

Microsoft Dynamics NAV 5.0

Sarbanes-Oxley Readiness with Microsoft Dynamics NAV

White Paper

This paper discusses the impact of the Sarbanes-Oxley Act of 2002 (SOX) on businesses and explains how Microsoft Dynamics NAV can help companies and their subsidiaries in SOX compliance.

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Table of Contents

An Introduction to Sarbanes-Oxley (SOX)	3
Sections of Importance	3
Section 302	3
Section 404	4
Section 409	4
The Demands on ERP Solutions	5
Authorization and Security	5
Validity	5
Precision	5
Safeguarding	5
Microsoft Dynamics NAV Features that Help with Compliance Efforts	6
Authorization and Security with Role-Based Security and Access Restriction	6
Document Approvals	7
Application Controls and Data Validation	8
Reconciliation	9
Reporting	10
XBRL Documents	11
Navigating and Audit Trails	12
Customizations for Local Compliance	13
Accounting for Alterations Made to Data	14
Change Log	14
Client Monitor	14
Tools to Help Ensure Data Consistency and Integrity of the System	15
Backups	15
Conclusion	17

An Introduction to Sarbanes-Oxley (SOX)

The Sarbanes-Oxley Act (officially known as the US Public Company Accounting Reform and Investor Protection Act of 2002) -- came into law in 2002. The need for reform became apparent after a series of accounting scandals involving large, publicly offered companies. Legislators wrote the Act to restore investor confidence in the integrity of US capital markets in the wake of these events by implementing higher regulatory standards upon the quality and integrity of the information itself and assigning responsibility to those responsible for reporting accounting and financial information.

Simultaneously, other initiatives were taken to improve corporate governance. These include the Basel II initiative, which will impose a new operational risk management framework on financial institutions. The International Accounting Standards (IAS) body is also developing a number of new and revised standards for better reporting from an international perspective.

The possible benefits of these changes and the implementation of Sarbanes-Oxley are significant. Organizations will have the opportunity to reevaluate business processes, including financial reporting processes, in order to identify the most efficient mode of operation. By reassessing their business processes, organizations can obtain new competitive advantages if they can identify and exploit new, more efficient modes of operation. These new modes of operation can ultimately provide organizations with more stable bases for current business operations and for future business development.

These new regulations also provide organizations with the opportunity to increase transparency for investors, employees and the public, which can positively influence an organization's public image and strengthen their trustworthiness for investors still wary after the recent corporate scandals. These changes also give those individuals who are personally responsible for reporting valid, reliable, and accurate financial information even greater responsibility. This provides another guarantee to investors, employees and the public that information stated in reports and statements is correct, and that the given organization has not provided fraudulent or inaccurate information, thereby giving the organization another means of reassuring investors of their intentions.

Sarbanes-Oxley, IAS and other initiatives all play an important role in improving modern day corporate governance. However, with regard to computerized accounting and reporting, these changes also place a heavy burden on the technological infrastructure of many organizations. Microsoft Dynamics NAV, a business management software solution that is especially suited for subsidiaries of larger organizations, provides a range of features, tools and services to help support small to medium-sized businesses in their efforts to comply with Sarbanes-Oxley.

Sections of Importance

Three sections place specific demands on ERP systems. The following sections describe what is required for documenting the validity and accuracy of the data that a company will use to compile their financial reports and release to the public.

Section 302

This section stipulates that the principle officer (CEO, CFO, financial officer) certify in each annual or quarterly report filed that they have personally reviewed the data contained within the report and that they are confident in the accuracy and validity of the data, data compellation procedure and analysis process.

Section 302 is an indication of the changes many organizations will have to make. In order for the report certification required by this section to be possible, special attention must be given to the kinds of process controls and event monitoring that typify compliance with sections 404 and 409 of the Act. Furthermore, if, as a form of personal certification, CEOs, CFOs and other financial officers are required to sign off on the organization's annual and quarterly reports, the validity of the information contained in these reports and how the report was compiled can come into question. This leads to sections 404 and 409, which deal with internal reporting control and regular and timely disclosure of financial information.

Section 404

This section stipulates that an internal control report must exist, which states that management is responsible for establishing and maintaining an ample internal control structure/procedure for reporting. In addition, the report must contain an assessment, as of the end of the fiscal year, of the effectiveness of the implemented internal control structure/procedure. The last stipulation requires that an external auditor approve the report.

The objective of this section is to place emphasis upon the controls and procedures for managing financial reporting processes. A framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)¹ is an example of an internal control structure/procedure and can be helpful in addressing issues related to this section of the Sarbanes-Oxley Act. The section in this paper titled, "The Demands on ERP Solutions" discusses COSO in further detail.

Section 409

Section 409 requires each issuer to disclose to the public on a regular and timely basis additional information concerning material changes in the financial or operational health of the issuer in plain English. This may include trend and qualitative information and graphical representations as necessary for the protection of investors, employees, as well as in the public interest. The objective of this section is to require that organizations focus on the need to appreciate, analyze and publicize material business events that will influence the health of the organization.

The fact that organizations have to present the public with financial information about material changes on a regular basis implies that they would have to have the information on hand immediately in order to report in this manner. They will need an accurate and up-to-date service to prepare such information.

