making it available as a platform for online orders.

Fastener Distribution

Faspac was a California-based developer of fastener distribution software. The company contracted with Haitek Solutions to help them develop a new version of their software using the Sage 500 SDK. Faspac launched the software and sold approximately 20 licenses before being acquired by Prophet 21 in 2003. Prophet 21 was acquired by Activant which is now part of Epicor Software's distribution software portfolio which includes many other niche distribution software applications including Triad, Speedware, ECS, Prelude, eXegeSys (original HP), and Eclipse (from Intuit). The Sage 500 version of Faspac is likely dead.

Grower Software (Part 1)

AgSoft was a publisher of business applications for produce and agricultural products. The company, attracted by the new Haitek Envision ERP manufacturing modules, rewrote their own software in the Sage 500 SDK but like iDC, they never gained significant momentum and sold its business to <u>E-Markets</u> which still includes AgSoft ERP on its website.

Service Management

Service Management provider <u>SingleSource Systems</u> joined the Sage 500 ISV community in the early 2000s. SingleSource was a long-time developer of field service applications that tied into Syteline, a leading ERP solution now owned by Infor. SingleSource rewrote their applications in the Sage 500 SDK and launched SM-Plus for Sage 500. The application quickly became a leading add-on product driving significant sales into field service markets. It was also a great combination with Envision ERP for manufacturers with mobile service technicians and for use as an enterprise asset management (EAM) solution for managing preventative maintenance within the manufacturing facility. SingleSource sold its Syteline business to Infor in 2010 and continues to develop and resell SM-Plus for Sage 500 to this day.

Process Manufacturing

Long-time Sage PFW (formerly Platinum for Windows) reseller <u>Escape Velocity Systems</u> launched a suite of process manufacturing business applications called O2 Process Manufacturing in the early 2000s. The product build on years of experienc e working with SagePFW and Batchmaster process manufacturing but represented a completely new approach to process manufacturing filling many functional gaps that others in the market had never addressed. Developed in the Sage 500 SDK, O2 Process Manufacturing is still aggressively developed and supported. Escape Velocity Systems has also introduced Sage 500 R2, a rewrite of some portions of Sage 500 in C# (C Sharp) using modern Microsoft .NET technologies. The Company has also introduced O2 Mobile Warehouse (as previously mentioned) as well as z.Find, a Google-like search engine for Sage 500 data.

Grower Software (Part 2)

Long-time Sage 500 reseller Practical Software Solutions has built an industry solution in the Sage 500 SDK for the <u>Grower & Nursery</u> market. The product has considerable functionality and has been implemented in dozens of companies throughout North America. Practical Software continues to develop, sell, and support the application.

.NET Strategy

As early as 2000, Sage realized the need to replace the aging Visual Basic 6.0 code used for the client application. Microsoft had initially promised a magic tool that would convert VB 6 code to Microsoft's new .NET technology (C# code) but this never came to fruition due to the many changes in newer versions of Visual Studio .NET. In a nutshell – converting code was impossible without completely rewriting the application from scratch. In 2002 Sage announced their plans to move to Microsoft .NET for Sage 500. While Sage delivered a lot of new features on the .NET platform, the project was too large to tackle and VB 6 remains as a core technology in the majority of the application today. Microsoft ended extended support for VB 6.0 in 2008 yet there are still hundreds of business applications available on the market developed in VB6 and Microsoft continues to support VB 6.0 applications in their latest operating system releases – Windows 7.0 and Windows 8.0.

Sage 500 Product Releases

Sage 500 Version	2014	2013 (7.5)	7.4	7.3	7.2	7.05	7.0	6.3	6.2	6.1	6.0	5.0e	4.0
Year Released	2013	2012	2011	2009	2008	2006	2005	2004	2003	2002	2001	2000	1999
Product Name	Sage 500 ERP	Sage 500 ERP	Sage ERP MAS 500	Sage MAS 500	Sage MAS 500	Sage MAS 500	Sage MAS 500	MAS 500	MAS 500	Best Enterprise Suite	Sage Enterprise Suite	Acuity	Acuity Financials
What's New Brochure		Click Here	Click Here	Click Here	Click Here	Click Here	Click Here						
Customer Upgrade Guide		Click Here	Click Here	Click Here	Click Here	Click Here							
Release Guide		Click Here	Click Here	Click Here	Click Here	Click Here	Click Here	Click Here		Click Here			
Compatibility Guide		Click Here	Click Here	Click Here	Click Here	Click Here	Click Here	Click Here	Click Here	Click Here			

Getting Started with Sage 500 ERP

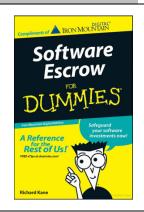
The best way to start off with Sage 500 ERP is to review the <u>Getting Started Guide</u> all of the related Guides, Brochures, and White Papers available for Sage 500 ERP (and there are a lot of them spread all over the place). The Getting Started Guide provides an overview of Sage 500 ERP components and features; sources for more information, an explanation of common elements, and a general overview of logon procedures, navigation, using the help system, and an overview of system reports. It also includes more information about other resources listed below:

- Installation and System Configuration Guide
- Implementation and Planning Guide
- Sage 500 Implementation Spec Sheet
- Customization Tools Brochure
- Software Development Kit Installation Guide
- Remote Access Spec Sheet
- Data Migration and Sage MAS 500 ERP White Paper
- Sage 500 ERP Conversion Guide for Sage MAS 90 Customers
- Sample Reports Guide

Secure Your Source Code Modifications



Sage's Developer Agreement restricts the transfer of source code from the developer to any corporation not authorized to receive the source code including the customer organization. Many Sage 500 customers have source code modifications written by their partners or through authorized software developers. You could purchase a source code license from Sage but this is expensive and unnecessary. Unless otherwise agreed by the developer, the customer has the rights to this source code and can request that the source code be transferred to Sage or to another authorized Sage 500 ERP developer. This is highly recommended – especially for larger source code modifications to ensure that your source code modifications are available to you regardless of what happens to the development organization.



Product Registration

Monthly updates are available for Sage 500 ERP 6.3 to 7.0 for customers who experience registration errors during the Automatic Internet Registration process. Two possible errors are related to changes in the Sage MAS 500 registration URL as part of our corporate rebranding.

Details of the URL Changes:

The registration URL can be viewed from System Manager / Maintenance / Maintain Site. On the Registration tab, click Manual Registration.

New Registration URL: http://registration.SageSoftware.com/registration

Old Registration URL: http://registration.BestSoftwareInc.com/registration

Possible Errors:

The following errors may occur when registering a database in Automatic Internet Registration:

- "An error occurred retrieving the license information. Please view the Registration Log for details"
- "Your database server cannot connect to Sage MAS 500 Registration Web Services through the Internet. Please contact your Authorized Sage Partner or Sage MAS 500 Support to resolve" in the registration log

Resolution / Workaround:

To address or avoid these errors, please apply the following resolution or workaround:

- 1. Download and apply the following monthly updates:
 - Sage MAS 500 7.00 Monthly Update for December 2008
 - Sage MAS 500 6.30 Monthly Update for December 2008
- 2. Should the customer be unable to apply the updates due to customizations or other factors, they can use one of these alternative solutions:
 - Temporary Workaround: Manually register Sage MAS 500 at http://registration.sagesoftware.com/registration/IssueRegistration.asp
 - Permanent Solution: Instructions to permanently update the registration URL are available by searching our knowledgebase for Resolution ID 2133.

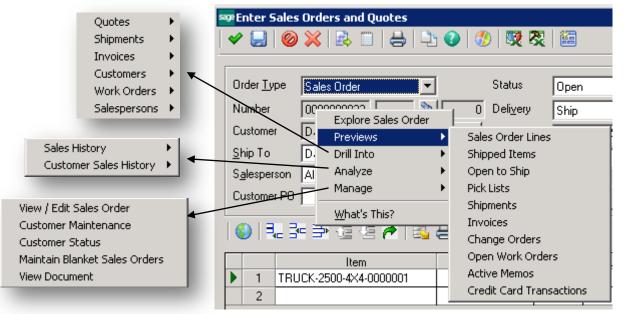
Sage 500 ERP Navigation

Navigation of Sage 500 ERP is varied throughout the application and contextual to the task being performed. Navigation begins with the Business Desktop which includes menus for each module and major area of the application. Within each module are typically three folders with different tasks. These include:

- Maintenance (tasks for setting up, maintaining, and configuring each module and options)
- Activities (tasks where transactional data is entered such as Enter Purchase Orders)
- Insights (reports and Business Insights Analyzer and Explorer activities for inquiries and ad-hoc reports)

Users can also create their own menu of tasks that they use on a regular basis to personalize the system for their daily and periodic duties. For example, an accounts receivable professional probably doesn't need access to any tasks in the Inventory, Purchase Order, or Manufacturing modules but they will definitely need access to many of the accounts receivable tasks and could require inquiry or full access to sales orders to view shipping information, project accounting for billable timesheet information, and other modules that relate to their specific duties.

All fields and grids in the system have special right-click context menus for additional navigation. Some fields simply provide access to field-level help while others allow users to navigate to related information and tasks.



SO Number Right-Click Menu Options

Open the Business Insights Explorer for Sales Orders

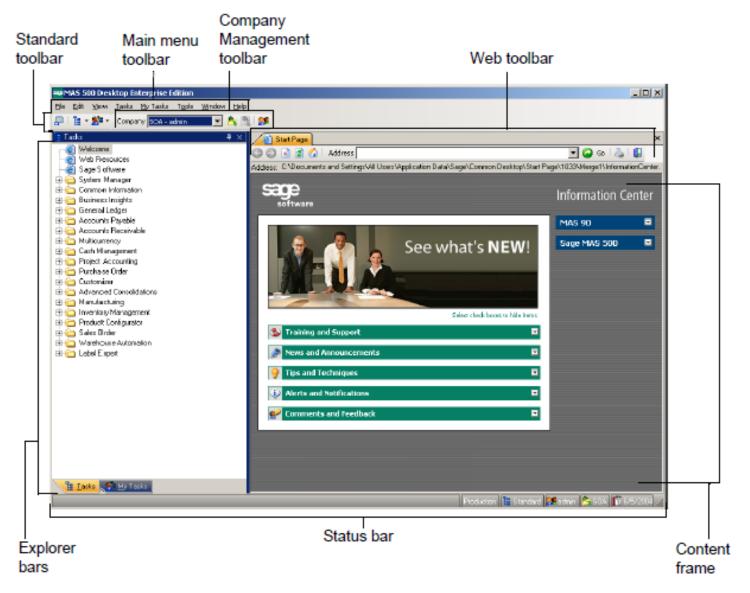
Preview related information for the selected order

Drill Into related transactions or records.

Analyze information related to the order.

Manage (or edit) related records through related screens.

Access Field-Level Help



The Sage 500 Business Desktop and system navigation are clearly explained in the Sage 500 ERP Getting Started Guide.

System Shortcut Keys

Sage 500 can also be navigated in part using special key combinations and function keys. This is not well documented, but the following shortcut key combinations may be useful for selected tasks and activities.

CTRL + SHIFT + E	Opens MAS 500 Office	ALT + F7	+ F7 Opens MS Excel with the DataPorter toolbar, which allows you to import data from and export data to Excel		Opens the Help Center
CTRL + L	Clears the currently entered, unsaved data and keeps the task window open	ALT + F8	Opens the DataPorter Metadata window, which allows you to create the infrastructure DataPorter requires to create the spreadsheet, and import or export data	CTRL + M	Allows you to enter a memo for the current record. After the memo is saved, the Memo icon changes to indicate a memo exists for the record
CTRL + SHIFT + L	Clears the current window and returns you to the Desktop or to the main window of the current task	CTRL + F	Delays printing of the current report/list, saves it, and places it in the repdata folder in System Manager	ALT + M	Displays the My Tasks Explorer bar menu
CTRL + Q	Closes the window	CTRL + D	Deletes the selected record	CTRL + N	Assigns the next available number in auto-numbered field
CTRL + T	Commits a shipment or customer return	CTRL + SHIFT + X	Exports the report to a third-party package, file, HTML, or e-mail	CTRL + W	Displays the current report or list on the screen
CTRL + C	Copies the selected information or graphic to the clipboard	CTRL + F	Saves the current entry and clears all data from the window; the window remains open	CTRL + P	Prints the current report or list

ALT + F3	Opens the Customization window, which allows you to modify the window	CTRL + SHIFT + F	Saves the current entry and closes the current task window	CTRL + O	Begins processing
CTRL + SHIFT + R	Refreshes data in the current window	CTRL + S	Saves the current entry, and all data remains displayed in the window	CTRL + U	Cancels any previous changes
CTRL + R	Assigns a new ID to the current record. All historical information is tracked under the new ID	ALT + T	Displays the Tasks Explorer bar menu		

Additional Shortcut Keys

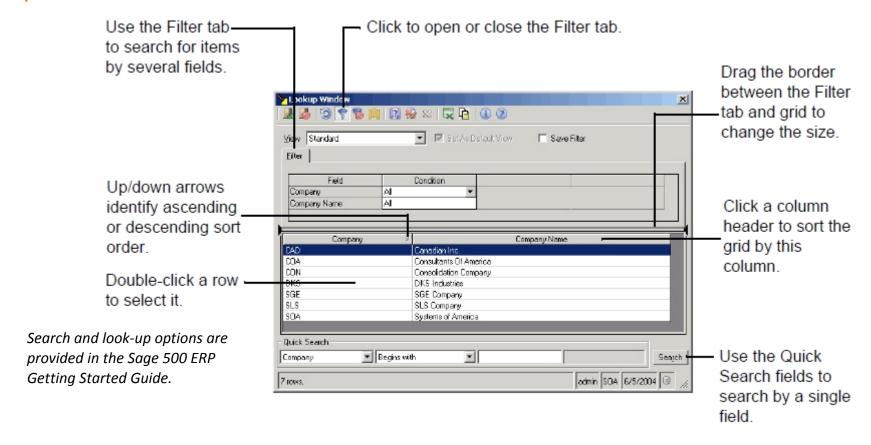
CTRL + B	Toggles the display of the filter criteria in a Lookup window. When selected in a Lookup window, displays the Filter tab to limit the information that appears. If filtering on a general ledger account field, displays the Advanced tab to further limit the information.	CTRL + SHIFT + I	Opens the record preceding the current record loaded in the window in the database or Navigator, depending on the Record Filter mode
CTRL + SHIFT + U	Opens the first record in the database or Navigator, depending on the Record Filter mode.	ALT + Q	Displays a map for the address displayed in the window
CTRL + SHIFT + O	Opens the last record in the database or Navigator, depending on the Record Filter mode.	CTRL + T	When used in conjunction with the Navigator, limits the search information available for display

CTRL + SHIFT + P	Opens the record following the current record loaded in the window in the database or Navigator, depending on the Record Filter mode	SHIFT + F5 when next to a Lookup, SHIFT + F4 next to a Navigator, or CTRL + SHIFT + T when it appears by itself	Enables you to select an item from a hierarchical list, such as general ledger accounts and payments and inventory items
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Function Keys

F1	Displays help for the current field while in a task. You can also right-click > What's This? in the current field of each task	F12	If account shortcuts have been defined in General Ledger Maintain Account Shortcuts, use the F12 key when in the Accounts field to enable the shortcut, which automatically enters the full general ledger account number.
F3	Updates (or refreshes) the field with data added since opening the window	ALT + F3	Opens the Customization window for the current Sage 500 window.
F4	Opens the Navigator search window to retrieve data for all related fields in the current window	ALT + F4	Closes the current Sage 500 task window
F5	Opens the Lookup search window to retrieve data for the current field	ALT + F7	Opens DataPorter

Look-Ups



We have had a wonderful relationship with e2b for many years now. Their staff is some of the most knowledgeable in the field and their customer service is exemplary. Because they provide quality service in a timely manner and under budget, our company has been successful in our use of Sage products.



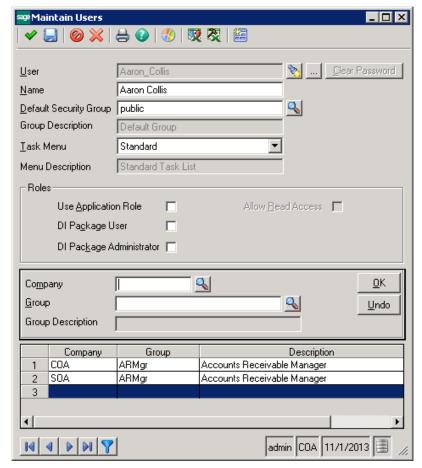
User Licensing

Sage 500 is licensed by concurrent user or the number of users that are likely to be in the software at the same time. For example, you may have 100 employees but at any point in time you may only have 20 employees in the software because general laborers, office managers, and other employees may never need access to the software. Some modules are available with special user licenses. For example, you can purchase special, inquiry-only licenses for Business Insights Explorer for employees that simply need to inquire into data without having full access to the rest of the system.

Users are setup in System Manager where you can set a number of defaults for the user including their default security group (see security section in this document), their default task menu, and what security group they belong to in various companies within the Sage 500 ERP system. For example, you may have an accounts receivable clerk that is responsible for managing several companies. You can also define the user role. For the most part, users will be Application Role users. DI roles are related to the Data Import Manager which is a utility discussed later in this document.



You can assign a user to multiple security groups for one or more companies; however, if you assign the user to more than one security group within the same company, the system grants the user access permissions of the security group with the highest access permissions level.



