**INTRODUCTION**

Microsoft Dynamics® AX 2009 is a comprehensive business management solution for midsized and larger organizations that works like and with familiar Microsoft® software to help you improve productivity. Microsoft Dynamics AX is built to make it easy to do business across locations and countries by consolidating and standardizing processes, providing visibility across your organization, and helping simplify compliance. With Microsoft Dynamics AX, you can be confident your business management solution is, and will continue to be, relevant to the needs of your people and the demands of your industry and business.

Built on a proven foundation of advanced technology, Microsoft Dynamics AX helps customers seize global business opportunities with support for high transaction rates and hundreds or thousands of users across multiple sites. It also includes support for local languages, currencies, and legal requirements for more than 36 countries. The solution is delivered through a worldwide network of channel partners that provide specialized services and local support tailored to your unique needs.

This guide discusses functionality and modules that are available to the majority of countries in which Microsoft Dynamics AX is available.

**IMPORTAN**

This Quick Reference Guide is a dynamic document that will be revised as new product and licensing information becomes available. Please visit PartnerSource for the latest information about Microsoft Dynamics AX, including product updates, licensing changes, and any amendments to the information in this guide.

**HOW TO USE THIS DOCUMENT**

This Quick Reference Guide is designed to be used by sales and non-technical staff in Microsoft Certified Partner organizations. It is intended for you to use as a tool to familiarize yourself with the full scope of the solution and to help describe specific modules and functionality to customers. It is written in the second person (the subject is “you”) to make it easy to transform the text into customer-ready statements.

The order of the modules in this document follows the Microsoft Dynamics AX price list. As such, partners may find it helpful to use this document together with the price list when working with customers to determine their business requirements for a Microsoft Dynamics AX solution. Note that while Business Ready Licensing groups many modules into Business Essentials, Advanced Management, Advanced Management Enterprise, and some additional components, this guide describes each module or component of Microsoft Dynamics AX separately. Prerequisites for each module are also described in terms of individual modules rather than by pricing edition. This additional detail will give you a deeper understanding of the modules’ and components’ capabilities.

**KEY**

- Introduction
- Business Essentials
- Advanced Management
- Advanced Management Enterprise
- Additional Components
- New Functionality
## Contents

### BUSINESS ESSENTIALS

**Business Essentials Foundation Pack**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Dynamics AX</td>
<td>1</td>
</tr>
<tr>
<td>Base Package and Database</td>
<td>3</td>
</tr>
<tr>
<td>Alerts</td>
<td>3</td>
</tr>
<tr>
<td>Workflow</td>
<td>3</td>
</tr>
</tbody>
</table>

**Financial Management**

| Financials I                                | 4    |
| Financials II                               | 6    |
| Fixed Assets                                 | 6    |
| Unlimited Virtual Companies                  | 7    |
| Dimensions (Three)                          | 7    |
| Company Accounts (Unlimited)                | 8    |
| Domains (Group of Companies)                | 8    |

**Supply Chain Management**

| Trade                                        | 9    |
| Trade Agreements                             | 10   |
| Logistics                                    | 10   |

**Configuration and Development**

| Bus Layer Runtime                            | 12   |
| Morphx Development Suite                     | 12   |
| For Microsoft Windows                        | 12   |
| Var Layer Runtime                            | 13   |
| Application Integration Framework            | 14   |

**Other Business Essentials Functionality**

| Database Log                                 | 15   |
| Electronic Banking                           | 15   |
| Application Object Server                    | 15   |
| Record Level Security                        | 16   |
| Microsoft Dynamics Administration Console Add-in for Windows | 16   |
| Essential Business Server                    | 17   |
| Task Recorder                                | 17   |
| Electronic Signature                         | 17   |

**Business Intelligence**

| Business Analysis                            | 17   |
| Integration with Microsoft Office            | 18   |
| Performancepoint Server 2007                 | 18   |

**Workspace Collaboration**

| Enterprise Portal Framework                  | 19   |
| Unified Communications                       | 19   |

### ADVANCED MANAGEMENT

**Advanced Management**

**Foundation Pack**

| Financial Management                         | 20   |
| Financials III                               | 20   |
| Compliance Management                        | 21   |

**Supply Chain Management**

| Warehouse Management I                       | 21   |
| Purchase Requisition                         | 22   |
| Quality Management                           | 22   |
| Master Planning                              | 23   |