¹ COSO is a voluntary private sector organization dedicated to improving the quality of financial reporting through business ethics, effective internal controls and corporate governance. For more information go to: <http://www.coso.org/>

The Demands on ERP Solutions

Inevitably, as the demands on accounting processes evolve and intensify, so do the demands on ERP solutions. Sarbanes-Oxley is essentially about quality of process and technology, and in most organizations today, many business processes are managed across a range of business management software applications. Sarbanes-Oxley focuses primarily on the quality of the information reported, meaning that the core issue for CFOs to address with regard to Sarbanes-Oxley compliance is quality in financial processes. While this does not explicitly mean that software is the primary concern of CFOs and controllers when dealing with Sarbanes-Oxley compliance, it suddenly becomes a main concern because in a modern organization, information technology (IT) is a necessary tool in corporate governance. In fact, many of the business processes on which Sarbanes-Oxley compliance depends center on the use of better software applications, like Microsoft Dynamics NAV.

Since Sarbanes-Oxley is primarily about data, analysis, and reporting, the IT environment in an organization will be critical in determining whether that organization is able to be compliant. The functionality of Microsoft Dynamics NAV provides controls that aid in compliance when coupled with a Sarbanes-Oxley- targeted management model. Fortunately, COSO provides a framework for helping companies meet requirements laid out in Section 404 of the Act. The objective of the COSO framework is to help to ensure internal controls, which are constantly monitored by the organization's managerial techniques. According to the COSO framework, organizations must create a control environment, and within this environment, perform risk assessments and initiate control activities to ensure that risks are managed. Organizations must have systems in place to make sure that organizations convey information accurately and in a timely fashion.

Sarbanes-Oxley influences two aspects of the business environment: the purely IT aspect of accounting/financial reporting and the business/managerial aspect. Once companies implement an internal controls system such as the one suggested by COSO, much of this burden then shifts to IT, particularly ERP solutions. The following concepts are invaluable in Sarbanes-Oxley compliance and any ERP solution should address these concepts when used in the context of Sarbanes Oxley:

Authorization and Security

Access to financial information should be limited to those who have authorization to the system or to a section of the system. This must be in place to avoid unauthorized access and fraud.

Validity

Information should come from a reliable, trusted source. Only certain people or groups can post or alter certain information.

Precision

Information is only accepted when entered in the correct format. Furthermore, information may only be entered once – duplicate entries are detected and then rejected. All information is kept as current as possible.

Safeguarding

All transactions should be backed up. Additionally, a log of users, their sessions and transactions is ideal for tracking inconsistencies in the system.

Microsoft Dynamics NAV Features that Help with Compliance Efforts

Authorization and Security with Role-Based Security and Access Restriction

The core functionality of role-based security is to segregate users by tasks and accessibility. IT security is an important element of the reliability of ERP solutions. Microsoft Dynamics NAV allows the user to dictate which users have what access rights to the database based on the duties of the user. For example, a user can be given the right to alter/delete/add entries, be allowed "read only" access to the database or the user can be blocked completely from certain areas of the database. This can be done in the Roles window as shown in Figure 1.

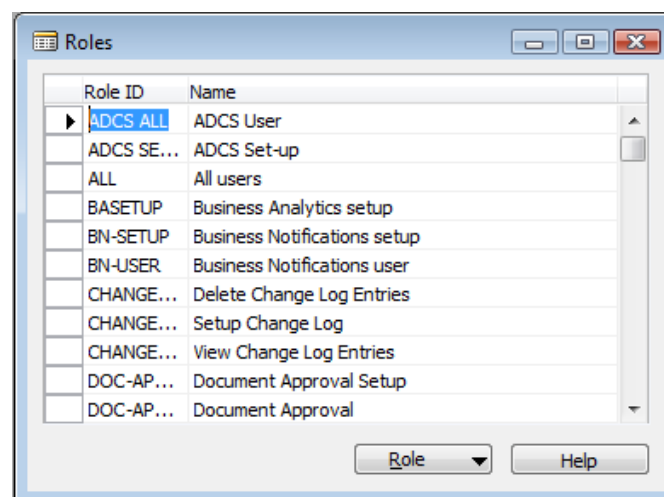


Figure 1: Roles Window

Access Restriction in Microsoft Dynamics NAV allows the user to create rules about accessibility to areas of the database. In the example shown in Figure 2, the Database Logins window for posting editing bank accounts has been opened through the roles window. In this window, the accessibility to "G/L BANK ACC, EDIT" can be limited by user and by company.