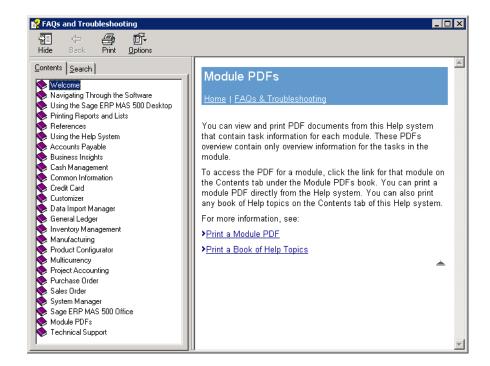
Sage 500 Module Overview

Sage no longer prints hard copies of Sage 500 ERP modules. Instead. you can access these from within the help system by module (see below). Sage used to publish an Available Module Spec Sheet outlining all major modules for Sage 500 ERP. This may still be useful as a general reference guide even though Sage has since disposed of several of the products such as SalesLogix, TimeSheet Professional, eCustomer, etc.

An updated overview of the Sage 500 system and available solutions is provided on the next page courtesy of e2b teknologies.



When you activate a module for a company, it cannot be deactivated without deleting the entire company and all its transactions.





I reached out to e2b teknologies because I've followed their company on various forums for years and was always impressed with their technical knowledge and success. We absolutely love the services provided by e2b's development, quality assurance, and support which have far exceeded our expectations.

Sage 500 ERP Solutions

Financial Management

- General Ledger
- **Accounts Receivable**

Financial Reporting

- Accounts Payable
- Credit & Collections Management
- Multicurrency
- Enterprise Asset Management (EAM)

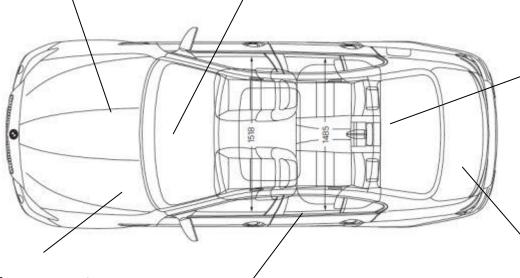
Supply Chain Management

- **Inventory Management**
- Warehouse Management System (WMS)
- Sales Order Management
- Purchase Order Management
- Supplier Relationship Management
- Shipping & Receiving
- Sales Demand Forecasting
- **Distribution Requirements Planning**



- Light Manufacturing / Kitting
- Advanced Manufacturing (Work Order)
- Manufacturing Execution System (MES)
- **Product Configurator**
- **Quality Management**
- Advanced Planning & Scheduling (APS)
- Material Requirements Planning (MRP)
- Product Lifecycle Management (PLM)
- Preventative Maintenance

Note: This information includes third party solutions and native Sage **500 ERP** modules.



Enterprise Data Management

- System Manager
- **Customization & SDK**
- Data Integration
- Database Management
- **Business Intelligence**
- **Business Alerts**

Customer Relationship Management

- Sales Force Automation (SFA)
- **Marketing Automation**
- **Customer Support**
- **Project Management**

Specialized Solutions

- Service Management
- **Catalog Sales**
- **Process Manufacturing**
- **Automotive Supply Chain**
- **High Tech & Electronics**

Overview of Sage 500 ERP

Sage 500 ERP Overview Brochure

Manufacturing and Distribution Overview

Sage MAS 500 Roadmap



Sage ERP Modules

This section includes an overview of all modules available for Sage 500 ERP including many popular third party applications.

Modules Owned

Many companies buy Sage 500 hoping to implement every module to improve their processes throughout their enterprise, but very few ever implement all of the modules they purchased and fewer still understand the capabilities of their existing systems. Over time, people leave the organization and newer employees start to use the system but they lack the training and the history to understand what they own and how to use it effectively. Soon they start to doubt the system, and some invest significant money into customizing the software when all they needed to do was to implement the system properly or to purchase an add-on module or third party product.

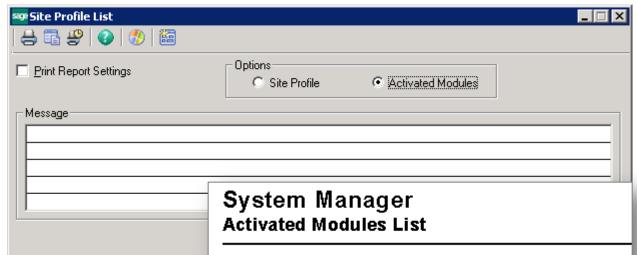
The first thing every Sage 500 customer should do is find out what they actually own. You can do this easily by navigating to the System Manager module in the Sage 500 Business Desktop and opening up the Reports folder. Here you will find a report called Site Profile List.



Understand the capabilities you have in your Sage 500 ERP system and what options are available for advanced features through other modules and third party solutions. Many companies pay consulting firms to build new functionality because they simply do not understand the capabilities of their existing business system. Also, keep in mind that Sage 500 ERP has grown considerably since early versions and the answer to your pressing questions may only be an upgrade away as new features are added in every major release.



Open the Site Profile List task and change the options from Site Profile to Activated Modules (right).



Next, preview or print the report (right).

If you're new to Sage 500 you probably don't know what all of these modules include and even veterans to Sage 500 may not know all of the applications available within the product suite that they either own and do not use or modules that they could purchase to resolve pressing business issues.

<u>Module</u>	Module Description	Module Activated
AC	Advanced Consolidations	No
AM	Advanced Manufacturing	Yes
AP	Accounts Payable	Yes
AR	Accounts Receivable	Yes
AS	Advanced Planning & Scheduling	Yes
BA	Business Insights - Analyzer	Yes
BE	Business Insights - Explorer	Yes
CC	Credit Card Processing	No
CI	Common Information	Yes
CM	Cash Management	Yes
CZ	Customizer	Yes
DA	Alerts	Yes
DB	Application Database	No
DI	Data Import Manager	Yes
DM	Data Migrator	Yes
DP	DataPorter	Yes
EB	e2btek Customizations	No
EC	eCustomer	No

Business Intelligence

There a several ways to access business intelligence within Sage 500 ERP. These include <u>Business Insights Analyzer</u>, <u>Business Insights Explorer</u>, and Reports which are embedded into the system with Crystal Reports. Many companies have used Sage 500 for years without realizing that it includes embedded integration with Microsoft Office applications for mail merge and other tasks through the <u>Sage 500 ERP Office</u> functionality available in most of the major modules in the system. Sage also offers several specialized modules and integrated products for specific reporting and business intelligence. For example, Sage Budgeting and Planning (formerly called Active Planner), Sage Allocations (formerly Advanced Allocations), and Sage Alerts and Workflow (private-label version of VineyardSoft's KnowledgeSync product) provide additional capabilities. Sage 500 ERP also includes <u>Business Insights Dashboard</u>. Several third party reporting and business intelligence tools are also available including special financial <u>reporting tools</u> discussed later in this document as well as software from <u>Qlikview</u> and <u>DataSelf</u>.

Pre-7.05 Inquiries

Sage 500 ERP used to have inquiries available in the application. These inquiries were replaced with Business Insights Explorer in the 7.05 release. The table below maps the old inquiries to the corresponding Business Insights Explorer task.

Module	Version 6.3 Inquiry Task Windows (accessed through menus)	Version 7.0 Business Insights Explorer Tasks	Туре	Comments
GL	GL Accounts Inquiry	GL Accounts	Explorer	
GL	GL Transactions	GL Transactions	Explorer	
GL	Account History	Account History	Analyzer	
AP	Vendor Inquiry	Vendors	Explorer	
AP	Vendor Status	Vendor Status	Same as previous	
AP	Vendor History	Vendor History	Analyzer	
АР	Vendor Class History			Functionality is now included with Vendor History
AP	Voucher Summary	Vouchers	Explorer	

AP		Voucher Lines	Explorer	
AP		Recurring Vouchers	Explorer	
AP	Payment Summary	Vendor Payments	Explorer	
AR	Customer Inquiry	Customers	Explorer	
AR	Customer Status Inquiry	Customer Status	Same as previous	
AR		Customer Class	Explorer	
AR	Customer History	Customer Sales History	Analyzer	
AR	Customer Class History			Functionality is now included with Customer History
AR	Salesperson History	Salesperson History	Analyzer	
AR	Invoice Summary	Invoices	Explorer	
AR		Invoice Lines	Explorer	
AR		Recurring Invoices	Explorer	
AR	Payment Summary	Customer Payments	Explorer	
AR		Banks	Explorer	
CM	Bank Accounts	Bank Accounts	Explorer	
CM	Bank Statements	Bank Account Statements	Explorer	
СМ	Bank Account Status			Functionality is now included with Bank Accounts
CM	Bank Account History	Bank Account History	Analyzer	
CM	Bank Transaction Summary	Bank Account Transactions	Explorer	
PA	Project Status Inquiry	Project Status	Same as previous	
PA	Committed Costs			Access from the Business Insights - Explorer Preview pane in Projects
PA	Project Transaction Inquiry Project Lines			
PA	Project Transaction Detail Inquiry	Project Detail		

PA	Timesheet Inquiry	Timesheet Inquiry	Same as previous	Removed from the main menu and added to the Timesheet Explorer tasks under the Manage group
PA		Timesheets	Explorer	
PA	Timesheet Line Inquiry	Timesheet Lines	Explorer	
PA	Expense Claim Inquiry	Expense Claim Inquiry	Same as previous	Removed from the main menu and added to Expense Claim Explorer tasks under the Manage group
PA		Expense Claims	Explorer	
PA	Expense Claim Line Inquiry	Expense Claim Lines	Explorer	
PA	Misc Project Transaction Inquiry	Misc Project Transaction Inquiry	Same as previous	
PA	Master Project Status	Master Project Status	Same as previous	
PA		Master Projects	Explorer	
PA		Resources	Explorer	
РО	Requisition Summary	Requisitions	Explorer	
PO	Requisition Line Summary	Requisitions Items	Explorer	
PO	Purchase Order Summary	Purchase Orders	Explorer	
PO	Purchase Order Line Summary	Purchase Order Items	Explorer	
РО	Change Order Summary			Access the Business Insights - Explorer Preview pane in Purchase Orders
РО	Receipt Summary	Receipts	Explorer	
РО	Receipt Line Summary	Receiver Items	Explorer	
РО	Return Summary	Vendor Returns	Explorer	
РО	Return Line Summary	Vendor Return Items	Explorer	
РО		Buyers	Explorer	
РО	Routing Inquiry	Routings	Explorer	

MF	Work Order Inquiry			Removed from the main menu and added to Work Order Explorer tasks under the Manage group
MF		Work Orders	Explorer	
MF	Transactions	Work Order Transactions	Explorer	
MF	Current Activity Inquiry	Mfg Current Activity	Explorer	
MF	Lot Tracking	Lot Tracking	Same as previous	
MF	Serial Tracking	Serial Tracking	Same as previous	
MF	CTP Inquiry	CTP Inquiry	Same as previous	
MF	Schedule Inquiry	Schedule Inquiry	Same as previous	
MF	Estimate Inquiry		Explorer	
MF	Outside Shipment Inquiry		Same as previous	
MF	Job Ticket Inquiry		Same as previous	
MF		Mfg Employee Explorer	Explorer	
IM	Item Inquiry	Items	Explorer	
IM	Inventory Inquiry	Inventory	Explorer	
IM	Warehouse Inquiry	Warehouses	Explorer	
IM	Price Inquiry	Price Inquiry	Same as previous	
IM	Stock Status Inquiry	Stock Status	Explorer	
IM	Inventory Status Inquiry	Inventory Status	Explorer	
IM	Cost Inquiry	Cost Inquiry	Same as previous	
IM	Purchase Product Line History Inquiry	Purchase Product Lines	Explorer	
IM	Item History Inquiry	Inventory Transaction History	Analyzer	
IM	Lot Summary Inquiry	Lot Summary	Explorer	
IM	Serial Summary Inquiry	Serial Summary	Explorer	
IM	Inventory Transaction	Transactions	Explorer	
IM	Transfers	Transfers	Explorer	
IM	Transfer Lines	Transfer Order Items	Explorer	

IM		Warehouse Purchase Product Lines	Explorer	
IM		Inventory History	Analyzer	
SO	Quote Summary	Quotes	Explorer	
SO	Sales Order Summary	Sales Orders	Explorer	
SO	Sales Order Line Summary	Sales Order Lines	Explorer	
SO	Change Order Summary			Access the Business Insights - Explorer Preview pane in Sales Orders
SO	Customer POs Summary			POs added to most customer transaction Explorer tasks
SO	Sales Order Picking Inquiry	Pick Lists	Explorer	
SO	Shipment Summary	Shipments	Explorer	
SO	Shipment Line Summary	Shipment Lines	Explorer	
SO	Customer Returns	Customer Returns	Explorer	
SO	Customer Return Lines	Customer Return Lines	Explorer	
SO	RMA Inquiry	RMAs	Explorer	
SO		RMA Lines	Explorer	
SO		Blanket Sales Orders	Explorer	

Enterprise Content Management

ERP systems create a lot of paper which is costly, unnecessary, and difficult to manage in today's digital world. Sage 500 was an innovative solution in the early days with its embedded Microsoft Office integration. This functionality exists today as Sage 500 ERP Office. But this functionality is not a true enterprise content management (ECM) document management solution. Sage has long partnered with Altec providing their doc-link solution for document management. Sage markets the product as Sage ERP Document Management. There are of course many other third party products available including (but not limited to) ASG Cypress, Acom, and Anytime Docs by e2b teknologies. Altec is perhaps the most advanced of these options but with complexity comes cost and many companies do not need the full capabilities of doc-link. ASG Cypress is comparable to doc-link but is not as tightly integrated throughout the application.

For companies that have basic document management capabilities on a tight budget – Anytime Docs is perhaps the best solution. The product is similar in many respects to the Paperless Office module within Sage 100 ERP in that it creates PDF copies of virtually any business form or report that you can print out of the system.



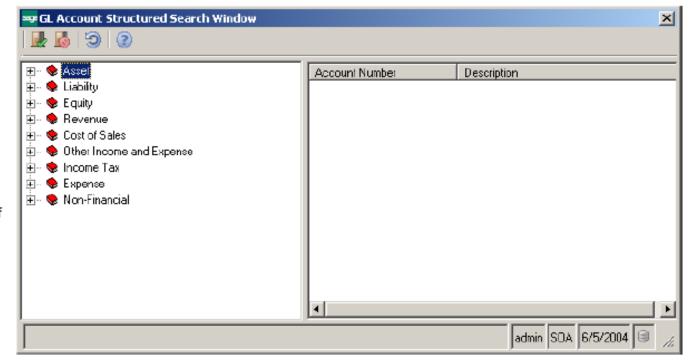
Utilize document management systems like Anytime Docs which combine multi-report registers and journals into a single PDF document which can be viewed from a right-click menu option or through a Business Insights Explorer View to reduce paper while improving access to historical information.

Financial Management Modules

Sage 500 ERP has one of the most feature-rich accounting systems available on the market today. While it is not designed for true multi-national accounting, it has many advanced features that made it attractive to larger enterprises with multiple operating business units across a variety of industries. The General Ledger itself is the hub of the system which includes literally dozens of Sage (and Sage partner) financials solutions. The main accounting solutions are profiled in this section.

General Ledger

The general ledger module for Sage 500 ERP has extensive drill-down capabilities that enable you to view everything from detailed journal entries to original source documents. Sage 500 ERP has the flexibility to accommodate complex company structures. You can set up an unlimited number of companies and designate account numbers with up to 15 segments and as many as 100 characters.



Sage 500 FRP Owner's Manual Convright 2013, e2h teknologies



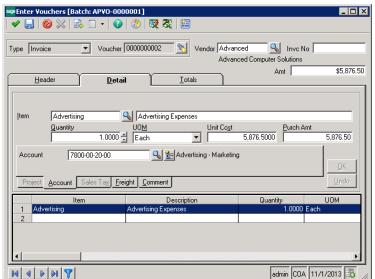
Setup your chart of accounts with an eye toward the future. Many companies simply use the same chart of accounts they had in their previous system when setting up Sage 500. They later regret this decision as Sage 500 has advanced capabilities that help companies make better financial decisions if the chart of accounts defined properly. Best practices call for reviews of chart of accounts annually to identify changes to support the company's changing analysis and reporting requirements.

Financial Reporting

Early versions of Sage 500 ERP included FRx financial reporting software. Microsoft FRx was created by the FRx Software Corporation in Denver, Colorado. The first FRx product was a DOS-based application that originally shipped around 1991 and integrated with Platinum DOS. A Windows-based version of FRx was available in 1993. FRx Software was acquired by Great Plains Software, which itself was purchased by Microsoft, where it was run as a wholly owned subsidiary. Microsoft introduced a replacement product called Microsoft Management Reporter which is part of its Dynamics product line. Sage and most other ERP vendors did not select Microsoft Management Reporter as a replacement product. Instead, Sage introduced its own product called Sage MAS Intelligence (now called Sage ERP Intelligence Reporting) which was developed originally in South Africa. This product is shipped with later versions of the software. A popular alternative to this tool is BizNet Excel Suite by BizNet Software. BizNet utilizes Microsoft Excel for financial reporting and is more popular among Sage 500 customers who like the Excel user interface which is closer to the original FRx product.