**Manufacturing**

| Resources                                    | 24   |
| Production I                                 | 26   |

**Project Accounting**

| Project I                                    | 26   |

**Customer Relationship Management**

| Marketing Automation                         | 28   |
| Telemarketing                                | 29   |
| Sales Force Automation                       | 30   |
| Sales Management                             | 31   |

**Workspace Collaboration**

| Expense Management                           | 32   |
| Application Integration Framework             | 32   |
| Web Services Extension                       | 32   |

### ADVANCED MANAGEMENT

**ENTERPRISE**

| Financial Management                         | 34   |
| Cost Accounting I (Cost Center Accounting)   | 34   |
| Cost Accounting II (Open Dimensions)         | 35   |
| Cost Accounting III (Internal Cost Accounting)| 35   |
| Cost Accounting IV (Flexible Planned Cost)   | 35   |

**Supply Chain Management**

<p>| Intercompany                                 | 35   |
| Warehouse Management II (Including RFID)     | 35   |
| Demand Planner                               | 37   |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>PRODUCTION II (ROUTING MANAGEMENT)</td>
<td>37</td>
</tr>
<tr>
<td>PRODUCTION III (SHOP MANAGEMENT)</td>
<td>38</td>
</tr>
<tr>
<td>PRODUCT BUILDER</td>
<td>39</td>
</tr>
<tr>
<td>SHOP FLOOR CONTROL I (TIME AND ATTENDANCE)</td>
<td>40</td>
</tr>
<tr>
<td>SHOP FLOOR EMPLOYEE RECORDS</td>
<td>40</td>
</tr>
<tr>
<td>SHOP FLOOR CONTROL II (JOB REGISTRATION)</td>
<td>41</td>
</tr>
<tr>
<td>SHOP FLOOR CONTROL III (PAYROLL GENERATING)</td>
<td>41</td>
</tr>
<tr>
<td>Project Accounting</td>
<td></td>
</tr>
<tr>
<td>PROJECT II</td>
<td>42</td>
</tr>
<tr>
<td>PROJECT TIME MANAGEMENT</td>
<td>42</td>
</tr>
<tr>
<td>Service Management</td>
<td></td>
</tr>
<tr>
<td>SERVICE MANAGEMENT</td>
<td>43</td>
</tr>
<tr>
<td>SERVICE SUBSCRIPTION</td>
<td>44</td>
</tr>
<tr>
<td>Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HUMAN RESOURCE MANAGEMENT III</td>
<td>44</td>
</tr>
<tr>
<td>Workspace Collaboration</td>
<td></td>
</tr>
<tr>
<td>MICROSOFT DYNAMICS CLIENT FOR</td>
<td></td>
</tr>
<tr>
<td>MICROSOFT OFFICE AND WINDOWS</td>
<td></td>
</tr>
<tr>
<td>SHAREPOINT SERVICES</td>
<td>45</td>
</tr>
<tr>
<td>ENTERPRISE PORTAL</td>
<td>46</td>
</tr>
<tr>
<td>SALES REPRESENTATIVE ROLE</td>
<td>47</td>
</tr>
<tr>
<td>CUSTOMER ROLE</td>
<td>48</td>
</tr>
<tr>
<td>VENDOR ROLE</td>
<td>48</td>
</tr>
<tr>
<td>CONSULTANT ROLE</td>
<td>49</td>
</tr>
<tr>
<td>QUESTIONNAIRE FOR ENTERPRISE PORTAL</td>
<td>49</td>
</tr>
<tr>
<td>HUMAN RESOURCE MANAGEMENT FOR</td>
<td></td>
</tr>
<tr>
<td>ENTERPRISE PORTAL</td>
<td>49</td>
</tr>
<tr>
<td>PRODUCT BUILDER FOR ENTERPRISE PORTAL</td>
<td>49</td>
</tr>
<tr>
<td>PERFORMANCE MANAGEMENT FOR</td>
<td></td>
</tr>
<tr>
<td>ENTERPRISE PORTAL</td>
<td>50</td>
</tr>
<tr>
<td>SHOP FLOOR CONTROL FOR</td>
<td></td>
</tr>
<tr>
<td>ENTERPRISE PORTAL</td>
<td>50</td>
</tr>
<tr>
<td>MOBILE SOLUTIONS</td>
<td>50</td>
</tr>
<tr>
<td>MICROSOFT DYNAMICS</td>
<td></td>
</tr>
<tr>
<td>EXTERNAL CONNECTOR</td>