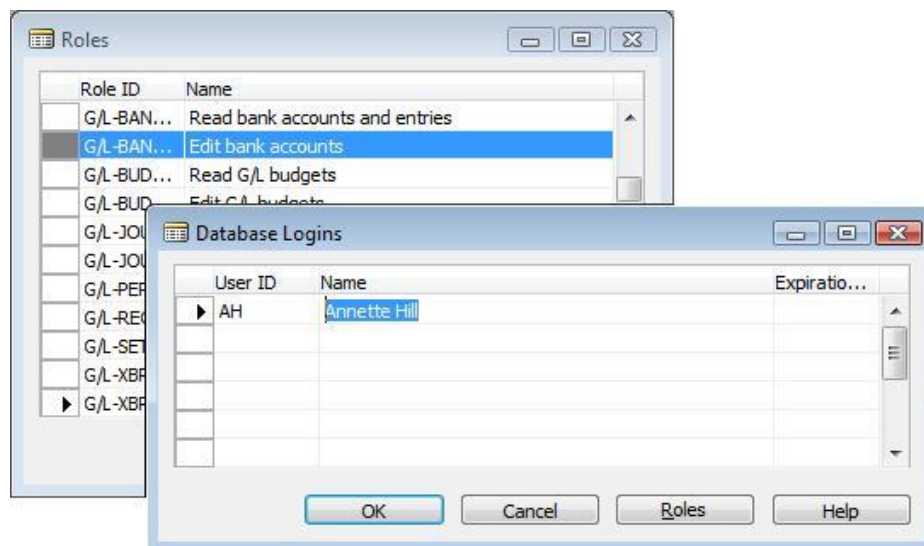


Figure 2: Roles Windows - Limiting Accessibility

Further levels of permission on the table level can be seen in Figure 3. Here, the read/write properties of table data can be determined.

Object Type	Object ID	Object Name	Read P...	Insert ...	Modify ...	Delete ...	Execut...
Table Data	4	Currency	Yes				
Table Data	8	Language	Yes				
Table Data	9	Country/Region	Yes				
Table Data	13	Salesperson/Purchaser	Yes				
Table Data	17	G/L Entry	Indirect		Indirect		
Table Data	21	Cust. Ledger Entry	Indirect				
Table Data	25	Vendor Ledger Entry	Indirect		Indirect		
Table Data	36	Sales Header	Indirect				
Table Data	38	Purchase Header	Indirect				
Table Data	80	Gen. Journal Template	Indirect				

Figure 3: G/L-BANK ACC, EDIT Permissions Window

Access can also be controlled through the windows access control table. This table contains information about the security roles assigned to each user. Through the identity management of Microsoft Dynamics NAV, access can be granted for users to access the system at any time.

These features, when integrated into the internal controls required for Sarbanes-Oxley compliance, can help ensure validity. These features help ensure that only necessary personnel can access certain areas of Microsoft Dynamics NAV. This supports both internal controls and the internal controls reporting required by section 404. Furthermore, these features will help limit the probability of tampering and the chance that flawed information will be added to the system. This helps to provide a greater assurance of reliability for those approving any financial reports required by section 302.

Document Approval

Sales and Purchase Document Approval, a new feature in Microsoft Dynamics NAV 5.0, introduces another form of control that can aid in compliance efforts. A set of predefined controls means that employees are restricted from buying or selling goods that exceed their sales, purchase, or credit limits without the approval from a specific manager or salesperson or purchaser with account responsibility for that customer or vendor.

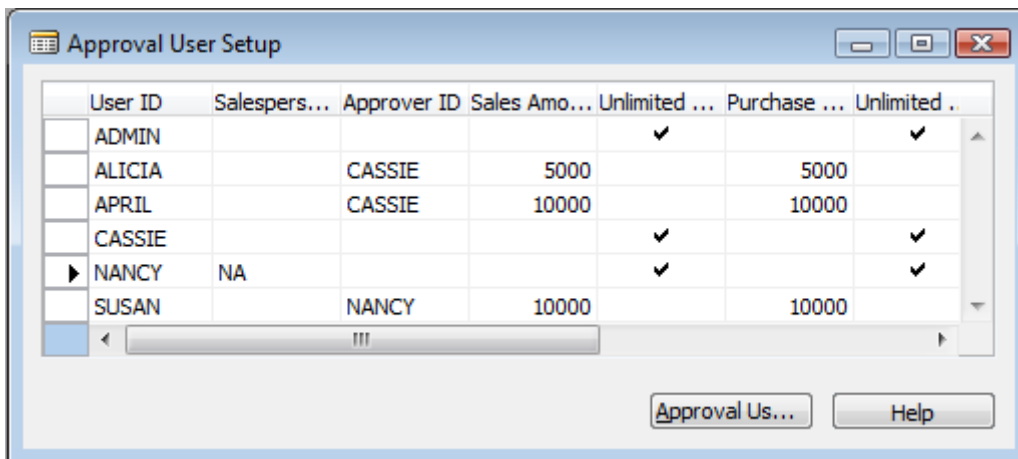


Figure 4: Approval User Setup Window

Restricting users from buying and selling for any sum of money not only makes good business sense, this new set of controls also help in the compliance of section 302. Outside of ensuring that fewer mistakes are made in the sales and purchasing processes, the document approval feature also makes it possible to stop inappropriate transactions, limiting opportunities for fraud or inappropriate use of funds. This helps CFOs and financial controllers ensure that what they are reporting does not include incidence of fraud before signing off and complying with section 302.