Accounts Payable

The Sage 500 Accounts Payable module helps you to take control over your business processes by automating a wide range of vendor-related tasks. This module makes it simple to enter a default general ledger account to the vendor class, or to a batch, and track expenses by department or location. You can also fulfill specific vendor requirements quickly and easily by assigning a default item, 1099 information, payment terms, and tax codes to each vendor. Accounts Payable simplifies voucher enter by automatically calculating sales taxes, discounts and due dates, as well as by defaulting general ledger accounts, payment terms, and 1099 information. In addition, the system gives you fast, easy access to the information you need for day-to-day tasks and period-end processing, including vendor statistics, aging, and transaction information.



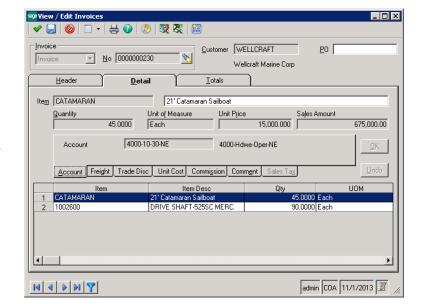
Accounts Receivable

The Sage 500 ERP <u>Accounts Receivable</u> module helps you improve cash flow while enhancing customer service through more effective management of your entire collections process. It is a key component of Sage 500 ERP, a highly reliable, robust, and integrated series of business applications that delivers a flexible, scalable, and full-featured total business management solution.

Accounts Receivable gives you the power of automation to speed up and streamline every step in your billing efforts, from invoice entry to the recording of payments, and even to issuing customer refunds. The system automatically calculates sales taxes, discounts, commissions, and due dates and automatically distributes invoice amounts to the appropriate GL account based on the item sold. During payment application, you can apply cash receipts to open invoices and write off those balances that are within predefined tolerances. In addition, you can use the Sage 500 ERP Office integration tool to create customized dunning letters quickly and easily, without any programming knowledge.

Sage 500 Accounts Receivable benefits:

- Improve cash flow with timely and efficient collections management.
- Design flexibility into your commission structure with the ability to split commission payments and create vouchers for commission payment.
- Improve productivity and customer service by maintaining complete online records for all customer accounts.
- Assign invoice or memo numbers automatically or manually and instantly verify unapplied payments, credit limits, and past-due amounts.
- Automatically apply cash receipts to open invoices, accept cash on account, and write off balances that fall within predefined tolerances.
- Enter invoices and cash receipts in their natural currencies, as well as recognize and accrue unrealized gains and losses when applying cash receipts to invoices.
- Create and track overpayments and issue customer refunds from Process Cash Receipts
- Provide superior customer service using drill-down or drill-around capabilities within any customer field, or from the inquiry menu.
- Manage related customers with parent or subsidiary relationships.



Credit & Collections

<u>Anytime Collect</u> is a credit collections module for Sage 500 ERP. The module contains many advanced features to extend Sage 500 ERP for credit and collections management including invoice delivery, automated customer communications, dispute management, expected payments, email and phone communications, document and attachment management, and automated work queues for accounts receivable staff helping them to prioritize their activities with all of the information they need in one

place to do their jobs effectively. Major features include:

- Automated communications
- Dispute Management
- Expected Payments (Cash Forecasts)
- Reduced Bad Debt Write-Offs
- Improved Customer Service



Companies that implement systems like Anytime Collect typically reduce past due accounts receivable and days sales outstanding (DSO) by 15-20% realizing a return on investment in about 2 months by reducing bad debt write-offs and financing costs.



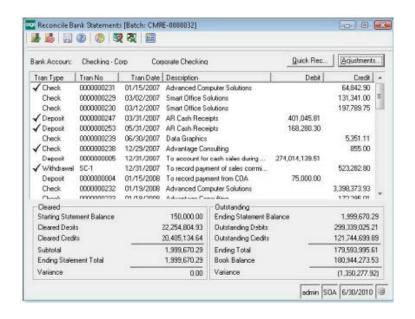
Anytime Collect integrates with multiple ERP accounting systems so it can work with Sage 500 today and other ERP systems used by subsidiaries or your future ERP business application.



Cash Management

<u>Cash Management</u> enables you to quickly and easily handle and track a wide range of bank transactions—including deposits, withdrawals, adjustments, interest earnings and charges, bank fees, and transfers between bank accounts—with pinpoint accuracy. In addition, the module's extensive drill-down and drill-around capabilities give you fast, convenient access to transaction details and source information.

Cash Management simplifies deposit generation by allowing you to create deposits automatically in the system when posting cash receipts in Accounts Receivable. Integration of Cash Management with Accounts Payable and Accounts Receivable enables you to access payment and deposit information by bank account, confirm transactions, and import cleared transactions from your bank for automatic reconciliation. Integrate Cash Management with Multicurrency Management, and you'll be able to set up bank accounts in currencies other than your home currency.



Features of the Cash Management module include:

- Simplify deposits, reconcile transactions, and process multicurrency bank transactions.
- Create bank accounts in any currency with the Multicurrency Management module.
- Handle and track many different types of bank transactions.
- Simplify deposit generation through Accounts Receivable integration.
- Access payment and deposit information by bank account when Cash Management is integrated with Accounts Payable and Accounts Receivable.
- Smoothly handle the increased volume of banking transactions that occur at period end.
- Quickly analyze cash transactions with easy access to source information such as bank account status, history, or detailed account statements.
- Control access to confidential banking transactions and account information.

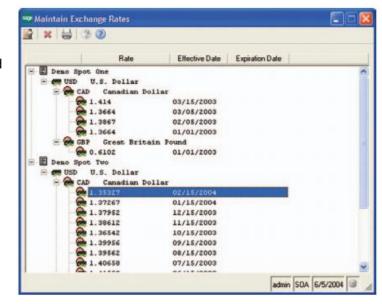


Use caution when using the same bank and bank account in multiple companies. The system maintains these as separate identities; however, check reconciliation in Cash Management can be confusing if the same check numbers are used across all companies.

Multicurrency Management

The <u>Multicurrency Management</u> module has a preloaded library of 27 major currencies and their ISO symbols. This module gives you the critical data you need for more informed decision making and improved trend analysis. Standard reports and registers create a complete audit trail of detail activity before posting. And with the ability to retain detail postings and monthly summaries for an unlimited number of years, you can gain additional insight by having more information at your disposal for year-to-year comparisons.

Multicurrency Management helps you maximize productivity, too. Enter the data just once into the module, and you'll be able to leverage multicurrency capabilities, including revaluation functions, across other modules, including Accounts Payable, Accounts Receivable, Sales Order, and General Ledger.



Allocations

<u>Allocations</u> allows you to use the power of automation to structure virtually any allocation, distribute allocations in a variety of ways, redistribute individual transactions, and create accrual transactions. Any account or group of accounts can be allocated to one or more accounts, with full control over the accounts used in the transaction.

Formulas built into the solution enable you to perform a wide range of calculations quickly and easily, saving you time while helping to enhance the budgeting and planning process. With Allocations you can use formulas to calculate a variety of allocation transactions, define global and local formulas, create an unlimited number of formulas and formula lines, and use database queries in formulas to calculate and deploy values from other databases.

Allocations prevents errors with built-in processing controls that allow you to run individual allocation and accrual transactions, as well as transaction batches in specific periods and select effective dates to restrict the lifecycle of a particular allocation. Allocations also provide a clear picture of formula calculation through a complete audit trail.

Advanced Consolidations

The Advanced Consolidations module was discontinued for Sage 500 version 7.3. Companies that owned this module can no longer access it from Sage MAS 500 after they upgrade. The data for the discontinued module will remain on the server, allowing customers to view it using the appropriate SQL Server tools. Sage recommended FRx as a replacement but of course FRx has been replaced with Sage ERP Intelligence which may not be an ideal solution for consolidations.

Sage Budgeting & Planning (Active Planner)

With <u>Sage Budgeting & Planning</u>, you improve the flow of key information, such as business drivers and transaction data, through templates, automatic distribution and consolidation of the budget, central control over budget revisions, real-time seamless integration of data sources, and built-in security mechanisms. With more control over your budgeting and planning process, you can create effective, more accurate budgets and forecasts, and render a true analysis of company performance.

Contract Revenue by BHE Consulting

Long-time Sage 500 reseller and development partner BHE Consulting built a <u>Contract Revenue</u> module in the Sage 500 ERP SDK. This module includes deferred revenue, contract management capabilities, billing schedules, and advanced features required in a variety of businesses and industry environments. BHE also offers solutions for Electronic Funds Transfer (EFT), Lockbox, Positive Pay, and other fantastic accounting extensions for Sage 500 ERP.



Mexico-based Sage 500 partner <u>Multiconsulting</u> offers a Spanish translation of Sage 500 ERP. The company also provides implementation and professional services to partners who require Spanish-speaking consultants for implementations in border towns or in subsidiaries or manufacturing plants located in Mexico or throughout Latin America and the Caribbean. This is the only translation of Sage 500 ERP available other than English despite the fact that Sage 500 ERP was originally developed to support multiple languages. The Sage 500 ERP database includes language codes that were never fully-developed or utilized in the application.

Enterprise Asset Management (EAM)

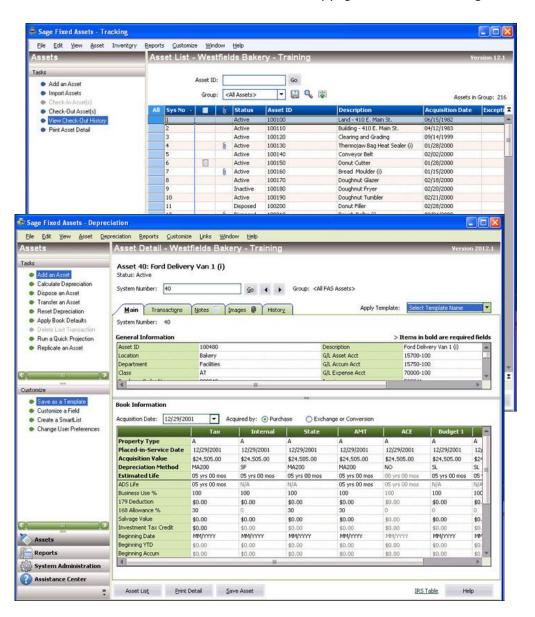
Enterprise Asset Management is defined as the management of all enterprise assets. It typically includes several modules for the depreciation of fixed assets, asset tracking, and preventative maintenance (also called Computerized Maintenance Management Systems or CMMS). Sage's FAS product line encompasses two parts of EAM – depreciation and tracking. Preventative Maintenance is provided by SingleSource Systems.

Fixed Asset Depreciation

If you manage over 10,000 fixed assets, <u>FAS 500</u> Asset Accounting is simply the ideal solution for your business. It integrates with Sage 500 General Ledger for depreciation and Purchase Order for purchased assets. It includes up to seven books all visible on one screen including two user-defined custom books, alternative accounting periods such as 13 period, 52/53 week, 4/4/5, 4/5/4, or 5/4/4 accounting, and a fully customizable data entry screen that includes field names, lengths, pictures, and prompts.

Fixed Asset Tracking

Related modules may be of interest including <u>Sage Fixed Asset Tracking</u> (formerly Fixed Asset Inventory) providing fixed asset inventory tracking capabilities and <u>Asset Labeling Solutions</u>.



Asset Maintenance

Companies that implement Fixed Asset systems may also be interested in the <u>SingleSource SM-Plus</u> application which can be utilized for internal preventative maintenance. SM-Plus includes Depot Repair and preventative maintenance scheduling and material planning capabilities that far exceed the very basic preventative maintenance features included in the Sage 500 Advanced Manufacturing and Advanced Planning & Scheduling modules.

Asset Planning

<u>Sage Fixed Assets Planning</u> (formerly Construction in Progress) is a great solution for companies who build their own assets such as assembling a production line in a factory or piecing together multiple assets for an internal HVAC system. The acquired components can be tracked to the final assembled asset and depreciated as a single asset on your books.

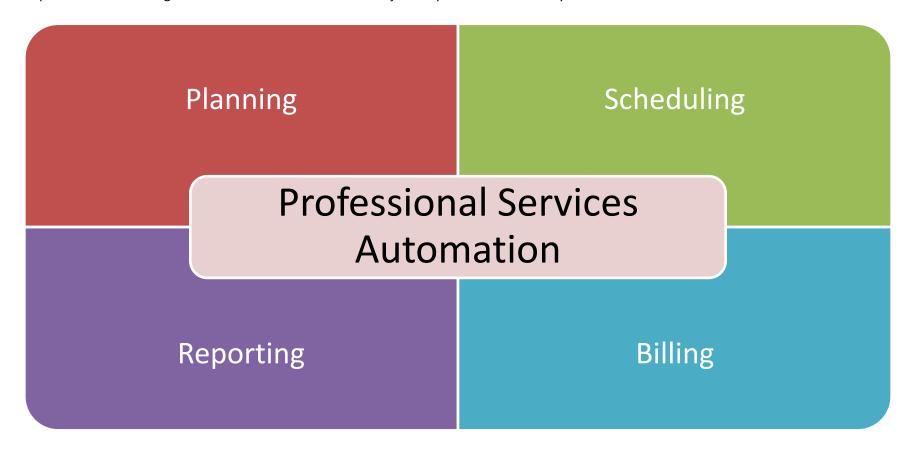


e2b consultants are very helpful and they are exactly what we were looking for in a technology partner – especially given their deep manufacturing knowledge and success working with larger, complex implementations like ours. They understand the software, they take time to understand our business, and everything is working wonderfully. It was a very good experience from start to finish.



Professional Services Automation

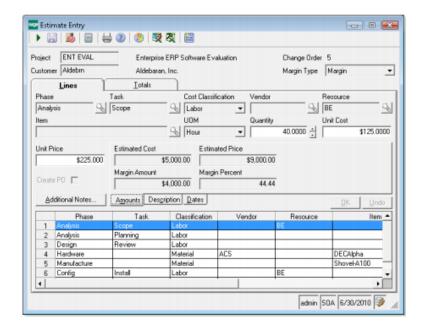
As mentioned previously, Sage 500 ERP has a long history in the professional services automation (PSA) space dating back to its Acuity Financials origins and integration to Proamics/Niku. But Sage 500 ERP became a real PSA solution when Sage acquired the Project Accounting module from Intellisol. While the module has some noticeable gaps (i.e., no milestone billing or work breakdown structures – WBS), it is a worthwhile solution for companies in a variety of industries including many non-traditional PSA industries. For example, the project accounting system is integrated with the manufacturing MRP system making it a nice solution for manufacturers who need to track research and development (R&D) projects and the required materials that go into them. This section outlines major components of the PSA systems.



Project Accounting

The <u>Project Accounting</u> module allows managers to track actual against estimated costs through forecast completion, which helps prevent cost overruns and generates bottom-line savings. The Project Accounting module's detailed estimating allows estimation of multiple cost types, giving users the ability to report and analyze data at multiple levels. Data-driven contract rates handle numerous and complex project rates, making it easy for project managers to control rate changes and profitability. As project scope evolves, Project Accounting permits changes to the estimated budget to increase forecast accuracy throughout project lifecycles.

Project Accounting allows project managers to optimize project profitability through appropriate project type selection — whether it's time and materials, fixed price, or both. The option to choose the most appropriate project type decreases project management costs by eliminating multiple project tracking systems. In addition, the six GAAP-compliant profit recognition methods in Project Accounting provide the power to control profit recognized over each period, resulting in a well-managed revenue stream.



Benefits and features of the Project Accounting module include:

- Monitor all details of your project, including estimates, change orders, purchasing orders, timesheets, and billing.
- Track projects closely to prevent cost overruns and generate bottom-line savings.
- Process your time and materials against one or multiple projects.
- Input expenses electronically as they are incurred without the hassles of paper submission.
- Seamless integration to Sage 500 ERP General Ledger, Account Receivable, Account Payable, Inventory, Purchase Order, and MRP modules.
- Provide a wide range of invoicing and customization options to meet specific customer needs.

eTimeSheets

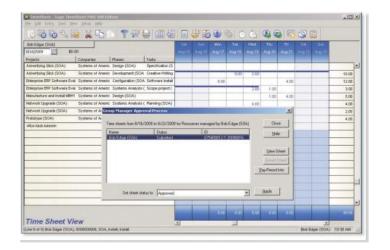
This was the original timesheet module available for use with the Project Accounting module. It was originally developed by Intellisol and was later replaced by Sage TimeSheet (see below).

Sage TimeSheet

<u>Sage TimeSheet</u> is a project-oriented time and expense tracking solution that seamlessly integrates with Project Accounting. It helps track time and expenses by many user-defined levels, including resources, customer, project, phase, and individual task. The approval mechanism allows organizations to configure an approval process that matches their internal procedures and policies. Plus, Sage TimeSheet is easily adaptable to any organization's project structure and workflow. This product is now owned by Insperity.

Benefits of Sage TimeSheet include:

- Improve project profitability and increase the accuracy of project budgeting, scheduling, and billing.
- Fast entry of timesheet and expense data with an intuitive spreadsheet-style interface.
- Save time by automating billing and expense reimbursement.
- Flexible to use PC and web browser deployment.
- Robust workflow approval processes with email notification.
- Powerful reporting and analysis for more accurate planning and resource utilization.



Project Resource Planning

The Project Accounting system was originally integrated with <u>Microsoft Projects</u> for project task and phase planning in a Gantt chart view. This functionality is still available but relatively limited. One relatively large hole in the PSA solution is around employee resource scheduling which is virtually non-existent within the core product.