<td>50</td>
</tr>
<tr>
<td>Configuration and Development</td>
<td></td>
</tr>
<tr>
<td>WEB MORPHX DEVELOPMENT SUITE</td>
<td>51</td>
</tr>
<tr>
<td>Other Advanced Management</td>
<td></td>
</tr>
<tr>
<td>Enterprise Functionality</td>
<td></td>
</tr>
<tr>
<td>BALANCED SCORECARD</td>
<td>51</td>
</tr>
<tr>
<td>BUSINESS PROCESS MANAGEMENT</td>
<td>52</td>
</tr>
<tr>
<td>QUESTIONNAIRE I</td>
<td>53</td>
</tr>
<tr>
<td>QUESTIONNAIRE II</td>
<td>54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADDITIONAL COMPONENTS FOR BUSINESS ESSENTIALS AND ADVANCED MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource Management</td>
</tr>
<tr>
<td>HUMAN RESOURCE MANAGEMENT I</td>
</tr>
<tr>
<td>HUMAN RESOURCE MANAGEMENT II</td>
</tr>
<tr>
<td>HRM EMPLOYEE RECORDS (MORE)</td>
</tr>
<tr>
<td>Environmental Sustainability</td>
</tr>
<tr>
<td>ENVIRONMENTAL SUSTAINABILITY</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>X++ SOURCE CODE</td>
</tr>
<tr>
<td>MICROSOFT SQL SERVER RUNTIME</td>
</tr>
<tr>
<td>Languages</td>
</tr>
<tr>
<td>LANGUAGES IN MICROSOFT DYNAMICS AX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration and Development</td>
<td></td>
</tr>
<tr>
<td>WEB MORPHX DEVELOPMENT SUITE</td>
<td>51</td>
</tr>
<tr>
<td>Other Advanced Management</td>
<td></td>
</tr>
<tr>
<td>Enterprise Functionality</td>
<td></td>
</tr>
<tr>
<td>BALANCED SCORECARD</td>
<td>51</td>
</tr>
<tr>
<td>BUSINESS PROCESS MANAGEMENT</td>
<td>52</td>
</tr>
<tr>
<td>QUESTIONNAIRE I</td>
<td>53</td>
</tr>
<tr>
<td>QUESTIONNAIRE II</td>
<td>54</td>
</tr>
<tr>
<td>ADDITIONAL COMPONENTS FOR BUSINESS ESSENTIALS AND ADVANCED MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HUMAN RESOURCE MANAGEMENT I</td>
<td>55</td>
</tr>
<tr>
<td>HUMAN RESOURCE MANAGEMENT II</td>
<td>56</td>
</tr>
<tr>
<td>HRM EMPLOYEE RECORDS (MORE)</td>
<td>56</td>
</tr>
<tr>
<td>Environmental Sustainability</td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL SUSTAINABILITY</td>
<td>57</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>X++ SOURCE CODE</td>
<td>57</td>
</tr>
<tr>
<td>MICROSOFT SQL SERVER RUNTIME</td>
<td>57</td>
</tr>
<tr>
<td>Languages</td>
<td></td>
</tr>
<tr>
<td>LANGUAGES IN MICROSOFT DYNAMICS AX</td>
<td>58</td>
</tr>
</tbody>
</table>
BUSINESS ESSENTIALS
The Business Essentials edition is an integrated, powerful financial and supply chain management solution designed for companies that need a core financial management and trade solution that will easily scale as their business grows. This edition is streamlined for easy installation, rapid user adoption, and an attractive price.

Business Essentials Foundation Pack
MICROSOFT DYNAMICS AX
BASE PACKAGE AND DATABASE
The Microsoft Dynamics AX Base Package provides a foundation including:
- One user
- Role Centers
- Familiar user interface
- Languages
- System configuration, security, and user management
- Database support
- Menu and form designer with IntelliMorph® technology
- One Microsoft Dynamics AX Object Server (AOS)
- Trade print management
- Organization and Positions & Jobs

One User
One user is provided with the Base Package at no additional cost. Additional users can be licensed.