Application Controls and Data Validation

Application controls are controls placed within the application to check for the validity, accuracy, and completeness of data. The following example demonstrates the configured controls in Microsoft Dynamics NAV. In Figure 4, the user has attempted to post a purchase order without a vendor invoice number. Microsoft Dynamics NAV will only allow the posting to occur once the vendor invoice number has been added because of the configurable controls in the application.

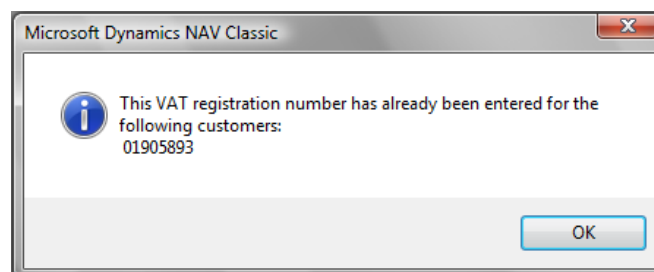


Figure 5: Duplicate VAT Registration Number

Data validation in Microsoft Dynamics NAV means that users can be prevented from making a posting with invalid information. In Figure 5, the user attempted to post a sales order without a posting date. Microsoft Dynamics NAV notes the error in a pop-up window and blocks the posting until the appropriate correction is made.

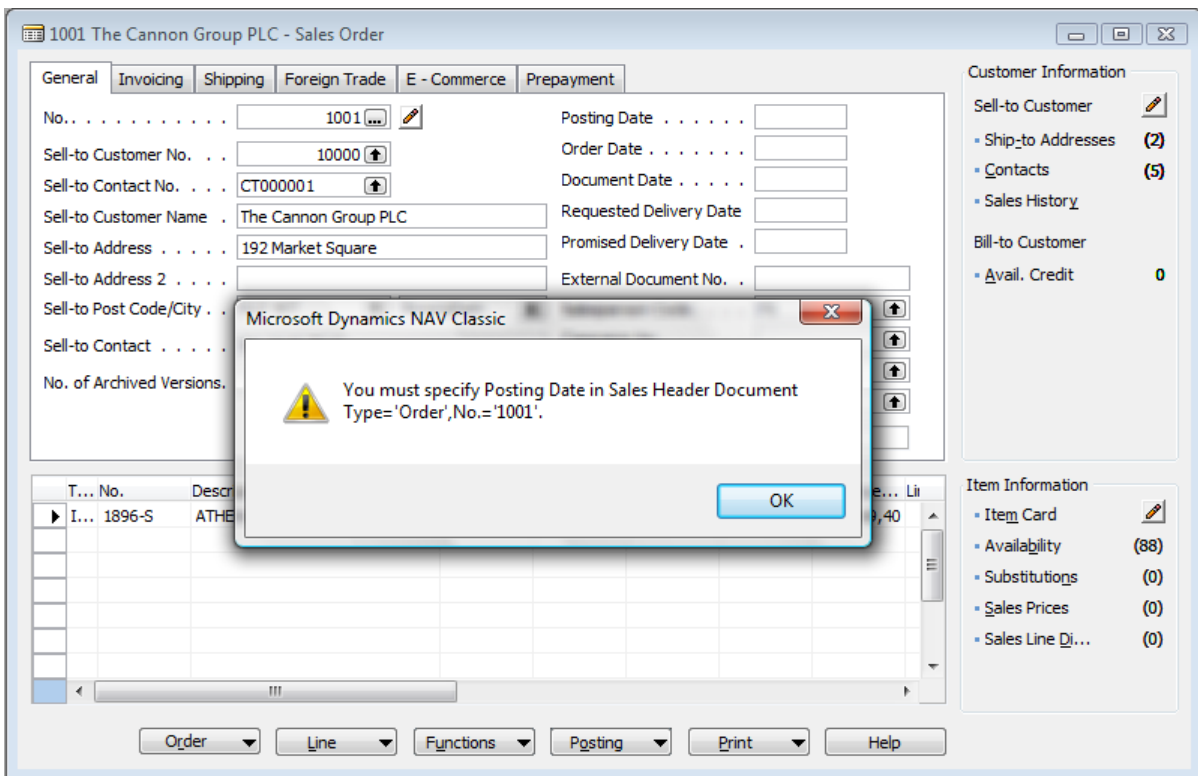


Figure 6: Sales Order without Posting Date

Such controls also exist on a field level to help ensure the completeness and validity of data throughout the system. For example, debits and credits must match within the application in order for the transaction to take place.

These features will help promote sections 404 and 409 compliance by helping users enter data that is complete, correct and precise. This is valuable in section 404 compliance in which internal controls must be presented and approved by an external auditor. This feature can be integrated into an organization's internal controls and be useful when presenting information to an external auditor. It also helps ensure that data that may constitute material changes in the financial condition of the organization is complete and up-to-date so that it can be presented in a timely fashion as required by section 409.

Reconciliation

The reconciliation feature allows Microsoft Dynamics NAV 5.0 users to gain financial information from bank account(s), get instant updates regarding transactions, drill down for more in-depth data, and resolve discrepancies between dates posted for transactions in Microsoft Dynamics NAV and the dates of the subsequent bank transactions.