Supply Chain Management

Supply Chain Management is designed for distributors and manufacturers who must manage the delicate balance between supply and demand to reduce carrying costs while minimizing stock-outs. It's not an easy task but Sage 500 ERP has a lot of capabilities that will help distributors and manufacturers – features not available in most midmarket ERP applications. This suite of modules is one of the major reasons why Sage 500 ERP was the jewel in Sage's portfolio for many years.

The heart of supply chain management is the Inventory Management module which integrates to all other parts of the system – Sales Order for demand, Purchase Orders for Supply, and Manufacturing (for demand on raw materials and supply for finished goods).

Supply (Planned & Actual)



On-Hand Inventory



Manufacturing Work Orders



Purchase Orders



Inbound Transfer Orders

Demand (Planned & Actual)



Sales Orders



Manufacturing Work Orders



Demand Forecast



Outbound Transfer Orders

Planned Orders

- Planned PO
- Planned WO
- Planned TO

Action Messages

- Late Orders
- Move-In
- Move-Out
- Cancel Orders

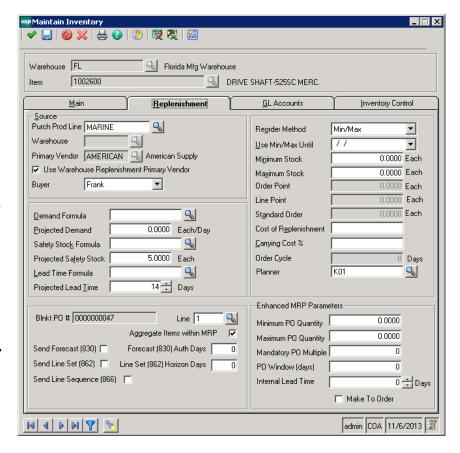
Inquiries

- Inventory
- Item Detail
- Period Summary
- Transactions

Inventory Management

Featuring a warehouse-centric design, <u>Inventory Management</u> enables you to track costs and sales histories by warehouse, and quickly locate items your customer's request. Process and ship orders even during inventory cycle counts to ensure that your business continually operates at peak efficiency. Shipping and receiving is also part of this module and provides a lot of options for distributors and manufacturers.

Inventory Management supports both assemble-to-order and build-to-order kits and includes full lot and serial number tracking. In addition, it supports FIFO, LIFO, Average, Actual, Standard, and Warehouse-Specific Costing. More advanced features include support for fixed asset inventories, substitute item definition, landed cost calculations, inventory catalog management, and powerful unit of measure conversion tables. This module includes extremely advanced item pricing capabilities to manage prices by customer, by item, by contract, by national account, by warehouse, by promotion, and for complex matrix pricing with many variables.



Enhanced Inventory

e2b teknologies provides an Enhanced Inventory module which allows companies to print labels for bins, lots, and serial tracked items. It also resolves a major issue for manufacturers who need to track lot or serial tracked raw materials to lot or serial tracked finished goods. Enhancements to the finished good labor entry screen allow users to define which raw material lots or serialized items were used in the production of the lot or serialized finished goods during the final labor progress transaction. This resolves a decade-old problem for companies who need to maintain traceability without being forced to create a single work order for lot or serial tracked finished goods.

Kanban Replenishment

Kanban is a lean manufacturing and replenishment philosophy that originated from Japanese car manufacturer Toyota. Kanban systems utilize a physical card to signal replenishment request. Most companies deploy a two-bin (or three bin) system where the quantity of product in each bin is the same. The concept is that once the first bin is empty, the Kanban card will signal a replenishment request (purchase order) and the bins will be sized as such that by the time the empty bin is replenished; the second bin will be nearly empty. Kanban Replenishment by e2b teknologies utilizes existing inventory usage and other data stored in Sage 500 ERP to calculate Kanban replenishment parameters. Users determine how many bins to use and what size the actual bins will be (quantity per bin). Each item is then linked to a Blanket PO. A Bin Request task automates the replenishment request by capturing the item and warehouse information and generating a bin request off the pre-defined Blanket Purchase Order. This process may be further automated to use barcoded Kanban cards. Buyers can approve replenishment requests and process the order which cuts a release from the Blanket for the Actual Bin Size defined for the inventory item.

Quality Management

World-class organizations strive to continually improve product quality to gain market share while fending off foreign competitors. With shrinking margins and increased compliance mandates, quality has become one of the most critical business issues. This is confirmed in almost every quality study conducted in the past few years. Quality mandates issued by large customers or by federal entities such as the FDA and USDA are no longer optional and it is getting tougher to remain in compliance without a completely integrated quality control solution.

Quality Management helps companies improve product quality while remaining in compliance with customer and federal requirements. Quality Management, coupled with Document Control makes compliance with ISO/QS/TS 9000 a breeze since quality data and procedures are secured and managed within Sage 500 ERP applications. Further, Quality Management is a keystone for Total Quality Management (TQM) and Six Sigma which are becoming increasingly popular.

<u>Quality Management</u> by e2b teknologies helps you define attributes, standardize test procedures, and record quality test results for analysis and reporting. Quality tests may be conducted randomly or for any inventory or manufacturing labor transaction in Sage 500 ERP such as receipts, returns, bin or warehouse transfers, labor entry, inventory adjustments, physical inventory counts, etc.

Further, Quality Management allows you to capture lot and serial attributes such as color, grade, chemical composition, heat numbers, and other inventory lot attributes that may be required to identify a unique lot of material to use for sale to meet specific customer requirements or for use in manufacturing operations. There is no easy way to do this in Sage 500 ERP without the Quality Management module.

Cost Modeling

How do you implement standard cost changes when you have hundreds or thousands of inventory items to update? How do you analyze the impact of changes to work center rates prior to implementing rate changes? Without Cost Modeling you could be faced with many hours of manual cost updates and analysis using external spreadsheets. Cost Modeling is designed to alleviate the headaches associated with changes to standard costs for purchased and/ or manufactured items and is ideal for distributors or manufacturers using standard costs. Different cost model scenarios may be created with tools to help you analyze the impact of changes to costs for purchased items or work center rates prior to deploying these changes. Cost Modeling provides tools to help you mark-up or mark-down costs or cost elements based on a percentage compared to original standard, average, replacement, or last costs. More sophisticated model calculations may be defined by exporting cost models to Excel for data manipulation with capabilities to update cost models directly from Microsoft Excel.

Inventory Replenishment

As mentioned earlier in this document, Sage 500 ERP's <u>inventory replenishment</u> system was designed by industry expert Jon Schreibfeder of Effective Inventory Management. Inventory Replenishment helps you define formulas for calculating lead times, safety stock, and product demand by warehouse location. The Replenishment system also includes Inventory Ranking, and so much more. However, the actual replenishment process is not time-phased and while it has strengths for some pure-play distributors, it is not recommended for manufacturers or distributors who have light assembly and kitting requirements.

Sage Inventory Advisor

This is a new product available in Sage 500 ERP 2013 and beyond. It was developed by a third party company, NetStock, out of South Africa. It is essentially very similar to Inventory Replenishment making it less attractive to Sage 500 customers (main target for this product are users of Sage 100 and Sage 300). It is not an MRP system and thus is only a recommended solution for distributors.

Warehouse Management

<u>Warehouse Management</u> functionality was originally part of Inventory Management and Inventory Replenishment but was broken out and enhanced to become its own module when Sage introduced Warehouse Automation (no longer available) with Scanco as a bar code solution for Sage 500 ERP. Warehouse Management is primarily three-step transfers between inventory warehouse locations, support for wave and zone picking, and tracking of inventory quantities by bin.

Purchase Order

The Sage 500 ERP <u>Purchase Order</u> module helps you save time, reduce costs, and automate processes through supply chain management tools. Create requisitions using date, originator, item description, quantity, and date required, even if vendor information is unavailable. Assign different ship-to locations to each purchase order line item, invoice automatically or manually, or use the Multicurrency Management module to create purchase orders in any currency. Automate warehouse processes while retaining accountability. Capture key vendor quality metrics to identify vendors that perform well and those that disappoint. Limit access to confidential purchasing information and tasks to authorized users. Obtain fast, easy access to purchasing information on any level. And increase your productivity with the ability to set up landed costs, maintain a tight audit trail, and create purchase orders automatically based on inventory requirements.

With Purchase Order, you can simplify your purchasing and receiving processes, while ensuring greater order accuracy. You'll enjoy efficient, flexible purchasing workflows, because you can create a requisition quickly and easily without prior knowledge of your vendors or buying practices. Plus, Purchase Order tightly controls buyers' spending limits and provides complete audit tracking for maximum accountability.

When purchases are received, the system can automatically capture important vendor metrics: info on correct item and quantities shipped, damaged goods, even labeling and packaging. Then you can view a Vendor Performance report by combining this information with delivery timing and cost variance data. Maximize warehouse efficiencies by guiding receiving personnel to designated preferred stock put-away bins.

Use the power of automation to minimize costly quantity and pricing errors, as well as errors in receipt of goods. Create vouchers that automatically default from the related purchase order. Tie a purchase order to a sales order so incoming products are correctly allocated to your priority customers. You'll save time and maximize productivity by using the system's extensive drill-down and drill-around capabilities to track transactions back to their origins.



If the Inventory Management module is integrated with Purchase Order, use caution when changing the Purchase Price Variance account in the Purchase Order module setup as any changes to this field are updated in Set Up IM Options.

Purchase Order Requisitions

Sage 500 Purchase Order includes basic requisition capabilities. Many companies require more functionality for automated routing of requisitions to different managers or based on different approval levels. A very popular solution for more advanced PO Requisition capabilities is <u>eRequester</u> by Paperless Business Systems. Not only does the software support PO Requisition workflow, but it also has other modules that could be useful for distributors and manufacturers – such as Request for Quote (RFQ), integration with Vendor Catalogs, and more.

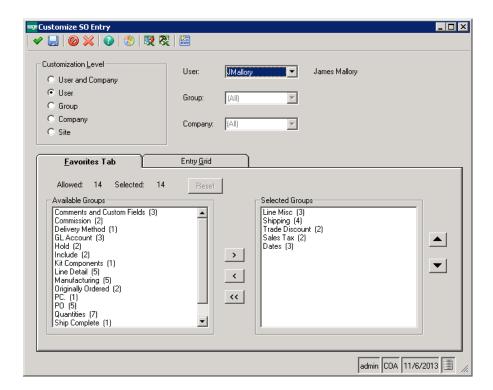
Sales Order

Put vital customer and inventory information at your fingertips to streamline your sales order processes and keep customers satisfied. <u>Sales Order</u> provides in-depth, flexible sales analysis tools to customize your entire sales function, including discounts, credit, taxes, commissions, kitting, and more.

Establish a wide range of item- or customer-specific information at the sales order line, including shipping information, drop shipment requirements, commissions, account numbers, vital order dates, sales tax, and trade discount percentages. Price inventory items for maximum profitability based on customer class, location, discounts, or any number of criteria your business requires. Assign each line item its own ship-to address, salesperson, tax rate, ship date, ship-from location and drop ship.

Improve employee satisfaction and productivity as well. Empower customer service representatives to personalize the order entry screen with their most frequently used data entry items, copy previous orders and drill down to track a transaction to its original source.

Sage 500 ERP Sales Order includes blanket sales orders, line-level discounting and commissions, a full-featured return merchandise authorization (RMA) system for customer returns, and everything you need to effectively manage customer sales orders.



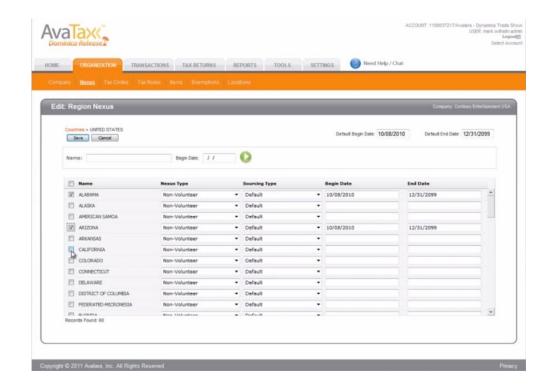
Sales Order Entry can be customized using the Customize SO Entry maintenance task in Sage 500 ERP which was introduced in the 7.0 rewrite of the Sales Order module.

Sales Tax by Avalara

The Sage 500 sales tax module, AvaTax, handles complicated tax issues, such as situs, nexus, tax tiers, tax holidays, exemption certificate management and product taxability rules. AvaTax Calc delivers instantaneous address validation and sales tax calculations on-demand. AvaTax Certs makes it possible to digitally create, store and access exemption certificates at the point of sale. AvaTax Returns closes the loop on your sales tax compliance process by completing and filing all forms and remitting all of your sales tax with one easy payment. Avalara sells three products – AvaTax Calc which is the main sales tax calculation engine available for Sage 500 ERP as Sage Tax and AvaTax Certs and AvaTax Returns which are available for purchase for sales tax exemption certificate management and tax return services. Click here for the AvaTax Installation Guide.

Features of AvaTax include:

- AvaTax Calc
 - Address validation
 - Sourcing rules
 - Jurisdiction assignment
 - Product taxability
 - Reporting
- AvaTax Certs
 - Certificate request
 - Collection wizard
 - Storage and retrieval
 - Tax decision software integration
 - Renewal management
- AvaTax Returns
 - Liability worksheet
 - Return preparation
 - Filing and remittance
 - Return archive
 - Notice management



Credit Card Processing

The <u>Credit Card Processing</u> module came through the <u>2006 acquisition of Verus Financial Management</u>. This was an acquisition at the top-level of Sage Group which had a dramatic and very positive impact on its global ERP product lines. The product is marketed today as Sage Payment Solutions. Prior to Sage Payments, several options were available for Sage 500 customers including a credit card module developed by the Sage 500 Professional Services Group (PSG) and several by Sage 500 partners. Among the most popular third party options was <u>ePayments by BHE Consulting</u>.

Sage Payment Solutions allows your customers place orders over the phones, through mail order, or through a web page. Data can be entered through the Sales Order and Accounts Receivable modules. Transactional information, such as authorization codes, is captured and stored for historical and reconciliation purposes. Fraud prevention features protect both you and your customers from unauthorized credit card usage. Features of the Credit Card Processing module include:

- Leverage Sage Payment Solutions as the processor.
- Automatically connect to merchant accounts for credit card authorizations and settlements.
- Process payments using Sales Order and Accounts Receivable modules.
- Complete, secure, 24/7 online transaction reporting.
- Stored credit card numbers are encrypted within Sage 500 ERP.
- Credit Verification Value (CVV2) is fully supported to help verify card authenticity.
- Compliant with Visa and MasterCard Payment Card Industry (PCI) data security standard.
- Multiple address verification options add an additional layer of credit card authentication.
- Security permissions control access to credit card information.

Shipping & Receiving

Sage 500 has advanced pick, pack, and ship capabilities but never provided native shipment tracking capabilities. V-Technologies, publishers of StarShip used to be the preferred vendor for Sage 500 customers. StarShip is still integrated with Sage 500 ERP and is a very popular option for most businesses. It is still the preferred solution for many Sage 500 business partners as well due to its simple design and advanced capabilities. Sage partnered with SmartLinc in 2012. Another popular option for Shipping is DC DistributionAutomation by DCSC Corporation. This product is written in the Sage 500 SDK with very tight integration to all parts of the Sage 500 distribution applications.

Warehouse Automation

The first warehouse automation solution available for Sage 500 ERP was Radio Beacon, now owned by Accellos. Radio Beacon is still available today for Sage 500 and is the most comprehensive (and most expensive) solution available for Sage 500 customers. For a brief period of time, Sage partnered with Scanco to deliver a Sage-labeled WMS solution. The Scanco solution is also a viable option for Sage 500 customers but offers little additional functionality. What Scanco does very well is to automate transactions via bar codes that would otherwise have to be entered manually. DCWarehouse by DCSC Corporation is the only major WMS solution available for Sage 500 ERP that is developed within the Sage 500 SDK with more advanced capabilities beyond simple bar code automation. The last major WMS option for Sage 500 WMS is O2 Mobile Warehouse by Escape Velocity Systems. What's the right solution for you? It all depends on your needs. Most companies evaluate several WMS systems selecting the one that has the best functional fit at the best price.

Electronic Data Interchange

The first EDI solution available for Sage 500 was <u>eBridge Software</u> which was available through Sage as an endorsed solution. It is still available today for Sage 500 but was replaced by <u>TrueCommerce</u> by HighJump Software which is the current endorsed solution available from Sage. Many other EDI systems are available for Sage 500 including <u>Mapadoc</u> by SWK (includes integration with SPS Commerce), <u>Kissinger EDI Advantage</u>, <u>RedTail EDI</u>, <u>B2B Gateway</u>, <u>Edisoft</u>, and a specific <u>Automotive EDI</u> integration utilizing Inovis TrustedLink for Windows by e2b teknologies. Customers are encouraged to evaluate several EDI solutions to identify the best solution for their needs. EDI evaluations can be difficult for companies that do not understand the terminology and the requirements. You will need to know what types of documents you will be trading (e.g., 810 invoices, 856 advance ship notices, etc.), whether they are inbound or outbound, the names of the trading partners (customers and suppliers), the estimated transaction volume per month, and other related information such as the required format (ANSIx or EDIFACT), and document version.