Role Centers
Role Centers in Microsoft Dynamics AX 2009 are personalized home pages that are based on an individual's role within the organization. Role Centers present job-specific information and enhance personal productivity by helping people prioritize their work and focus on the information and tasks most relevant to them. Role Centers are based on Microsoft SharePoint® technology, so they are accessible through the Microsoft Dynamics AX client or by using Enterprise Portal in Microsoft Dynamics AX, which further enhances flexibility and control.
- Personalize information and reconfigure your Role Center based on work preferences or current business needs.
• Developers can create and customize Role Centers to fit your industry or unique roles within your organization.
• Access current ERP data or information from other applications, such as an agenda, a document library, or community site news items from your Role Center.

Microsoft Dynamics AX 2009 includes more than 30 Role Centers in the areas of finance, supply chain management, human resource management, sales and marketing, and project management. Each Role Center is listed by name in the corresponding section of this document. Learn more about the capabilities of specific Role Centers in Microsoft Dynamics AX.

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules) for instance reports, cues, and other data that is displayed in the Role Centers.

**Familiar User Interface**
Microsoft Dynamics AX includes an enhanced user interface, which includes a Navigation Pane to present menu functionality with support for creating favorite links; Area Pages and List Pages; a Bread Crumb Bar, and an Action Pane. Travel buttons enable you to navigate back and forward through the Area Pages and List Pages you visited during a given session. In addition, you can quickly export data with the Export to Excel option on the List Pages, and gain access to grids and new filter capabilities on the Filter Pane. Global search helps users find data in Microsoft Dynamics AX more easily.

**Languages**
The Microsoft Dynamics AX Base Package includes any single language, which can be used in the user interface, online Help, forms, reports and menus, printed reports, invoices, purchase and sales orders, and other business documents, as well as interfaces for Enterprise Portal in Microsoft Dynamics AX. Additional languages can be licensed (see Languages in Microsoft Dynamics AX). Microsoft Dynamics AX also supports double byte character technology and a bi-directional user interface.

**System Configuration, Security, and User Management**
All of the functionality of Microsoft Dynamics AX is installed when you perform the initial implementation, regardless of which modules you have chosen to license. When you first implement the solution, you will get a series of license keys, based on the modules you have licensed. Each license key opens a set of system and user configuration options, and you can choose the specific functionality you need by simply turning on the appropriate configuration options. Any functionality you don’t need to license remains hidden until the moment you need to unlock it. Just enter the license key for the new functionality, and it will appear throughout the system.

The simple configuration architecture of Microsoft Dynamics AX leads to faster implementation, lower implementation and maintenance costs, lower upgrade costs, and a lower total cost of ownership (TCO).

Microsoft Dynamics AX contains a module to set up user group security and add users to these groups so they can inherit security settings.

**Database Support**
Microsoft Dynamics AX requires a database for data storage. Your company’s business information is stored in a single database. The simplicity of this all-in-one architecture can result in easier maintenance and upgrades and lower TCO. By using a single database, the solution eliminates the need for database synchronization and reduces the risk of data corruption.

The Microsoft Dynamics AX solution handles interactions with the database, including operations like creating indexes, sorting, and table synchronization. Microsoft Dynamics AX 2009 works with Microsoft SQL Server® 2008, Standard or Enterprise editions, or Microsoft SQL Server 2005, Standard or Enterprise editions, with Service Pack 2 or later. Review the most recent system requirements.

**Menu and Form Designer with IntelliMorph Technology**
Menu and form designer with IntelliMorph automatically lays out functionality, for instance, forms and menus based on personalization, license keys, configuration, security settings, and element properties without programmable changes. You can add new controls by simply dragging fields (or field groups) from the data source to the design.

**Trade Print Management**
Streamline business processes with the ability to manage print generation for sales orders, quotations, free text invoices, and purchase orders.
Organization and Position & Jobs

Organization and Position & Jobs in Microsoft Dynamics AX helps you manage your organizational structure and keep track of positions and job profiles, including roles and requirements.

Organization
• Manage line, matrix, and project organizations.
• Maintain your organizational structure and create new business units.
• Access visual, function-oriented organizational charts.

Position & Jobs
• Administer position groups and positions or jobs.
• Create job profiles and describe roles and requirements.