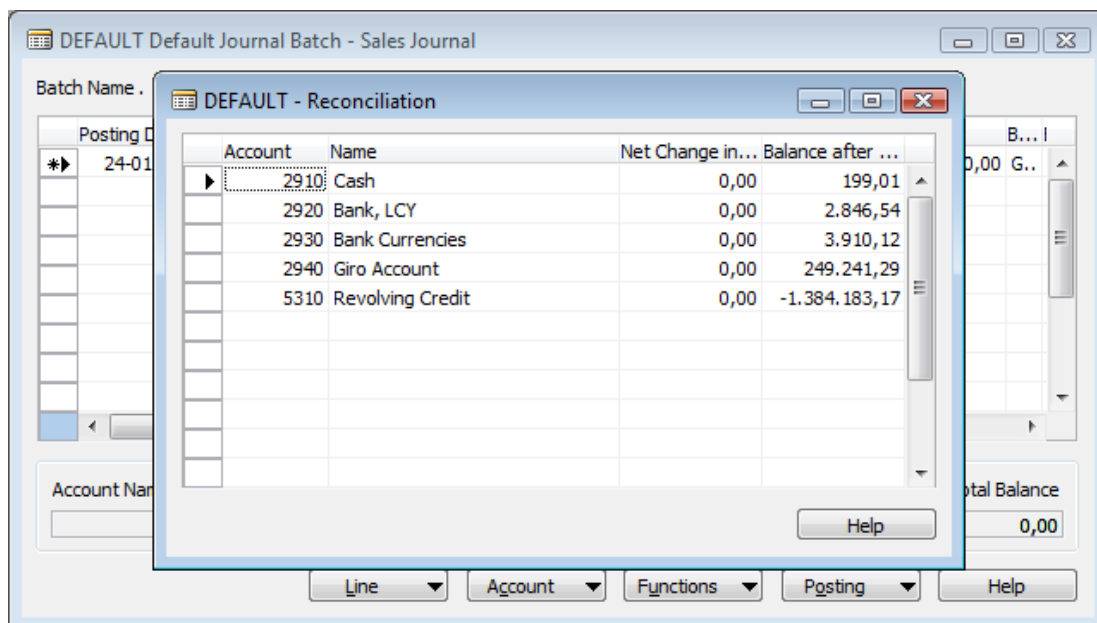


Figure 7: Reconciliation in Microsoft Dynamics NAV 5.0

While this feature will aid in the compliance to sections 302 and 404 because it helps improve the validity of the Microsoft Dynamics NAV database, the largest gain provided by this feature is the ability to provide up-to-date and precisely reconciled financial data. This feature will help the user in recognizing changes in financial conditions that need to be communicated to investors and the public as required by section 409.

Reporting

Microsoft Dynamics NAV comes with a set of reports used by most businesses. The reports show all transactions within a set of parameters. This functionality allows those creating reports to review the history of the information they are reporting to account for any changes that may go otherwise unexplained.

For example, among the reports available are the aging reports. The program calculates aging from the due date, posting date or document date depending on your choice on the Options tab. By entering the following window and opening the options tab, the user can also select other details and formatting.

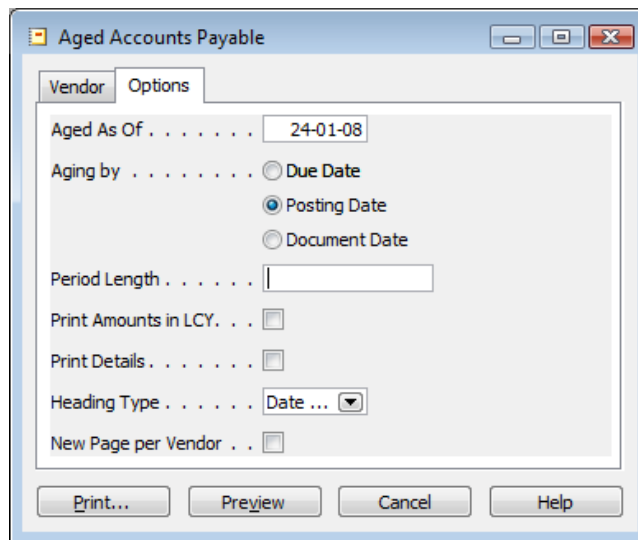


Figure 8: Reporting in Microsoft Dynamics NAV 5.0

The Order Summary report is another example as it is similar to the aging reports, but this report is specifically designed to provide a summary of all order transaction within a specified grouping. For example, if the report should include all customers dealing in American dollars, the report options can accommodate these demands. The Customer – Order Summary window can be seen in Figure 8. Information can be added to filters in this window to create a customized report. Here, the user is requesting that the information be filtered, meaning that the report will only show orders in American dollars. This can be invaluable to organizations that are handling orders in different currencies on a regular basis and that need to report in a single currency such as the American dollar for reporting purposes.