We were used to SAP – the Cadillac of ERP systems. It was very robust and allowed us to track many different types of data. e2b worked with us on our extensive customizations and made sure that we went live with the support we needed to be confident in the results. We had become accustomed to a certain level of functionality with SAP. Thanks to e2b, we didn't have to take a step back when we moved over to Sage 500 ERP.

eCommerce Sales

Sage entered the e-commerce world in 2000 with the introduction of Acuity 5.0e. The actual release number was 5.05 but the release was called 5.0e specifically for the introduction of the new eCustomer module introduced in that release. A white paper titled <u>E-Business and Sage Enterprise</u> <u>Suite</u> was developed highlighting this new module. eCustomer was quickly antiquated and Sage later replaced it with <u>eBusiness Suite</u> developed by

Sage 500 partner RKL. Another eCommerce option for Sage 500 is <u>Anytime Commerce</u> by e2b teknologies.

Anytime Commerce is a complete ecommerce storefront that integrates directly with Sage 500 ERP. Unlike most ecommerce storefront software, Anytime Commerce is designed specifically for business to business (B2B) online storefront sales. Major features of Anytime Commerce are listed below:

- **Shopping Cart** Shopping carts are easy to access from the top screen with order totals and quick access to the check-out screen.
- Content Management Use the built-in content management system (CMS) to maintain your website, including news feeds, contact forms, images, and other content by logging into your site and adding or rearranging content in a visual drag-and-drop interface.



- **B2B / B2C** Optimized for B2B ecommerce, Anytime Commerce also supports B2C sales and integrations your storefront to your backoffice accounting ERP business system for customer-specific products, customer pricing, and account history.
- Integrations Anytime Commerce provides integrated sales tax calculations, freight and shipping costs, and credit card processing.
- **Item Catalog** Item catalogs can be setup in categories and subcategories with attachments, images, product descriptions, and tagged keywords to assist with product searches with access to inventory stock status and other information.
- Sales Reps Sales rep and dealer log-ins provide access for your sales force to place orders or to review their customer account history.

Production Management

Advanced Kitting

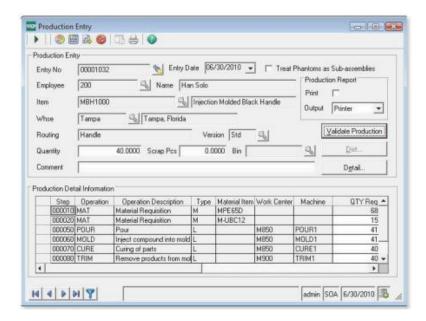
The <u>Advanced Kitting</u> module is the same module as Light Manufacturing (below). Sage introduced this module name as it is more relevant for wholesale distributors who perform light assembly as opposed to true manufacturing.

Light Manufacturing

The <u>Light Manufacturing</u> module provides an easy-to-use Production Entry screen where finished goods are reported after the fact. This single point of entry eliminates dozens of potential labor and production transactions by automatically issuing material quantities, outside process transactions, and labor time to finished goods.

Additionally, distributors can identify labor as part of the kitting process. This dramatically improves product costing, subsequent pricing, and the kitting procedure. Benefits and features of the Light Manufacturing module include:

- Manage production and kit assembly without complicated labor transactions or material issues.
- Establish standard routings and bills of material for make items.
- Simplify the production process by eliminating work orders.
- Report production only for finished goods. Other labor transactions are automatically calculated at standard rate.
- Use job costs to establish prices, profitability, and business plans.
- Use the optional Alerts module to notify your maintenance and production departments when assets are due for maintenance.
- Add optional modules for MRP, Estimating, Engineering Change Management, and Product Configuration.
- Organize, Analyze, and graph production assembly information such as component usage, assembly costs, and scrap quantities.





Understand how manufacturing costing functions in Sage 500 ERP. Sage 500 supports FIFO, LIFO, Standard, Actual, and Average Costing. What costing method is right for you? That depends on your business needs. Job shops and make to order companies typically implement Actual Costing but that requires that you track raw materials by lot which adds complexity. Some companies use FIFO or LIFO costing for financial reporting benefits but these also add complexity. Standard Costing is perhaps the easiest costing method to implement and is suggested for companies that have relatively simple costing and inventory tracking requirements. A white paper, <u>Sage 500 Manufacturing Costing White Paper</u>, is available explaining how Sage 500 ERP handles each of the five costing methods.



Do not change costing methods once you've implemented Sage 500 ERP unless you're working with a professional consulting organization that has experience performing these changes. All costing methods other than Standard utilize cost tiers which are stored in various tables throughout Sage 500 ERP. If you are changing, for example, from FIFO to Standard and you do not do everything right, you will be left with multiple cost tiers for an item which will cause serious problems with your costing and financial reporting which are nearly impossible to fix in the future. Too many companies have tried to change costing methods unsuccessfully and many decide to change for reasons that simply make no logical business sense. The time involved in making the change from one method to another is typically between 40-80 hours so this is not a project for an inexperienced consultant or system administrator. You wouldn't perform brain surgery on yourself without a specialist – do not attempt this on your own.



Sage 500 ERP's manufacturing system uses an integrated bill of manufacturing containing both the material and labor operations. Various fields in routing maintenance affect how manufacturing costs are determined as well as quantities and requirement dates for materials in Material Requirements Planning. It is imperative that the manufacturing routing and bill of material be setup properly or manufacturing costs will not be accurate and MRP will recommend purchase orders and work orders for the wrong quantities of items (or the wrong order dates) resulting in stock-outs, over-stock, excessive carrying costs, and late orders.

Advanced Manufacturing

The Advanced Manufacturing module includes all the functionality of the Light Manufacturing/Advanced Kitting module as well as enhanced work orders and labor and production reporting. This system provides shop floor visibility to your entire enterprise. With a few mouse-clicks customer service can quickly view the status of a customer order without having to interrupt the shop supervisor. Advanced Manufacturing provides instant visibility to see which employees are currently on the clock in any production facility. The GAAP-compliant job costing system helps you identify which manufactured items are generating the most profit and which items are costing you money. You can identify production bottle-necks and respond in real time to last-minute engineering changes and high-priority orders. Businesses define operations, machines, work orders, and other options based on their needs as opposed to predefined options. This allows you to tailor Advanced Manufacturing to your unique manufacturing environment and corporate business module.

Advanced Manufacturing is especially well suited for assembly, electronics, metal fabrication, machine/equipment manufacturing, and other production environments. A vertical solution from e2b teknologies is available for Automotive Supply Chains.

Benefits and features of the Advanced Manufacturing module:

- Gain shop floor visibility to your entire enterprise.
- Robust job costing enables you to accurately determine pricing and profitability for each item.
- Define operations, machines, work centers, and other options based on your unique manufacturing environment and business needs.
- Efficiently manage work orders for all manufacturing activities.
- Track actual labor times for accurate job costing and labor and production reporting.
- Track shipments of parts to outside vendors for subcontracted operations such as hear treating, assembly, coating, or painting.
- Empower customer service personnel to quickly view the status of customer orders.
- Use Business Insights to analyze Advanced Manufacturing data and transactions including work orders, costs, and quantities.

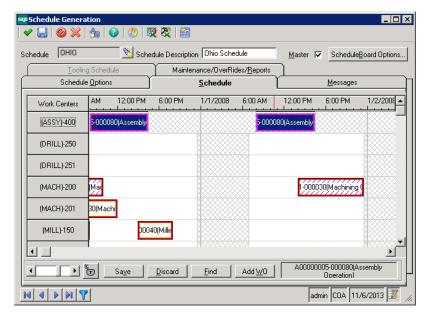


Sage acquired essentially a version 2.0 of the manufacturing applications from Haitek Solutions in 2001. Very little additional functionality was added to the core Light or Advanced Manufacturing modules since the acquisition. Most manufacturers utilize Anytime 500 by e2b teknologies which includes hundreds of enhancements to extend Sage 500 manufacturing. These include Routing Step Copy, Enhanced Costing, Batch Process Production Entry, Enhanced Labor Entry, Sub Work Orders, Work Order Splitting, Work Order Allocations, Engineering Change Orders, Quality Management, Cost Modeling, and other features to make Sage 500 manufacturing easier to use and more functional.

Advanced Planning & Scheduling

The Advanced Planning & Scheduling module uses industry-standard scheduling rules to automatically schedule production based on advanced algorithms and mathematical calculation. System-generated schedules provide a great foundation but do not take into consideration real world concerns. That's why the APS module includes a drag-and-drop schedule board. The schedule board displays all system-generated operation schedule, and it allows supervisors or production scheduling personnel to tweak the schedule to fit in high priority orders or to move scheduled operations to a different machine when another breaks down.

APS provides companywide visibility for production schedules. Your customer service, management, sales, and other employees have online access to view the status of each customer order. It provides customer service with tools to quickly find scheduled completion dates across manufacturing facilities.



The APS module was developed originally by Haitek Solutions in 1999. Little has been done to the product since the initial product release. The product utilizes an OCX control developed in Delphi for the schedule board itself. Delphi is a very old technology and as such, few programmers would ever want to modify the APS module. As such, manufacturers who need more advanced APS capabilities typically consider one of two options – <u>Planet Together</u> APS or <u>Preactor</u>. Both are enterprise-class applications with much more functionality than the Sage 500 ERP APS with an average cost (software and services) typically 2-4 times that of the Sage 500 APS module.



Sage 500 MRP does not consider capacity constraints such as labor, tooling, or work center (machine) availability. When used with the Sage 500 APS module, resource constraints can be integrated and considered within MRP by first generating MRP and then running the planned orders through the APS schedule against capacity constraints and work center and machine schedules (including down time for planned preventative maintenance, shift availability, and holidays.

Engineering Change Management

The <u>Engineering Change Management</u> module integrates with email notification, providing instant visibility and standardized approval methods for routing and bill of material changes. Any change made to an ECM-controlled routing and bill of material is routed through email to members of an approval group. Each member has a specified amount of time to approve any engineering changes. Engineering Change Management can also be used to track effective dates and retirement dates for each routing and bill of material. Engineering Change management is also crucial to quality control and is a requirement for ISO and QS certification. Benefits and features of Engineering Change Management include:

- Gain instant visibility into routing and bill of material changes.
- Improve communications with automatic emails sent to members of up to seven different approval sequence groups.
- Increase efficiency with online approvals of change requests and the ability to enter notes for each approval sequence.
- Use effective dates and retirement dates to eliminate guesswork about which version of a routing/bill of material to use.
- Analyze and monitor engineering change information to gain insights into how material and labor changes will affect production costs and pricing.

Engineering Change Orders

The Sage 500 Engineering Change Management module provides very basic control over simple routing and bill of material changes. What it does very well is to automate the approval process for engineering changes. However, it has some major functional gaps that require the Engineering Change Order module developed by e2b teknologies. The ECO module integrates with the Sage ECM module for change order approval workflow but it offers a much more comprehensive solution than ECM by itself. Some of the major advantages of ECO are:

Multi-Routing ECO – Control changes to subassembly routing and bill of material definitions as well as all finished good routings and bills of material that use the subassembly – all within the same ECO.

MRP Effective Dates – Sage MRP does not respect Sage 500 ECM effectivity dates. For example, an approved ECM in Sage 500 that takes effect in the future will not be used for MRP planning. MRP instead will use the current effective version for planning. The ECO module, on the other hand, is integrated with e2b's Enhanced MRP so that future-effective and approved changes are used in the MRP planning logic.

ECO Number – The ECO module tracks changes using a unique ECO number which is added to the routing and routing version to form a three-part identifier for the part revision. Additional functionality includes revisions for purchased items, reason and type codes, and more.

Estimating

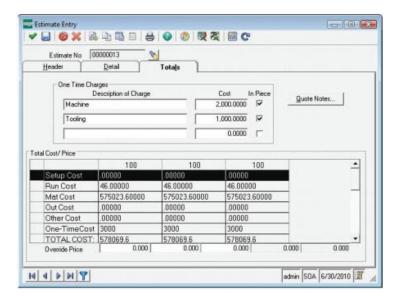
Estimates can be converted to a customer quote or directly to a sales order with one mouse-click. Further, an estimate may be copied to or from an existing routing and bill of material. This allows you to quickly create new estimates based on similar items or previous estimates. Estimates can even be created from existing work orders. This is critical because you can use the actual material quantities, scrap yields, and actual costs from a similar job to product more accurate quotes.

Enable your estimating department by providing flexible markup codes for up to five different quantities of parts. You can choose how to mark up materials, labor, outside processing, tooling, and other costs. Final estimates provide insightful production information, including total cost, cost per piece, total price, price per piece, and gross profit.

<u>Estimating</u> is compatible with either Light or Advanced Manufacturing. The optional Product Configurator module can help engineers by allowing them to create custom-designed routing and bills of material using sophisticated configuration rules. These configured routing and bills of material can be copied to a new part estimate.

Benefits and features of the Estimating module include:

- Accurately calculate costs and prices for new parts using inventory costs, work center rates, and other data.
- Convert estimates to a customer quote or directly to a sales order.
- Improve accuracy on new quotes by using actual material quantities, scrap yields, and actual costs from a similar job.
- Estimates and quotes can include multiple quantities of items, each with different markup codes.
- Assign dates to each estimate to accurately track start date, promised date, required date, order date, manufacturing release date, and expiration date.
- Final estimates accurately calculate production information including total cost, cost per piece, total price, price per piece, and gross profit.
- Analyze and monitor Estimating data to gain more insights into estimating and quoting.



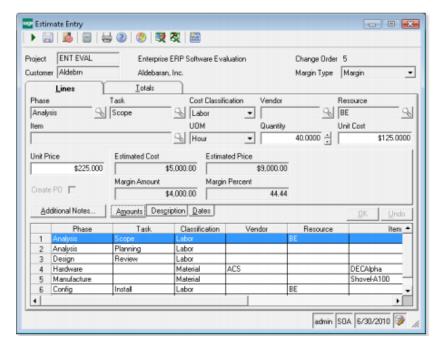
Project Management

The <u>Project Management</u> module is the same as the Project Accounting module but renamed to help companies understand that it can be used to manage research and development (R&D) and other manufacturing projects due to integration between Project Accounting and Manufacturing. It enables your project managers to assign resources easily to projects, track actual versus estimates costs through project completion, and generate detailed estimate for customers. Projects can be based on a fixed price, by accounting for time and materials, or a combination of both options. The module allows you to manage a wide variety of project types. Additionally, the six GAAP-compliant profit recognition methods enable you to control profit recognized over each period.

The Project Management module boasts a series of tools designed for businesses that install or service products. Time and materials can be instantly expensed throughout the installation or service processes.

Benefits and features of the Project Management module include:

- Increase profitability by managing a wide variety of projects, including design, manufacturing, installation and service.
- Improve accuracy by creating manufacturing work orders directly from a project to link production to materials required on project phases and tasks.
- Easily assign resources to projects, and accurately track actual versus estimated costs to prevent cost overruns and maximize profitability.
- Manage projects from design to engineering, and optionally utilize the powerful manufacturing modules for production management.
- Monitor all details of your project, including estimates, change orders, purchase orders, timesheets, and billing.
- Process your time and materials against one or multiple projects.
- Input expenses electronically as they are incurred without the hassles of paper submission.



Sales Forecasting

Sage 500 offers four primary means to create demand for inventory that can be used to drive MRP plans. A third party alternative, <u>Anytime Supply Chain</u>, is available as a fifth option. Below is an overview of each demand forecasting option for Sage 500 ERP.

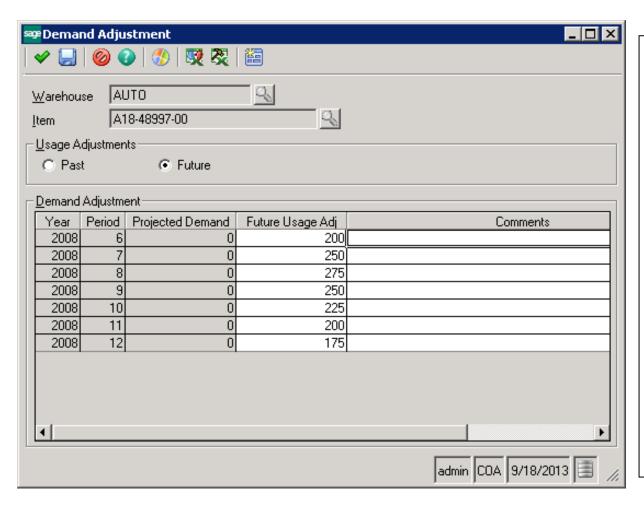
Dummy Sales Orders – Some companies create dummy sales orders in the system and use a user defined field to define these sales orders as "Forecast Orders." The dummy sales orders are easily filtered out of other sales order lists by using the type field. These sales orders are accurately accounted for as planned demand within the Sage 500 MRP application. However, actual sales orders will duplicate demand since the forecasted demand is not consumed by the real sales order demand. Further, this is a manual process that is prone to error and is very labor intensive to maintain.

Inventory Replenishment – Sage 500 has a fairly sophisticated inventory replenishment system that can use historical demand to predict future demand. Some of these native features may be useful for customers. For example, Sage 500 allows you to create custom lead time formulas for inventory items by warehouse location. It also allows you to create safety stock formulas to determine accurate safety stock settings for each inventory record. The system also includes demand formulas which apply a weight to previous inventory periods to utilize sales history to predict future demand. This works really well if products have a predictable demand pattern such as well-established items that have some seasonality. The downside to Sage 500 Demand Formulas is that they are not dynamic and do not recognize items that are trending up, trending down, or where seasonal patterns are changing. It is imperative that planners review demand formulas frequently – especially for items where there are supply and demand issues. Further, demand formulas only generate forecasted demand in the inventory calendar period. For example, most companies use a monthly inventory calendar which affects demand planning as well as their financial periods. However, many companies prefer to forecast demand in different period sizes that differ from their inventory calendar – such as weekly or quarterly forecasts. Further, Sage 500 demand forecasts are by item and by warehouse and cannot be managed by customer which is often a requirement that companies need to get a more accurate demand forecast. For these reasons, Sage 500 Inventory Replenishment is difficult to use for demand forecasting for most businesses – especially manufacturing businesses.