ALERTS
Alerts in Microsoft Dynamics AX help people across your organization quickly and easily create alert rules that deliver automatic notifications of changes and events that are critical to their jobs. For example, users can receive notification when a customer record has been created or deleted, when a purchase order has been open for more than a certain number of days, or when a job is marked as complete.
• Monitoring by predefined dates, including the number of days before an event occurs, the specific date it occurs, or the number of days after the event occurs
• Monitoring by changes to records, specific fields, or set value
• Conditions filtering so that alerts appear only when certain conditions are met, such as when a purchase order is created for a particular vendor group
• Flexible delivery through a dedicated View Alerts inbox, pop-up windows in Microsoft Dynamics AX, or as e-mail messages in Microsoft Office Outlook®
• Fast access to Alerts details, including the time of the alert, the reason for the alert, and the before and after values of a change
• Create alert rule templates based on specific needs and define an HTML or Extensible Stylesheet Language Transformation (XSLT) to merge alert data into an e-mail message
• Remote access capabilities using Enterprise Portal in Microsoft Dynamics AX

Benefit statement:
Alerts help you improve control over important business matters by providing proactive notifications of changes, events, and conditions that you determine. You can set up alert rules quickly and easily to increase efficiencies and reduce the time spent monitoring certain business conditions.

Key questions:
• Do you need a fast, easy way to monitor changes and events in your operations?
• Could your people maintain tighter control over business activity by monitoring the changes to and conditions and status of certain business priorities?

Prerequisite: Base Package

WORKFLOW
Workflow in Microsoft Dynamics AX helps streamline business processes across the organization by defining workflows that address current business needs and reflect your organization's best practices. By automating business processes, workflows help people prioritize critical tasks, work more proactively, and simplify communications with co-workers by replacing ad-hoc communication.

Help ensure that all tasks and approvals occur in the correct sequence, and configure escalation policies to prevent workflows from stalling. You can easily reassign tasks or approvals to another user. Review the automatically captured workflow history to verify the current status and evaluate workflow performance. For example, a business analyst can configure a workflow to ensure that the appropriate approvals are obtained when invoices exceed a certain amount, or to re-assign document approvals in the event of an employee absence.
• Easy configuration with embedded workflows based on Windows® Workflow Foundation
• Automatic approval processes for specific documents, such as purchase requisitions and expense reports
• The ability to configure business processes using out-of-the-box workflow templates for General Ledger, Accounts Receivable, Accounts Payable, Trade and Source, Project Accounting, and Expense Management
• Sequence task and approval workflow elements to establish workflow processes
• Safe limits offer the ability to designate a single approver, multiple approvers, a majority or percentage of approvers, or a first-line manager
• A centralized work list shows the workflow tasks and approvals assigned to users in their Role Center—the work list is available in the Microsoft Dynamics AX client and Enterprise Portal in Microsoft Dynamics AX

Benefit statement:
Workflow standardizes and streamlines business processes while helping your organization remain agile. Workflow also helps ensure that employees are following your organization’s best practices, reducing risk and simplifying compliance. Out-of-the-box templates make it easy to quickly configure workflows for common business tasks and activities without the need for developer assistance.

Key questions:
• Do you need to improve efficiencies and simplify communication for business processes, and help ensure that the proper approval channels are followed?
• Do you need tighter control over business activities with the ability to monitor the progress of priority items?
• Do you need to adapt business processes to changing conditions?

Prerequisite: Base Package

Financial Management
Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for finance:
• Accountant
• Accounting Manager
• Accounts Payable Coordinator
• Accounts Receivable Administrator
• Bookkeeper
• Chief Executive Officer (CEO)
• Chief Financial Officer (CFO)
• Controller
• Credit and Collections Manager

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules)—for instance, reports, cues, and other data that is displayed in the Role Centers.

FINANCIALS I
Financials I in Microsoft Dynamics AX includes basic functionality such as general ledger, bank management, accounts receivable, accounts payable, fixed assets, dimensions and reporting, and country-specific capabilities. This module is a prerequisite for more advanced Microsoft Dynamics AX modules and features.