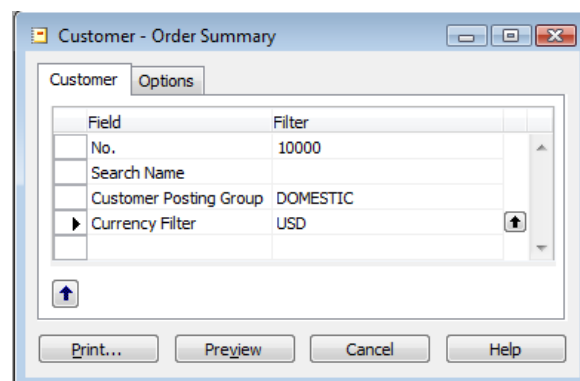


Figure 9: Creating a Customized Report

Both of these features can be helpful when complying with all three sections of the Sarbanes-Oxley Act discussed earlier in this paper. In addition to providing transparency for external audits, controllers or CFOs can review the history of accounts in question for validity and precision and, with regular application, can identify trends that can lead to what may constitute material changes in the financial condition early on and report these.

XBRL Documents

XBRL is an XML-based specification that uses accepted financial reporting standards and practices to exchange financial reports across different software and technologies, including the Internet. The key

benefits associated with XBRL are technological independence, full interoperability, the efficient preparation of financial statements and reliable extraction of financial information. XBRL allows organizations to exchange financial data easily and efficiently based on underlying data tags, which provide an alternative to scanning and re-keying financial data. Both scanning and re-keying have inherent disadvantages such as time consumption, human error, and there is the possibility that cross analysis or data extraction can be more difficult or even impossible. XBRL can help protect the integrity of the data and help to minimize these negative aspects.

XBRL works through a series of XML tags. By mapping financial information to these tags, communication between completely different financial systems for the purpose of data exchange becomes possible. In addition, the International Accounting Standards Board has mapped all IAS accounting terms to XML markup tags and made these tags available for each jurisdiction. Tags have also been gathered according to each jurisdiction's local general accounting principles in what is now called taxonomy. This allows one taxonomy to be used for various output formats, including the Internet, for further organizational transparency. Tags now allow data to be transferred not only from system to system for the internal use of the organization, but also to the systems of auditors for review. Figure 10 shows XBRL taxonomy.

XBRL can be an important tool in an organization's efforts to become compliant with the Sarbanes-Oxley Act. It provides another resource for helping to ensure the validity and precision of data and reporting by taking human error out of the financial reporting cycle. It also helps ensure that companies can easily share data with auditors, which can aid in Section 404 compliance. Organizations will also be able to create reports simply across systems and even post on the Internet, further informing the public of the current state of the organization and of changes in the financial state of the organization, aiding in Section 409 compliance.

Navigating and Audit Trails

From an accounting system standpoint, a key to compliance with Sarbanes-Oxley is the presence of an extensive audit trail, complete with drill-down and drill-around functionality. The sole reason why this functionality exists is to provide users with the ability to trace source documents through the accounting systems to the final financial statement and back to the original source document. For example, from the General Ledger – Chart of Accounts window, the Ledger Entries window can be accessed by tracking the audit trail. From this point, the user can see how and when the data was entered and to which account the entries were posted.

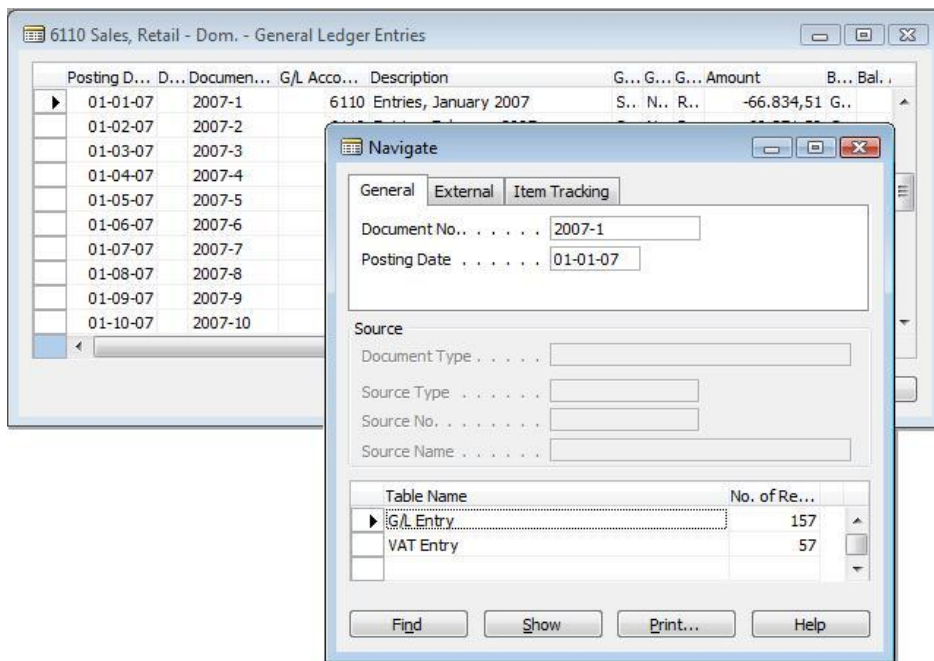


Figure 10: Following the Audit Trail

As part of the audit trail drilling tools, Microsoft Dynamics NAV provides the user with tools such as drill-down, look-up, filtering, Registers, and Navigate. These tools give greater transparency to the financial reporting process. And, it gives those employees responsible for reporting a valuable tool for helping to ensure the validity and precision of the data entered if any doubt should arise. Drilling is also useful for auditors reviewing the organizations financial data, thus aiding in Section 404 compliance.