Demand Adjustments – Sage 500 includes a Demand Adjustment task (Figure 1) where planners can manually enter a demand adjustment by inventory period for future demand. This is used in MRP. There are several problems with using Demand Adjustments for Forecasting. As mentioned previously, demand must be entered in the inventory calendar period (typically monthly), cannot be entered by customer, and must be manually maintained and manually input in the system. This simply is not a realistic method for most Sage 500 customers.

Sage Inventory Advisor – <u>Sage Inventory Advisor</u> is a new endorsed solution available for Sage 500 ERP 2013 and beyond. This product is similar to Inventory Replenishment and is designed primarily for wholesale distributors (not for manufacturers requiring an MRP planning tool.

Figure 1: Sage 500 Demand Adjustments





Understand your demand forecasting requirements and how they impact your planning process for purchase orders, transfer orders, and manufacturing work orders. Evaluate several options with a consultant that understands supply chain planning and demand forecasting. Failure to implement the right sales forecasting solution can have significant negative effects on your customer service and can result in stock-outs, over-stock, and excessive carrying costs. Consider customer and vendor requirements and how they impact internal material planning activities.

Anytime Supply Chain – Sales Forecasting

e2b teknologies provides Anytime Supply Chain for Sage 500 which allows companies to define demand forecasts which can be used to drive MRP planning. Statistical forecasts can be developed using products such as ForecastPro or others to develop statistic-based forecasts which can be used to drive MRP plans within Anytime Supply Chain.

Material Requirements Planning (MRP)

The <u>Sage 500 MRP</u> or Material Requirements Planning module was originally designed for manufacturers but it can be very useful for wholesale distributors since the Inventory Replenishment system has similar functionality for planning purchase orders but is not time-phased. Further, MRP has a lot more functionality around planning than release orders within the replenishment system. For this reason, Sage licenses companies for both Inventory Replenishment and MRP when they buy one or the other. Implementing Sage MRP is not easy since there are many parameters that can have adverse affects on the material plan. The MRP module considers Sage 500 supply (inventory, finished good work orders, purchase orders, and inbound transfer orders) and demand (sales orders, raw material requirements for work orders, project accounting material requirements, demand forecasts from various sources, and outbound inventory transfers) along with inventory and item parameters to determine what to buy or make, when, how much, and from which suppliers. Sage 500 MRP is missing many features that are typically available in other MRP systems. As such, most manufacturers and distributors using Sage 500 ERP also use one of the Enhanced MRP planning solutions available from e2b teknologies. These include a traditional Sage 500 SDK application called Enhanced MRP or the newer Anytime Supply Chain product.

Anytime Supply Chain - MRP

For years, e2b teknologies has sold two modules developed within the Sage 500 ERP SDK for supply chain management – Sales Forecasting & MPS and Enhanced MRP which included dozens of enhancements for Sage 500 MRP. These two modules have been completely redesigned and rewritten in Microsoft .NET and HTML and are now available in e2b's Anytime Supply Chain product for use with Sage 500 ERP and other ERP systems including Sage 100, Sage 300, and others.

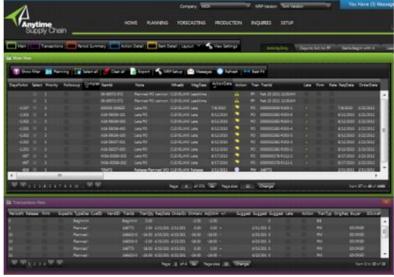
Anytime Supply Chain includes all of the great MRP capabilities in Sage 500 MRP plus the ability to schedule MRP generations; move in/out action messages; cancellation action messages; min/max/multiple order quantity definition for purchased and manufactured items; blanket purchase order integration with Sage 500 ERP, and dozens of additional features making it even easier than ever for material planners and buyers.



Understand what fields in Sage 500 ERP impact Material Requirements Planning calculations. e2b teknologies has developed a <u>Sage 500 MRP Guide</u> which outlines every field used by MRP with tips on how to most effectively use the application. This is a critical guide for anyone using Sage 500 MRP.

<u>Anytime Supply Chain</u> improves material plans and purchasing with demand pegging, exception messages, approved vendors, and new purchase order parameters. Action messages alert planners to issues regarding actual and planned purchase orders and work orders with recommendations

for move-in, move-out, and order cancellations. Inventory items can be flagged as "make to order" so that MRP generates planned work orders dependent to sales order line quantities with the order line copied to the work order as a reference. The MRP Scheduled Generation Utility is used to automatically generate MRP on a pre-defined schedule, such as nightly or weekly every Sunday night. Users may define a minimum or maximum order quantity for purchased items similar to the min/max options for manufactured items in Routing Maintenance. Further, purchase multiples may be defined for case packs, truckload quantities, carton orders, or other mandatory purchase multiples. Many additional features are included in the Anytime Supply Chain module.



Product Configurator

Product Configurator builds new parts by starting with a base item and adding features or options to it. New items can be created on the fly using customized items masks, new long and short item descriptions, and other options. Finished configurations contain unique routings and bills of material built during the configuration process. Product Configurator also builds the item cost and suggested price. Popular configurations are saved and reused as standard parts. All configurations are based on standard rules that limit or require certain features or options if another feature or option is selected. Final configurations can be validated to make sure that the final item can be produced. The Product Configurator has some limitations – especially for more complex configurations that require more control over option and value definition and nested configurations. There are many third party product configurators available on the market but few that integrate well with Sage 500's manufacturing system. One popular option recommended by e2b teknologies is ConfigureOne.

Shop Floor Control

Shop Floor Control provides access to all of the activities that generally take place in the shop. Users can log onto or off of operations manually or

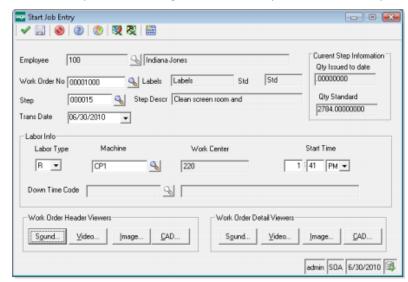
they can use the built-in barcoding functionality to scan work order numbers and work order steps for automatic logons. The logon and logoff activities include easy-to-use look-ups and number pads for data entry. They also include multimedia buttons that link directly to any multimedia or CAD attachments for the work order.

A current activity report and inquiry are provided to show which employees are currently logged on to a job at any manufacturing facility providing enterprise-wide visibility. The Shop Floor Control menu is easily customized to include virtually any activity, maintenance function, report, or inquiry you need to run your shop floor.

Benefits of the Shop Floor Control include:

- Real-time labor and production reporting shows current activity and current production status at all facilities at any time.
- Improve productivity with touch-screen technology and handheld devices.
- Supervisors can view and assign job tickets to employees for a paperless shop floor system.
- Analyze and monitor manufacturing data and transactions to effectively and profitably manage manufacturing operations.

Many companies require more sophisticated systems for Manufacturing Execution Systems (MES) and machine integration with the ERP production system. e2b teknologies provides custom software and integration services to third party MES applications. Further, integrations to time clock applications can be developed by e2b teknologies to integrate time clocks not only with human resources and payroll systems but also for time reporting against work orders in the manufacturing application.



Process Manufacturing

O2 Process Manufacturing is a third party manufacturing system developed in the Sage 500 ERP SDK specifically for companies in process manufacturing industries such as chemicals and food and beverage. O2 Process Manufacturing has the tools necessary to eliminate the "islands of data" many companies find exist and to make the entire enterprise visible to those who are making daily critical decisions. This can be done with the use of real-time cost data, inventory management and forecasting, lot tracking, unit of measure calculations, batch sizing, capacity resource scheduling, certificates of analysis (COA), auditing, security, and reporting capabilities. Major features include formula definition, potency and batch scaling, yield and loss calculations, regulatory compliance and much more. This is a fantastic industry application for companies that truly require a process manufacturing solution.

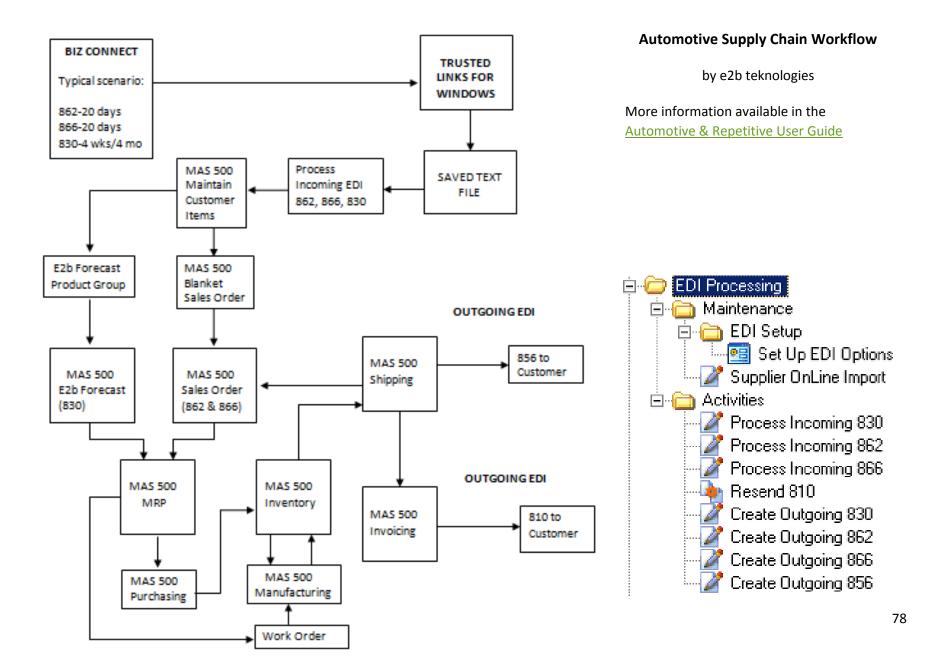
Automotive Manufacturing

An <u>Automotive Supply Chain</u> solution is available from e2b teknologies for distributors and manufacturers of parts to tier one automotive manufacturers. Automotive manufacturers are similar to other manufacturers but must comply with electronic trading requirements specified by their large automotive and heavy truck customers. These EDI mandates have forced many companies to implement or stay on antiquated ERP applications that support their customer requirements but offer very little competitive advantage in other areas of the application.

Sage 500 ERP is one of the few ERP products built on 100% Microsoft technologies with available functionality to support automotive suppliers conducting in-bound and out-bound EDI with customers and vendors. Unlike other canned ERP solutions that interface to third party EDI translators, Sage 500 ERP provides a true integration of ERP and EDI. EDI is maintained natively for customers, vendors and inventory items. EDI transactions are processed through Blanket Purchase Orders and Blanket Sales Orders. The MRP system considers in-bound customer forecasts for planning and can generate outbound vendor forecasts as well.

Supported EDI transactions include inbound and outbound line sequence (866), planning forecasts (830), and line sets (862). Additionally, customers can transmit customer ASN, Purchase Order, and Invoice documents. Production may be entered for cells or assembly lines through the e2b teknologies Batch Process Production Entry task or back-flushed using Production Entry. VIN numbers and serialized items are tracked from receipt through production.

Further, Kanban Replenishment can be automated to manage bin-level replenishment for fasteners, hardware, and other items consumed on the production line or shop floor. MRP supports the creation of planned orders which can be sent via EDI to downstream suppliers for purchased raw materials. Supplier forecasts can include VIN sequencing and additional production and inventory information.



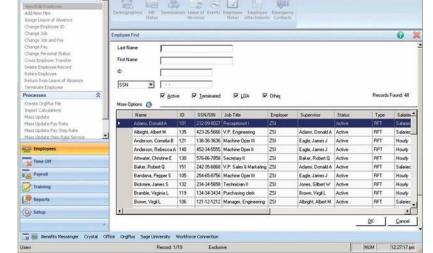
Human Capital Management (HCM)

Sage HRMS

<u>Sage HRMS</u> helps you elevate the level of service your HR department provides. This easy-to-use software lets you deliver crucial process analytics and decision support to management, increase employee motivation and retention, and improve organizational efficiency by automating employee related procedures. Click here for the user guide. Using Sage HRMS you can:

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- Reduce time-consuming and error-prone clerical work by centralizing, tracking, and reporting employee data that may be scattered across multiple systems.
- Ensure government compliance to avoid company risk in meeting federal and state rules, regulations, and reporting requirements.
- Manage your employee information more effectively with a set of powerful tools.
- Closely monitor employee records and personnel actions, HR compliance, benefits administration, absence management, reporting (standard and custom), and data import/export actions.



Sage HRMS Payroll

<u>Sage HRMS Payroll</u> is very flexible, supporting a range of tax management capabilities, variable pay plans, including sales commission and piece-rate plans, and a variety of pay frequencies to meet the needs of organizations such as government and schools. Sage HRMS Payroll supports the needs of most industries, including manufacturing, services, retail, wholesale, financial, transportation, high-tech, government, education, construction and agriculture.

Thank you for the quick turnaround. As usual, we are happy with the support we receive from e2b teknologies.



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Sage HRMS Attendance

<u>Sage HRMS Attendance</u> provides flexible attendance tracking features such as vacation, personal, and illness, jury duty, and bereavement time-off management. It also includes numerous reporting options. You can pinpoint trends in absence transactions with standard reports such as absence averages, absence percentages by department, and ranked lists by hours absent. Other standard reports include perfect attendance, FMLA due to return, medical recertification, and more. You can also create custom reports via the Abra Secure Query (ASQ) feature, or build reports with Crystal Report Writer, included with the purchases of Sage HRMS.

Customer Relationship Management

Sage has changed its CRM strategy for Sage 500 ERP dramatically through the years. Early versions of Sage 500 were often integrated to the leading CRM solutions available in the late 1990s and early 2000s including Pivotal, Onyx, SalesLogix, and even Seibel.

Sage later acquired Interact Commerce (ACT! and SalesLogix) and heavily promoted SalesLogix for use with Sage 500 ERP. A third party developed integration between Sage 500 ERP and SalesLogix. This integration, called Dynalink, was later acquired and sold by Sage to customers as the primary integration between the two systems. Sage replaced the Dynalink integration after Sage 500 version 7.2 with a new product called ERP Link which is the current integration tool available between Sage 500 ERP and SalesLogix.

Sage acquired Accpac (now Sage 300) in 2003 from Computer Associates. This acquisition brought along Sage CRM which had been acquired in 2002 by Accpac International from the original publishers, eWare Ltd. based in Dublin, Ireland. Sage started building an integration between Sage 500 and Sage CRM but quickly abandoned the project.



Sage sold SalesLogix and ACT! in 2013 to long-time marketing automation partner leaving Sage only with Sage CRM which still does not provide native integration to Sage 500 ERP. Integration for Sage CRM to Sage 500 requires third party integration software. The most popular is <u>GUMU by</u> <u>Greytrix</u> but other options have been available from various providers throughout the years.

Sage CRM

<u>Sage CRM</u> Professional (Cloud) is built on 100% web-based architecture, and is a tool used to automate your marketing, sales and customer service operations. Sage CRM Professional includes:

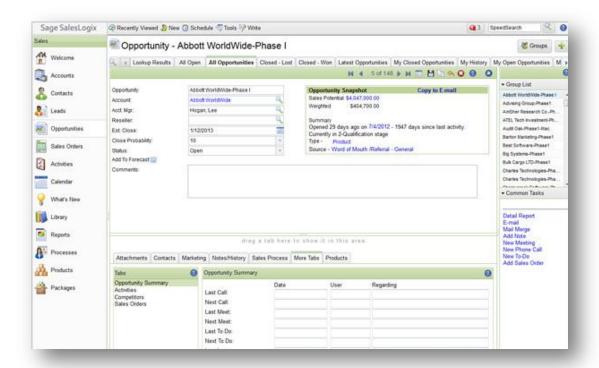
- Contact management
- Opportunity management
- Sales forecasting
- Quotes and orders
- Lead management
- Interactive dashboard
- Reporting
- Find/Advanced find
- Group management
- Microsoft Outlook integration
- Mobile device support
- Twitter integration
- Cross-browser compatibility
- Data import
- Case management
- Solutions/Knowledgebase management
- Campaign management
- Outbound call handling
- Manage relationships types
- Email management
- User management
- Territory/Security management
- Workflow
- Preconfigured escalations
- Professional user management



SwiftPage SalesLogix

<u>SalesLogix</u> is a secured CRM solution that provides a complete view of customer interactions across your departments and teams – providing the information and insights you need for better planning, managing, and forecasting. Features of SalesLogix include:

- Account, contact & opportunity management
- Calendar & activity management
- Microsoft Outlook and Office integration
- Process & workflow automation
- Sales forecasting & territory alignment
- Lead qualification & management
- Campaign management & ROI
- Integrated email marketing
- Ticket management
- Service contract management
- SpeedSearch KnowledgeBase
- Defect tracking & returns
- Customer self-service web portal
- Web, windows, and mobile access methods
- Disconnected web client
- On-premise or cloud deployment options
- Back-office integration
- Advanced customizations
- Data mashups capabilities



SwiftPage ACT!