General Ledger
• Manage flexible accounting periods and use a reliable year-end procedure including a closing sheet
• Configure multiple and recurring journals with workflow and approval capability
• Handle multicurrency and exchange adjustments
• Add flexible year-end procedures for distributing profits by financial dimensions
• Extensive posting control system, including validation prior to posting and posting of financial information into multiple posting layers, enabling the business to maintain a separate set of books for reporting purposes, such as tax
• Create different types of budgets to predict your company’s financial needs for a specific budget period
• Ability to track budget revisions
• Allocation based on percentages for accounts
• Access RoleTailored business intelligence with out-of-the-box financial reporting, performance indicators, and analysis tools
• Extensive, flexible tax module features for different types of calculations and reporting
• Advanced financial statement that includes alternative rows

Bank Management
• Bank account reconciliation, including electronic bank account statement import (for selected countries)
• Monitor deposits, payments, drafts, and bank balances
• Support for electronic vendor and customer payments and receipts using a number of standard formats, including Bills of Exchange

Accounts Receivable
• Monitor credit checks
• Set up parameters, flexible payment terms, cash discounts, and handle prepayments and advanced payments
• Preauthorize and authorize credit card payments for sales orders (only available in the U.S.)
• Calculate interest and generate collection letters

Accounts Payable
• Bridging accounts
• Prepayment capabilities
• Use three-way matching with the ability to set up price variance tolerances
• Support flexible payment terms, including advanced payment schedules, cash discounts, promissory notes, and multiple payment methods
• Use multiple invoice entry options, including separate handling of approved and unapproved invoices, and matching invoices to physical deliveries

Dimensions and Reporting
With Microsoft Dynamics AX, you can group transactions together by assigning additional dimensions to each transaction. A dimension can represent a cost center, region, customer type, transaction type, or any category by which you want to classify your transactions.
• Use dimensions to analyze and classify financial transactions
  ◦ Dimensions values are applied and stored at the transaction level
  ◦ Data can be aggregated by dimensions when running reports and inquiries
  ◦ Default dimensions can be set on base data, such as ledger accounts and customer accounts
• Work with multiple financial dimensions and increase or decrease the number of dimensions for detailed analysis
• License additional dimensions as needed through Business Essentials; the extra dimensions license key increases the number of dimensions that you can create
• Use the integrated Financial Statement Report Writer to view dimension output
• Create customized reports with Microsoft SQL Server Reporting Services and improve visibility into performance with Microsoft Office PerformancePoint® Server 2007

Country-Specific Functionality
• Easily conduct business across geographic borders by supporting multiple languages and currencies
• Adjust accounts payable, accounts receivable, and general ledger transactions to current exchange rates
• Expand functionality to comply with country-specific regulations (for more information, visit PartnerSource)

Benefit statement:
Financials I provides an inexpensive, fast, and efficient way to register financial transactions originating from accounts payable, accounts receivable, and the general ledger. Use dimensions to analyze your company’s financial data from different perspectives and transform raw data into actionable knowledge.

Key questions:
• Do your employees spend too much time processing financial transactions and maintaining journals and accounts in the general ledger manually?
• Do you need insight in your business that results from having multiple perspectives on data?
• Do your employees need simplified reporting tools to create custom reports and gain greater business insight?
• Does your organization need to conduct business across geographic borders with multiple languages and currencies?

Prerequisite: Base Package
Financials II

Financials II in Microsoft Dynamics AX includes intercompany accounting, multiple company consolidation capabilities, account allocations, and cash flow forecasting and currency requirements projections. Financials II can help your organization foresee future cash requirements and define automatic allocations to dimensions based on predefined settings.

Microsoft Dynamics AX also uses hierarchal dimensions, with each dimension having additional dimensions at multiple levels. The dimensions in a hierarchy retain the properties of the parent dimension.

Advanced General Ledger

- Define allocation rules to distribute posted amounts to destination accounts or dimensions at any time
- Project future transactions based on commitments using cash flow forecasting and currency requirement calculation
- Consolidate financials for multiple companies either online or through data exports and imports between companies
- Book transactions across subsidiaries and the parent company, and eliminate intercompany transactions to consolidate financials
- Help simplify compliance efforts with the Import XBRL (Extensible Business Reporting Language) Taxonomy and Setup feature

Dimension Hierarchies

- Create dimension sets, hierarchies, and rules, and simplify dimension creation using the Dimension Creation Wizard

Shared Services Support

Help reduce costs with centralized processing of customer and vendor payments:
- Process Accounts Payable payments for multiple companies in one step, paying from one company
- Process Accounts Receivable payments for multiple companies in one step, receiving payment into one company

Benefit statement:
The advanced general ledger features in Financials II help you manage relationships between subsidiaries and the parent company. You can make transactions directly in a related company, which can help minimize workload. Use dimension hierarchies to analyze your company’s financial data from different perspectives and transform raw data into actionable knowledge. Financials II also enables you to make cash flow forecasts, so you can easily anticipate cash requirements and liquidity.