Customizations for Local Compliance

In Microsoft Dynamics NAV, it is possible to change the set-up parameters for the general ledger, and the receivables and payables sections of the program. In Figure 11, the General Ledger Setup window can be seen. Many parameters in this window such as currency and VAT amounts are essential to sound bookkeeping and differ between regions or countries. This functionality allows the user to change these parameters to fit local demands thereby adhering to accepted accounting standards.

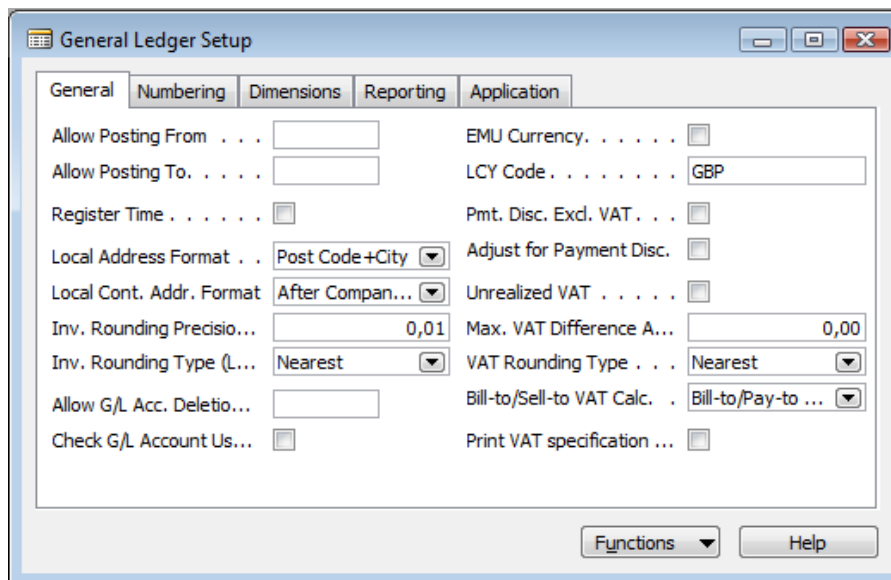


Figure 11: General Ledge Setup

Accounting for Alterations Made to Data

Change Log

The Microsoft Dynamics NAV Change Log tracks all changes made within the database and catalogs them by date/time. The Change Log Entries table below shows how the feature notes the User ID of the person making the changes, the fields changed, and the old and new values of the field. These changes can be tracked either through the window as seen above or made into a report.

Client Monitor

The Client Monitor also helps to track changes and communications between individual computers and the Database Server for Microsoft Dynamics NAV. It can monitor communications between the client and a database that is stored locally.

The ability to track changes means that administrators will be able to see exactly when changes were made and who made them. Users will be cited for every change they personally made and for each time they initiated communication between the client and database. Usually this feature will be used to validate new customizations to the database to ensure the changes have the desired results.

This safeguarding functionality of Microsoft Dynamics NAV helps in the compliance of sections 302 and 404. With Microsoft Dynamics NAV, it's possible to track what changes were made and by which employees, limiting opportunities for all employees to change or tamper with information. This helps CFOs and financial controllers to validate that the information in the reports is reliable and accurate, and that it does not include incidence of fraud before signing off and complying with section 302. This same transparency will help in the creation of controls and the external evaluation of the system required for the compliance of section 404. This functionality helps make internal controls more transparent. It helps those within the organization who are responsible for maintaining internal controls see the controls at work through the changes made by specific employees. Furthermore, this functionality makes it easier to trace back to a specific date and user for further clarification.

Tools to Help Ensure Data Consistency and Integrity of the System

While this may not be directly related to Sarbanes-Oxley compliance, Microsoft Dynamics NAV provides tools for programmers and IT employees that help ensure the integrity of the system as a whole and provide a reasonable assurance that the information presented is valid and the product of sound programming. These are also used to validate new customizations to the database and help ensure that customizations have the desired effect.

Backups

The backup feature in Microsoft Dynamics NAV provides for regular backups of either all or part of the database. These backups can be done manually or can be scheduled to occur regularly.