Although not a full CRM solution, <u>ACT!</u> does provide many of the features of a full CRM and it is the #1 contact and customer manager choice of small businesses and sales teams. A few third party integrations exist for SwiftPage ACT! and Sage 500 ERP including one from <u>DataPlus</u>.

SugarCRM

Sugar is one of the fastest growing CRM systems available today. Sugar helps your business communicate with prospects, track them through your sales cycle, close deals, and keeps your customers happy. It allows you to automate your business processes like sales, marketing, customer support, and more. Sugar's open source platform provides unlimited flexibility and control over your CRM deployment. Make unrestricted customizations, integrate with any third-party or legacy system using Web Services or Enterprise Service Bus (ESB) solutions, or build completely new modules with easy-to-use administration tools. Integration between SugarCRM is available for Sage 500 through Starfish ETL, a division of Technology Advisors.

Features of SugarCRM include:

- Sales force automation
- Marketing automation
- Support automation
- Integration via web services API
- Customizable reporting
- Customizable forecasting
- Business process workflow
- Social CRM
- Mobile CRM
- Unlimited support
- Run anywhere
- Source code access





Your team has been very helpful, diligent, and attentive to us in our 7.3 upgrade. Everyone is very responsible to all of our requests and patiently works through the open items with us. The entire e2b team deserves a pat on the back for a job well done!

Customization Tools

Sage 500 ERP allows you to customize its entire system to match your specific needs. The <u>customization tools</u> also provide a foundation for integrating Sage 500 ERP with other applications, and for developing Microsoft-based business applications for the SQL Server environment that are compatible with Sage 500 ERP. With Source Code, you can tailor the entire Sage 500 system.

Benefits of the Sage 500 Customization Tools include:

- Customize screens without modifying source code.
- Get the information you need exactly the way you want it by customizing financial and operational reports.
- Personalize business intelligence and key performance indicators to quickly get information that is most valuable to your business.
- Extend your ERP solution by integrating data from custom applications and third-party systems.
- Rapidly develop custom add-ons with the look and feel of Sage 500 ERP.

programming knowledge, you can use Customizer to adapt form controls, tab

Customizer

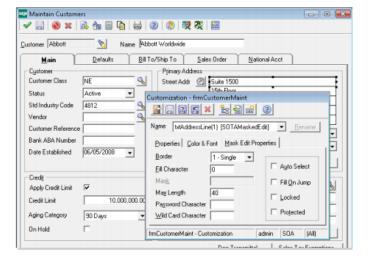
The Sage 500 <u>Customizer</u> enables you to modify screens and forms easily to match your specific business process. Even if you lack extensive

sequences, and more, without changing source code.

You can enable business logic, define custom processes, or add new controls or application functionality by using the scripting languages included with the Customizer. This powerful feature also offers easy management of customizations through a server-based repository. You can also enable, disable, and delete customizations through a centralized customization management console. The customizer can alter application interfaces and add fields to forms using a short-cut approach that save valuable time. In addition, you can attach filed controls to database values, allowing you to add new fields to forms.

Benefits and features of the Sage 500 Customizer include:

• Change standard screens and forms to fit your company perfectly.



- Apply custom changes to specific users or across your entire organization.
- Save data entry integrity by assigning default values to key fields.
- Capture mission-critical information by creating new fields.
- Modify form controls and field navigation to speed up data entry.

Software Development Kit (SDK)

You can use the <u>Software Development Kit</u> (SDK) to add functionality to standard Sage 500 applications, or as the basis for any Visual Basic or SQL business application development project. It is comprised of ActiveX software controls, tools, applications wizards, and utilities. The SDK module is the same framework that has been used to develop Sage 500, and is commonly used to create new reports, build new data entry screens, and develop custom applications. The Sage 500 SDK Installation Guide is a vital resource for more information on this module.

Source Code

The Sage 500 Source Code is available for development and implementation but it is relatively expensive and is intended only for larger companies that have dedicated IT resources that have been trained how to use the SDK. Most companies should NOT make their own source code modifications but are encouraged to work with a professional and experienced Sage 500 development firm for any and all source code modification projects or complex integrations. Further, an experienced developer will know the best way to solve a problem with the least impact on your Sage 500 ERP source code making it easier to upgrade to future releases and minimizing upgrade costs for customizations.

In addition to getting projects done right and on time, e2b has also done a great job in providing us with on-site and web-based training. It's nice to have them offer this kind of training — where we need it, when we need it, and on the subject of importance to our staff rather than a pre-scripted training manual. As a solution provider — the thing I like best is that they know manufacturing and they understand how to make technology work for a company like ours. Their solutions really work for us — they're not overly complex. e2b are manufacturing system experts and know how to make technology for a company like ours. They are simply among the best at what they do.



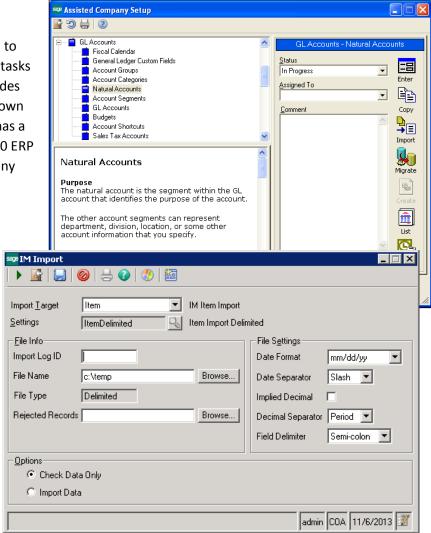
Enterprise Data Management

Assisted Company Setup

Assisted Company Setup is designed to walk you through the steps needed to setup a company in Sage 500 ERP. It is used to provide maintenance setup tasks and ensures the correct sequence based upon data dependencies. It provides you several tools to help you bring your data in. This tool is relatively unknown to many Sage 500 ERP users but has a lot of value for implementations. It has a lot of tools specifically designed to help companies migrating from Sage 100 ERP (formerly Sage MAS 90 or Sage MAS 200) to Sage 500 ERP. Assisted Company Setup is extremely helpful when converting large files.

Import Utilities

Sage 500 ERP has provided data <u>import utilities</u> in most modules to import small amounts of data into the system since the inception of Sage 500. Import Utilities are included in the Sage 500 ERP Maintenance menu in a Utilities directory. For example, the IM Import Utility is one of the more popular utilities which is used to transfer data from another module or another application to the Inventory Management module. You can also transfer Inventory Management information from a remote location or company to consolidate the information at a central site. You can import data formatted as ASCII records in flat files of fixed length records or of delimited records (identified by a specified character). A single import file cannot contain both record types. By convention, files containing fixed length records are given the extension ".asc," while the files containing delimited records are given the extension ".del." The Import IM Data utility allows you to import the item records, inventory records, and inventory beginning balance records.



Sage 500 ERP Owner's Manual

DataPorter

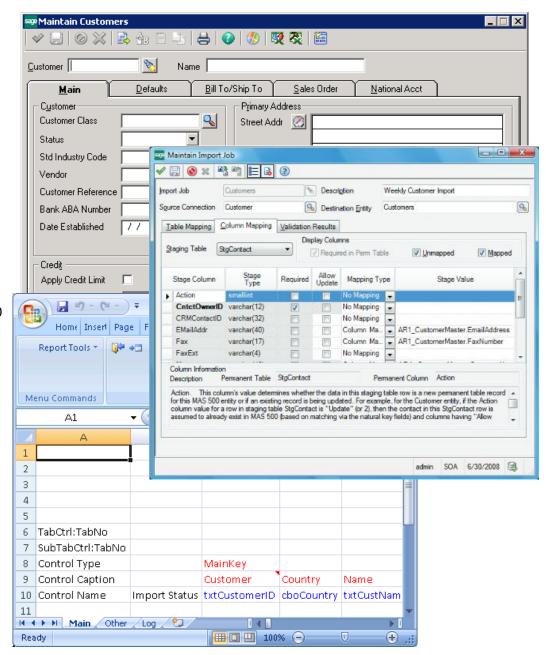
DataPorter utilizes Microsoft Excel to import larger amounts of data into specific maintenance screens within Sage 500 ERP. Introduced in Sage 500 ERP version 6.0, this is a useful alternative for data import activities – especially for one-time imports. It is accessed from a special icon on the menu or by using the shortcut – ALT + F7. DataPorter menu options are available in Microsoft Excel from the Add-Ins menu.

Data Migrator

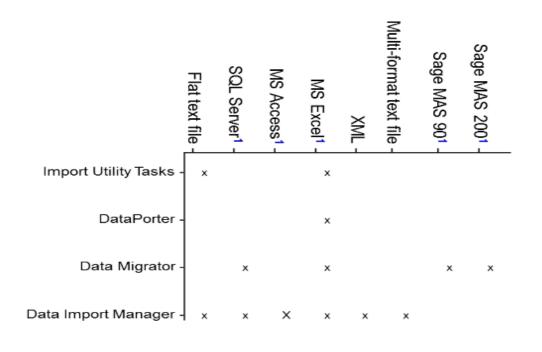
<u>Data Migrator</u> was introduced in Sage 500 ERP version 6.2. It is part of the Assisted Company Setup system within Sage 500 ERP used primarily for initial implementations.

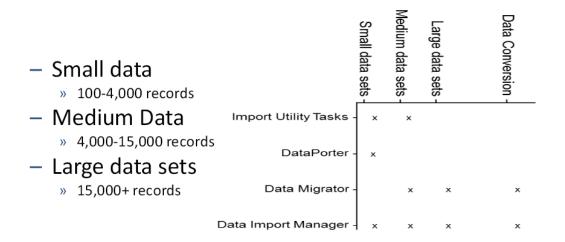
Data Import Manager

Data Import Manager (DIM) was introduced in Sage 500 ERP version 7.2. It is accessed as its own menu option in the Sage 500 ERP Business Desktop. DIM is perhaps the most flexible data import tool available since it can be used to import small or large data sets one-time or on a scheduled basis which is very useful for periodic updates such as updating pricing from suppliers or picking up sales orders from external systems such as ecommerce websites.



Comparison of Data Import Options for Sage 500 ERP





DataPorter can transfer data in the following Sage 500 ERP tasks:

- S/M Maintain Users
- C/I Maintain Non-Inventory Items
- C/I Set up Postal Codes
- G/L Maintain Natural Accounts
- G/L Maintain Account Segments
- G/L Maintain Accounts
- G/L Maintain Allocations
- G/L Maintain Recurring Transactions
- G/L Enter Journal Transactions (Standard or Beginning Balance entry types)
- A/P Maintain Vendors
- A/P Maintain Recurring Vouchers
- A/P Enter Vouchers
- A/R Maintain Customers
- A/R Invoices
- A/R Maintain Salespersons
- A/R Maintain Recurring Invoices
- I/M Maintain Items
- IM Maintain Item Classes
- I/M Enter Inventory Transactions
- I/M Physical Inventory Transactions Enter Counts
- P/O Enter Purchase Orders
- S/O Enter Quotes
- S/O Enter Sales Orders
- S/O Maintain Blanket Sales Orders
- Process Receipt of Invoices

Sage 500 ERP Security

Sage 500 has a very complex security system. The system is actually three-levels deep in respect to security. You can control access to the application using native Microsoft Windows security. You can also control access at the Microsoft SQL Server level. Lastly, the Sage 500 application itself offers security for every module down to every field within the system. Setting up the security system can be very confusing for new or untrained users. It is important to understand how the system is setup in respect to security groups, companies, sites, menus, tasks, users, roles, and security events. For more information on Sage 500 ERP Security, see chapter 5 of the Installation and System Configuration Guide.

Security Groups

Users are assigned to security groups which control access within the system. You can have (and probably should have) multiple security groups. Security Groups cross all Sage 500 modules. Task security allows for different permissions for accessing various tasks in the application. Permission options are explained below:

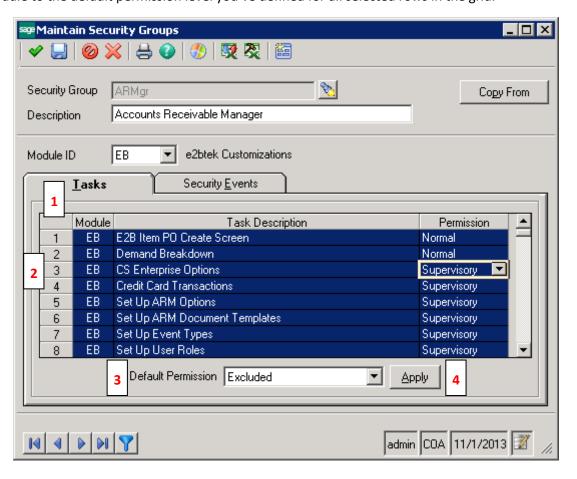
- Select **Excluded** to prevent users in the security group to view the task. If this option is selected, an entry field involved in the task may be bypassed, the button used to access the task does not appear, or a dialog box that is involved does not display.
- Select **Display Only** to allow users in the security group to only view the data. If this option is selected, the users cannot change the values at the fields or click buttons in the task.
- Select **Normal** to allow users in the security group to enter or change data. If this option is selected, buttons and dialog boxes related to the task are available to the users.
- Select **Supervisory** to allow users in the security group to enter or change data as well as perform supervisory tasks (for example, posting private batches).

Sage 500 ERP also includes security events which are essentially overrides and are application specific. For example, if a customer exceeds the limit of credit, the user can, if they have permission, allow the customer to override the credit limit. The user would see a dialog asking whether to allow the credit overrun. Depending on which tab you have selected (tasks or events), the security events grid displays the task description and access permission level for each task, or the security event description and security rights for each security event. You can change access permission levels and security rights two ways: use the grids pull-down features or apply a new default permission for all highlighted lines using the Default Permission field.



Most users don't know that if you click the top left corner of most grids in Sage 500 ERP that it will select all of the columns and rows like you would do in Microsoft Excel. You can then de-select specific rows in the grid by clicking on the row number column. This is useful in many ways. For example, when setting up security – select all of the rows for a module and then select the Default Permission drop-down box and click the apply button. This will set the default permissions for all selected tasks in that module to the default permission level you've defined for all selected rows in the grid.

- 1. Click the top left corner of grids to select all columns and rows.
- 2. Click on the row numbers to deselect or to select individual rows.
- 3. Select the default permission for the selected security group for each module.
- 4. Click Apply to set the default permission for the selected rows in the security task or events grid.





Implement a solid disaster recovery plan to protect your Sage 500 ERP data. This should include frequent backups of the database and implementation of a separate test environment for testing of customizations and integration to third party products.

Windows Authentication or SQL Server security can be used for both the FRx and Sage MAS 500 applications. See the following documents for more information:

- Sage MAS 500 Installation
- Sage ERP MAS Intelligence Installation Guide
- System Configuration Guide
- Online Help in Maintain Users and Maintain Security Groups
- Sage MAS 500 Compatibility and Resource Guide
- FRx guide

Database Security

- Verify the SQL Server security setting in the SQL Server properties (sp_configure).
- Sage MAS 500 creates either standard (SQL) or Windows Authenticated users in SM Maintain Users.
 - When creating new users, the logon is created in Sage MAS 500 and SQL Server.
 - Existing SQL Server, Windows or domain (Windows Authenticated) users, or groups can be added to Sage MAS 500.
 - Windows Authentication requires that logons or groups first be created in the domain or at the server.
 - Windows Authenticated (domain) users can start Sage MAS 500 only when logged on to the domain.
 - Domain users or groups can be added using the ellipsis in Maintain Users only after logging on to the domain. The domain must also be accessible from the SQL Server and the SQL Server startup account logon. When adding a Windows or domain group, access to Sage MAS 500 for all logons in that group is enabled. The user logons do not need to be added separately.
 - Only the System Administrator (sysadmin role) in SQL Server can add new users.
 - The 'Use Windows Authentication' option must be enabled at the logon window or the Desktop Configuration Utility to employ the domain logon for access to Sage MAS 500.
 - If a user is deleted from Sage MAS 500, that user remains as a SQL Server user. This is because the logon can be used with other SQL Server applications, but that user can no longer access Sage MAS 500. If necessary, delete the user from SQL Server using Enterprise Manager or Query Analyzer.

- Configure the application role for a more secure environment.
 - The application role information is configured in SM Maintain Site.
 - Remove the 'admin' user or deselect the System Administrator role for this user.
 - Sage MAS 500 prompts for the SA password to perform certain functions like adding users when you are not a System Administrator
 - Select the 'Allow Read Access' option in SM Maintain Users to allow users to employ their logon to access the SQL Server through FRx and Crystal Reports.
- The correct authentication method, SQL Server, and database must be selected to use an ODBC DSN in FRx or Crystal Reports.
- Select the proper security option when using FRx security. This option is accessed by clicking FRx Security in Organization Information.
 - Select the 'Require User Login' option for SQL Server authentication.
 - Select the 'Use Network ID' option for Windows Authentication.

SQL Server Roles

In versions greater than 6.0, security for Sage MAS 500 is assigned by roles. When not employing the application role, a user logon is assigned to the ApplicationDBRole, which enables all permissions to all objects in the Sage MAS 500 application and system database (application database beginning with version 7.0). This allows access to the Sage MAS 500 data from any application that can be used to log on to SQL Server.