Key questions:

- Does your company spend a large amount of resources on manually tracking subsidiary operations or separate business groups, plants, or offices in the general ledger?
- Are you maintaining multiple separate general ledgers or, even worse, multiple system architectures across your company?
- Are you sometimes unable to anticipate future cash requirements?
- Do you need to share payment services across multiple companies within your organization?
- Can you analyze and classify your company’s financial transactions to get detailed breakdowns of business data?

Prerequisite: Financials I

Fixed Assets

Fixed Assets in Microsoft Dynamics AX uses asset budgeting and multiple depreciation models to track the status of your company’s fixed assets. Integration with other parts of Microsoft Dynamics AX means you can order and receive fixed assets through purchase orders and inventory.

- Implement transaction reversals, additional asset groups and attributes, and asset adjustment reason codes
- Quickly update the replacement cost and insured value for selected fixed assets
- Manage the full life cycle from acquisition to depreciation and disposition
- Projects can be transferred as fixed assets for capitalization and depreciation purposes
- Maintain asset status information

Prerequisite: Financials I
• Improve control over fixed assets to drive accuracy and timeliness in your accounting results
• Multiple depreciation models
• Forecasts using fixed asset budgets
• Integrated with purchasing, inventory, and project functionality
• Barcode handling
• Includes workflow templates for Fixed Assets and Fixed Assets Budget

Benefit statement:
Fixed Assets helps you manage the entire life cycle of your fixed assets, from acquisition to resale or write-off.

Key questions:
• Do you spend too much time tracking the status of your fixed assets in the general ledger and elsewhere?
• Are you maintaining multiple sets of fixed asset data?

Prerequisite: Financials I

UNLIMITED VIRTUAL COMPANIES
You can include any table in a "virtual company." By doing this, you can set any number of other company data accounts to share the data in the virtual company. For example, you can place a currency exchange rate table in a virtual company, and share exchange rate data with any number of other company data accounts. You can share inventory across multiple companies or decide to handle the invoices of multiple companies with one shared account. Any changes in the table in the virtual company will be reflected in all the other company data accounts that share that company's data. You can have any number of tables in a given virtual company, and you can have any number of virtual companies in a single database instance.

Prerequisite: Base Package

DIMENSIONS (THREE)
With Microsoft Dynamics AX, you can group transactions together by assigning additional dimensions to each transaction. A dimension can represent a cost center, region, customer type, transaction type, or any category by which you want to classify your transactions. The Base Package includes three default dimensions:
• Department
• Cost center
• Purpose

You can license additional dimensions to increase the level of detail at which you can analyze your financial data, or to introduce new perspectives from which to look at your financial data. Note that the functionality associated with Dimensions is available with Business Essentials. The extra dimensions license key just increases the number of dimensions that can be created.

Dimension settings can be customized by increasing or decreasing the number of dimensions tracked by Microsoft Dynamics AX. For example, the dimensions "phone sales" and "Internet sales" can be applied to sales data to give business leaders more information about their sales figures and results. Microsoft Dynamics AX also uses hierarchal dimensions, with each dimension having additional dimensions at multiple levels. The dimensions in a hierarchy retain the properties of the parent dimension. For more information about dimension hierarchies, see Financials II.

Benefit statement:
Use more than three dimension axes to analyze your company’s financial data from different perspectives and gain powerful insight into your business data to transform raw data into actionable knowledge.

Key question:
Can you analyze and classify your company’s financial transactions on more than three axes in order to get detailed breakdowns of your figures and business data?

Prerequisite: Base Package
COMPANY ACCOUNTS (UNLIMITED)
The Microsoft Dynamics AX Base Package includes three company accounts:

- Two company accounts, including a demo account that can be used for testing and training purposes; and a company data account, which contains all the business information that will be used by the Microsoft Dynamics AX solution
- A DAT account, which is used to store non-company-specific data such as user permissions

Each additional company account enables you to host a separate set of data for each of your business units or clients. When a transaction is made in one company account, it will not affect the data in any other company account. Also, multiple company accounts enable customers to build a separate data set for each of their business groups, plants, or offices.