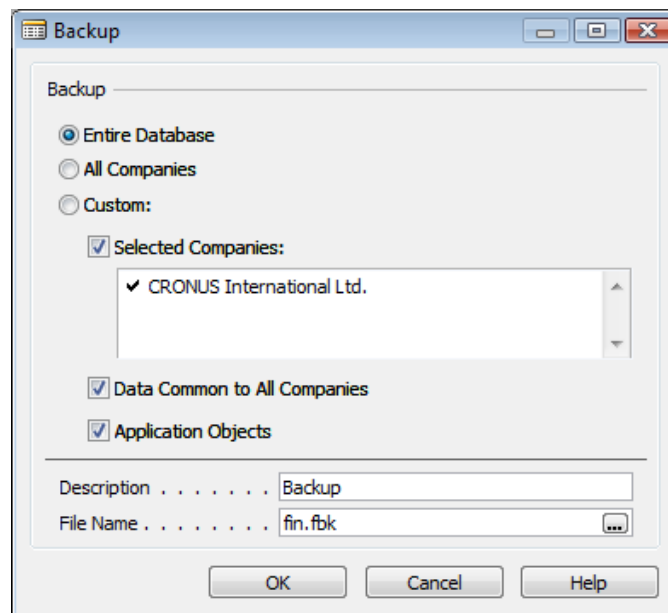


Figure 12: Backup Window

This feature supports section 404 by creating a valuable link in the organization's internal structure and procedure for financial reporting through safeguarding. The backups help guarantee that information entered into the system is protected from electronic failures such as computer or network crashes. Microsoft Dynamics NAV will create a backup file either on command or on a schedule, so if such an event were to occur, a full record of all transactions as of the backup would be available. This would help reinforce the systems reliability in connection to Sarbanes-Oxley compliance efforts.

Security

The SQL Server Option for Microsoft Dynamics NAV 5.0 allows you to limit the access that users have to the information stored in the database by specifying that they can only access records that fulfill certain criteria in specific tables. This is called record level security and you implement it by placing security filters on the roles and permissions that you assign to your users.

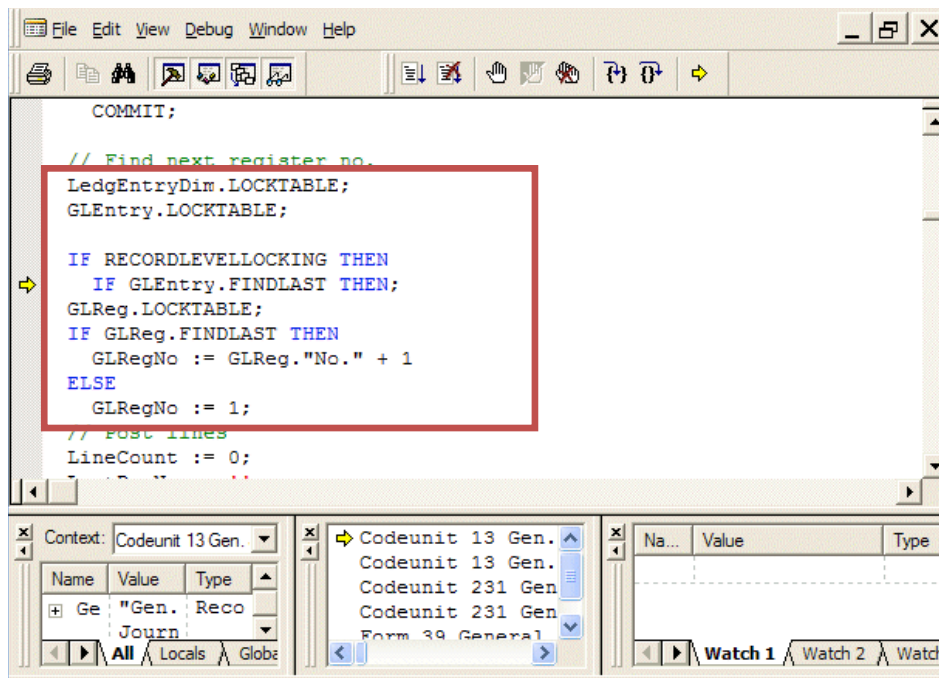


Figure 13: Dynamics NAV Debugger – Setting Record Level Security

With Microsoft Dynamics NAV 5.0, some general rules can be formulated for implementing record level security:

- Record level security and the business logic of the application must work together.
- For forms, reports and dataports that are run by properties and not code, the security filters that you apply at user level are sufficient.
- For forms, reports and dataports that run code, assign an extra indirect read permission at the user level.
- For codeunits, assign the extra indirect read permissions at user level and at object level.
- Permissions are cumulative and not mutually exclusive.

Security is essential when dealing with sections 302 and 404 of the Sarbanes-Oxley Act. When principle officer (CEO, CFO, financial officer) certify in each annual or quarterly report filed that they are confident in the accuracy and validity of the data, it is vital that they know that the right employees have access to the right areas of the application, reducing the risk for mistakes and fraud. Furthermore, section 404 is also supported as it supports a management led initiative to establish and maintain ample internal controls within the ERP itself. Once record level security filters have been set up as defined by management, Microsoft Dynamics NAV automatically applies them. This means that the user only receives an error message if they manually attempt to access data that is outside the range of the security filters that have been defined for them.

Conclusion

The changes associated with Sarbanes-Oxley compliance may seem like a burden to those facing compliance, but with the proper approach, compliance may actually leave organizations and their subsidiaries in a better condition than they were in before complying. Organizations cannot achieve Sarbanes-Oxley compliance without the proper tools and once these tools have been obtained, compliance becomes an opportunity for organizations to reevaluate their business practices and grow. Microsoft Dynamics NAV is a powerful ally in compliance efforts when used within an internal controls structure, and can give organizations the extra controls and review tools they need to help reach compliance and improve their organizational capacity.

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18