When using the application role, Sage MAS 500 logons can be assigned to the role. The role revokes permissions to all objects in the Sage MAS 500 application and system database outside the Sage MAS 500 application, unless the Allow Read Access option is selected for the user logon. This option grants the user logon SELECT permissions only on the tables so that the logon can be used to query data for use in FRx, Crystal Reports, and so forth.

Perform the following to configure the most secure environment within Sage MAS 500:

- 1. Create user logons within the Windows domain.
- 2. Add all computers to the domain.
- 3. Create security groups in SM Maintain Security Groups that are specific to the rights you with to enable for users in specific tasks. Set Excluded permissions for Desktop Customization to disallow users to modify their task menu.
- 4. Configure Desktop menus specific to the tasks your users will use.

- 5. Add the domain users in SM Maintain Users. Do not specify a Default Security Group, but add the proper security groups for each user for each company. Remember, task permissions work on an inclusion basis, so the user inherits the most permissive rights allowed within the groups that user belongs to within the company specified (see Help in Maintain Users for additional information).
- 6. Select the 'Use Application Role' option within SM Maintain Users for all user logons.
- 7. Select the Task Menu the user will use within Sage MAS 500.
- 8. Remove all SQL users from access to Sage MAS 500 using SM Maintain Users.
- 9. Select the 'Use Windows Authentication' option for all users in the Desktop Configuration Utility.

System Manager

Sophisticated tools are included in <u>System Manager</u> that ensure data integrity and streamline processing and deliver enhanced security management. With System Manager, you can configure system and workstation settings, user security, and more. The module's data dictionary provides utilities for viewing and maintaining database files and enables you to modify and create your own custom databases and indices. Flexible period-end and year-end closing routines allow you to process, archive, and purge transactions on a schedule tailored to fit they way you operate your business.

Features of the System Manager include:

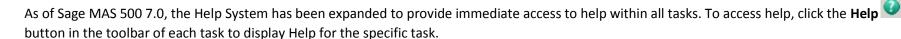
- Save time digging through data and easily prioritize your most pressing issues. Click through five smart tabs and you're instantly updated on the health of your business.
- Chart trends and track progress for a variety of important factors using the Favorite Views tab.
- Remotely manage customer records and review customer-related inquiries such as Payments, Receivables, Invoices, and Orders.
- Stay up to the minute with the Business Status Report (BSR) screen, which includes cash balances, forecasts, and inventory values.
- Remotely manage vendor records and review vendor-related inquiries.
- Drill down into your Accounts Payable, Accounts Receivable, Order Entry, or Purchase Order modules from one handy General Ledger account view.
- While working through a Web browser, use Contact view to look up your customer and vendor information through easy-to-sort lists.
- The Message Center allows you to communicate proactively with your team. With remote access through the Dashboard, you gain flexibility to focus on your business. Plus, check your messages, return calls, and track order placement—all from one screen.

Training & Customization Resources

There are many resources available for Sage 500 ERP system administrators and users to learn how to effectively manage Sage 500 ERP or how to best use the software. These include the online help system, <u>Sage University</u>, online forums, and certified consultants.

Help System

Sage MAS 500 7.0 and later:



The following guides are still available from Online Help in PDF format:

- Getting Started
- Implementation Planning
- Installation and System Configuration
- Internet Applications
- Web Reports
- Sample Reports

Sage MAS 500 6.30 and earlier:

Online Help is the primary resource for obtaining information about Sage MAS 500. Help is installed with the client software and is available from Sage MAS 500 windows, as well as the Business Desktop or older LaunchPad.

- Business Desktop (Sage MAS 500 6.1 and later):
 - On the **Help** menu, click **Information and Support Center**. This presents general information, as well as the links to the user guides that are installed locally
 - Help is divided primarily into three sections:

- User Guides General information about module usage and system settings
- Module Information Overview and frequently asked questions
- Task Information Procedures on working with specific tasks
- Click the **Complete index and full-text search** link to search for specific keywords and access module and task information (version 6.2 and later).
- LaunchPad (Sage MAS 500 6.2 and earlier):
 - Click the **Help** (?) button on the LaunchPad to access Online Help. The same information as above is generally available. Click **Help Topics** for index and search functions.
- Task Window
 - Click on the **Help** (?) button on the toolbar to access Online Help for that task.
 - Right-click specific fields or buttons, and click What's This? for help specific to that field or button.

Sage University

Live and recorded training was previously provided by Sage for Sage 500 ERP through <u>Sage University</u>. As of 2013, there are very few courses available live for Sage 500 users. Sage University training and resources are only available to customers with active Business Care plans. Recorded training, called <u>Anytime Learning</u>, is available through the Sage University as well.

User Communities

A number of user communities exist for Sage 500 including <u>Sage City</u> which is Sage's online user community, a general <u>Sage 500 Group on LinkedIn</u> and a <u>User Group on LinkedIn</u>. Another source for training and information is the annual <u>Sage Summit User Conference</u>.

Certified Consultants

At its prime in the early to mid 2000s, there were hundreds of Sage 500 ERP consultants available to provide training. However, many of these companies no longer resell Sage 500 ERP and others have moved their consulting resources on to other products such as Sage ERP X3. Selecting the right consultant depends greatly on your specific needs and the consultant's strengths. For example, do not choose a consultant with general industry knowledge if you have complex manufacturing requirements and do not select a consultant that has minimal experience working with Sage 500 customizations if you need to modify the system. Also consider personalities and resource availability. It's best to select a larger company that has several Sage 500 consultants available and even better if those people have many years of experience working with companies like yours. Close geographic proximity may be a concern for you but consider that there are so few consulting firms remaining that focus on Sage 500 and consider utilizing a remote consulting firm if they have experience supporting customers in other states. Sage registers their customers to reseller companies so you are likely aligned to a Sage 500 ERP Reseller. However, it is your choice, not Sage's , nor the reseller's choice, on who you work with in respect to consulting, training, custom development, and support. You can work with your aligned partner or any person or firm that you select. Some partners may try to get you to process a Reseller of Record (ROR) change to formally switch you from your existing partner to their firm. This is not necessary but may be the right direction if you find a partner that you trust and intend to use for an extended period of time. It allows the partner to place orders for new modules and users with Sage on your behalf but it does not preclude them from providing services to your company.

Our company, e2b teknologies, provides consulting, development, and support services to Sage 500 ERP customers throughout North America. We work directly with some companies and provide subcontracted services to other companies through their preferred Sage 500 ERP partner. Our staff includes three implementation, training, and consulting resources; two full time and dedicated support analysts; and eight Sage 500 developers. We welcome any and all inquiries from Sage 500 ERP customers and partners who require general or specialized services. Contact us for more information or find out more about our company in our e2b teknologies Corporate Brochure.





Do you want to focus on YOUR business or do you want to be a software developer? Consider this carefully before you embark on any customization projects internally. While many Sage 500 ERP customers make small modifications to their software, few companies have the infrastructure required to document modifications, test modifications, or to support modifications to their critical ERP systems.

Sage 500 Success

NANOFILM

I appreciate good customer service and your company certainly knows how to treat a customer. I mean it when I say we love working with e2b teknologies.

The Crossroads Interface and customizations e2b developed provide us with greatly enhanced performance, much-needed flexibility, and helps us effectively and easily manage our enterprise business systems. We couldn't be happier with the results and we will continue to leverage e2b as our business needs change. They simply excel at custom software development – especially when faced with complex integrations and tight deadlines where there's absolutely no room for error.





As a project manager, I know that you are only as good as the vendors you work with and I consider myself fortunate to have found e2b. They not only make my job easier, but their expertise across many areas has also saved us money! Whether it is a small project or a huge implementation, I can count on them to bring creative ideas and helpful suggestions to make our investment cost effective. Their employee retention is very high so instead of having to "re-teach" a contact when we have a new project, we get to work with a staff that is familiar with our business plan and our workflow. I can always count on their follow up and follow through. I could not ask for a better partner and would highly recommend e2b to anyone looking to implement any size project.

Sage 500 ERP Optimization

Database Maintenance

Regular database maintenance is very important to the life of your Sage 500 system. Database issues can cause a sudden slowness in the processing or access of your data. Depending on your business, your Sage 500 systems may require index turning. As a general rule of thumb, indexes should be rebuilt once a week.

Click to view Best Practices for Sage MAS 500 SQL Maintenance

Workstation Performance

Sometimes the speed of your Sage 500 processing or data access is an issue of the client workstation rather than the server. If this seems to be the case, you need to determine the connection speed of the users (i.e. 10 mbp, 100 mbp, 1000 mbp). Your anti-virus and anti-spyware software can also affect the performance of your workstation. To troubleshoot this, try temporarily turning these tools off.

Evenly Distribute Workload

It's a good idea to place separate SQL log files, data files, and temporary database files on different physical had drives or RAID arrays. Divesting the reporting requirements allows dedication to processing the Sage 500 workload. This includes work such as order entry, invoicing, and posting, which can require much of your CPU resources.

Hardware Considerations

Sage Software recommends that you use name-brand hardware over the generic equivalents for both client workstations and servers. Mainstream manufacturers uphold a high quality of performance and support that far exceeds that of generic hardware. As an extra precautionary measure, make sure your hardware is supported by Microsoft in their Hardware Compatibility Listings (HCL).

Microsoft SQL Server Setup

Sage 500 should reside on the server dedicated to running SQL server. Microsoft SQL is not recommended for installation on a domain controller because those computers perform tasks that require a lot of resources, such as maintaining and replicating the network accounts database and performing network login authentication. Also, don't set the system to run as a DHCP, WINS, IIS, RAS, print, file, or Windows Terminal Server (WTS). Only the minimal services required to run SQL Server should be started on the system.

It is recommended by Sage Software that you use Storage Area Network (SAN) because it utilizes fiber channel interconnects which typically operate at higher speeds than connection methods of Network Attached Storage (NAS).

Things to Avoid with Your SQL Server

- Using 3-D screen savers on the server. If a screen saver is necessary, use Blank Screen.
- Running CPU or disk intensive applications like ODBC traces, Performance Monitor, CHKDSK, Defrag, or SQL Profiler during production hours.
- Creating SQL Server databases on a compresses drive or folder.
- Compressing SQL Server data or log files after they've been created.
- Utilizing removable media for your database file locations.

Sage 500 ERP Check-Up

Very few companies implement everything they need in their ERP system when they switch over from their previous software. They have plans to implement other modules and features in future phases but they get busy and never get around to implementing the software. Their businesses change and the way they setup their system initially isn't ideal for their future needs. The best way to ensure that you're getting the most out of your business software is to perform an annual ERP check-up evaluating each area of your business to find out what's working and what's not working. Evaluate your accounting, inventory management, project accounting, manufacturing, and every possible and critical area of your business to seek out areas for improvement. It's much like kaizen or other lean manufacturing techniques aimed at improving quality throughout your organization. e2b teknologies provides ERP check-ups for customers to help them improve their ERP system by implementing additional modules or features, providing training to help users understand how to effectively utilize the system, and to identify gaps that may be filled by third party solutions or custom software development. An ERP Check-Up Template is available from e2b teknologies for companies that want to conduct their annual system evaluations.

Is It Time to Move On?

Sage 500 ERP is a very mature ERP application with a lot of functionality but there will come a point in time when you may start to evaluate another ERP platform. With that said, companies should closely evaluate what options are available to extend Sage 500 instead of replacing it altogether. Development partners such as e2b teknologies, SingleSource Systems, DCSC, Escape Velocity Systems, and others have considerable investments in Sage 500 and will continue developing product extensions for a long time. The reality is that companies don't have to change their ERP system if it continues to support their business needs and they have a reliable partner to provide training, support, and development services specific to their business needs.

There will come a time when you will move off Sage 500 ERP. When that occurs will depend greatly on your specific needs whether they be for scalability, technology, functionality, or financial. Sage 500 ERP is very scalable but is not ideal for smaller organizations due to the complexity of the software. If your company is smaller today than it was when you implemented Sage 500 ERP (due to competition or divesting of business units) then you may be able to move to a lower-end solution. If your company is growing then you may outgrow Sage 500 ERP and you may consider moving to a solution like Sage ERP X3 or other comparable solutions.

Your business needs are constantly changing due to company growth or shrinkage, introduction of new products and services, new customer or supplier requirements, and changes in your industry. As such, your business system needs will evolve and change over time. There will come a point in time when Sage 500 ERP will not be the right solution to carry you forward into the future due to functional limitations in the software. At that point you can invest in customizations, build integrations to other systems to fill those needs, or you may move to another ERP solution that has the capabilities that best meet your needs and future business requirements. In all cases, you have many options available on the market.

Sage is dedicated to providing more functionality in Sage ERP X3 to support the majority of Sage 500 ERP customers as a viable migration option down the road. With that said, Sage ERP X3 is primarily designed for wholesale distributors and both discrete and process manufacturers. Companies using Sage 500 ERP in professional services, field service, or other industries will probably not find Sage ERP X3 as a viable migration option and will need to evaluate other solutions – some of which may be other Sage products like Sage 100 or Sage 300.

Now is a good time to conduct a full audit of your Sage 500 ERP system to identify what you have, what you may need, and then match those capabilities to your current and future business plans. The <u>ERP Check-Up</u> mentioned previously is a great place to start to understand what direction you need to take and what your options will be for your long-term ERP strategy. There are a lot of tools available to help you identify the right ERP

solution for your business. One of these, <u>6 Common Mistakes Business Make When Selecting ERP Software</u>, is available from e2b teknologies to help you avoid making the wrong decisions.

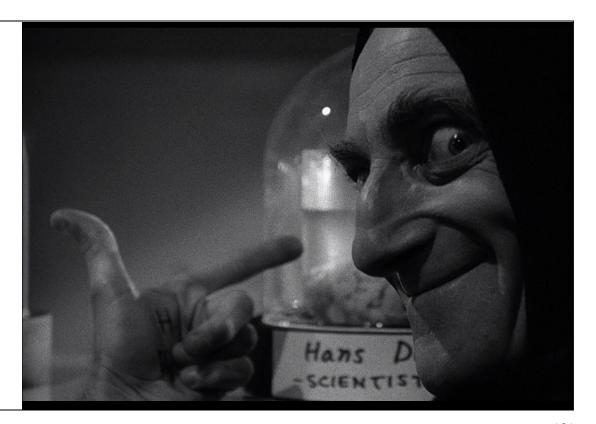
e2b teknologies has helped hundreds of companies to evaluate ERP business software. We understand what Sage 500 ERP can do and what comparable products are available on the market today that companies may want to consider when the time comes for them to make the change. We also resell Sage ERP X3 and plan to develop migration tools to assist those Sage 500 ERP users that plan to migrate to Sage ERP X3. We are also planning to develop new functionality for Sage ERP X3 to fill functional gaps that currently exist between the two products. These solutions will be available starting in 2014.

Switching ERP Software is Like Having a Brain Transplant While You're Still Awake

You've accumulated a lot of knowledge in your ERP system and you've built your business processes around Sage 500 ERP.

Carefully consider which company you trust to help you when the time finally comes to move that knowledge to a new ERP platform.

Pick the right partner and you're poised for success. Pick the wrong partner and you're destined for a long, expensive, and difficult project that will negatively impact your business for many years to come.





We needed an integrated system at North Carolina and we needed it implemented fast. e2b was right there.

They actually created an EDI interface for us in order to address the specific Freightliner requirements and they saved that business for us.

e2b's professionalism, thoroughness, and impeccable work ethic have won them a secure place in MFG's future.

I work with e2b almost daily, and I'm telling you, they're so responsive. I can send an email out at 9.30 at night and I'll get a response from somebody. Even when they're not at work, they're always monitoring what's going on. I mean, it might seem weird that we can have an emergency in the middle of the night, but you can. If things start shutting down, it doesn't matter what time it is.

e2b is very special, they are much more than a supplier to MFG – they are a strategic partner and we know that our business can continue to grow and to adapt to the ever-changing needs of our customers, suppliers, and our business partners because we have them on our side.

E2B DEALER SERVICE



ADDITIONAL RESOURCES FOR YOUR BUSINESS!

To safeguard the quality, reliability and safety of your vehicle,

e2b recommends that you consider your authorized e2b dealer first for maintenance or repair. Only authorized e2b dealers offer you these advantages:

- · Factory trained technicians
- . Immediate access to warranty service history and factory technical information
- Special tools required for e2b vehicles
- Genuine Parts that meet e2bs demanding standards 12 month/20,000 kilometers parts and labour limited warranty when
- Genuine Parts are installed by your dealer
- . Lifetime limited warranty on select replacement parts
- · Clear, up-front estimates
- . Over 140 locations nationwide
- · Shuttle service/Courtesy van (at select dealers)



6 ERP Mistakes

This white paper sheds light on some of the fatal mistakes that could undermine not only your ERP selection but possibly your entire company.

Click Here



Everything Sage MRP

This white paper delves into the bowels of Sage MRP and the Inventory Replenishment modules.

Click Here

ERP Evaluation Template

Our ERP checkup will evaluate your system from several angles and give you a calculated grade on: general features, finance/accounting, human resources, sales/marketing, inventory/warehouse, manufacturing, information technology, partner services

Click Here

Two Types of BI

This Sage white paper discusses the origins of BI, how it started, and why almost immediately it became the exclusive domain of an organization's management

Click Here















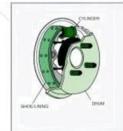


SugarCRM is the fastest growing CRM solution on the market. Find out why with this 7 day trial!

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These resources are worth 'hitting the breaks' for!



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