Even though the data in each company account is kept separate from other company accounts, it is possible for different accounts to share data tables, such as ZIP codes, exchange rates, or customer and vendor data. This reduces the amount of redundant data that needs to be stored. Transactions can also be made between company accounts.

Data Storage and Security

- Company accounts enable separate data sets to be stored within the same database
- Separate company accounts can be modified independently—transactions in one account do not affect the data in separate accounts
- Domains support user access to multiple company accounts; see Domains (Group of Companies)

Benefit statement:
Separate company accounts enable you to divide up your business data to support separate business groups in your company. You can also use company accounts to host sets of data for other companies. With company accounts, Microsoft Dynamics AX can store unique data sets in one installation and enable those separate sets to interact with common tables. This maintains the data integrity of each account and can reduce TCO for your company.

Key questions:
- How do you host separate client accounts?
- How do you build and work with separate data sets for different internal business groups, plants, or offices?

Prerequisite: Base Package

DOMAINS (GROUP OF COMPANIES)
Separate company accounts can be grouped together into domains. Domains in Microsoft Dynamics AX help you define user groups whose members have the same permissions in a number of different company accounts. The permissions of any given user group can be set uniquely for different domains. A single set of company accounts can belong to several domains.

Benefit statement:
Using Domains enables you to set up user permissions for Microsoft Dynamics AX implementations that have many company accounts. With Domains, you can set up different access rights by company accounts.

Key question:
Do your company’s administrators need to set up company-specific user permissions?

Prerequisites:
Financials I
Company Accounts (Unlimited)
Supply Chain Management

Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for supply chain management:

- Purchasing Agent
- Purchasing Manager
- Shipping and Receiving
- Order Processor

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.

TRADE
Trade in Microsoft Dynamics AX helps automate the entire purchase and sales process. When you enter sales orders, the system automatically checks credit limits, customer account information, and inventory levels so you can give your customers real-time information. You can print, fax, e-mail, or (with Enterprise Portal in Microsoft Dynamics AX) publish order confirmations on the Web. You can also offer your customers flexible invoicing options, keep track of backorders, and manage returned items. You can track backlogs of all purchase orders. Depending on the status of the purchase order, you can allocate required items to sales orders.

Inventory
- Use multiple costing methods, including first in/first out (FIFO), last in/first out (LIFO), standard cost, and weighted average
- Easily reconcile inventory values versus ledger transactions for revision purposes
- Control inventory with a variety of inventory models and safety stock support

Purchasing
- Initiate purchase orders from production orders, sales orders, or inventory coverage rules
- Create purchase orders with direct links to sales orders to support just-in-time purchasing
- Print backorder information on delivery documentation and invoices

Sales Management
- Make flexible and comprehensive price calculations for increased accuracy and customer service
- Add miscellaneous charges to item costs and sales/purchase prices
- Automatically substitute unavailable items with alternate items
- Create sales quotations and promote to sales orders without re-entry of information
- Perform real-time conversion of currency on open orders
- Send notifications of partial deliveries and remainders on sales order documents
- Support direct delivery and specify acceptance parameters for over- or under-delivery

Other
- Compare costs against revenue
- Create credit notes from invoice journals
- Tag counting and transfer to counting journal

Benefit statement:
Trade helps you deliver strong, consistent customer service, and helps reduce costs by automating and optimizing your sales and purchasing processes.

Key questions:
- Are you still using manual processes to track your orders and backorders?
- How fast can you get an overview of all your open orders?
- Can you quickly share your open orders with production and purchasing to speed up your supply chain and deliver to customers on time?

Prerequisite: Financials I
TRADE AGREEMENTS
Trade Agreements in Microsoft Dynamics AX helps you enhance business relationships with detailed trade agreements that include customer, vendor, or item-specific pricing and discounts in all currencies. You can also automatically retrieve prices and discounts when entering orders and assign active “from” and “to” dates to prices for both items and customers.

Trade Agreements
- Set up price, discount, multi-line discount, and total discount on customers, vendors, and items, as well as groups of these
- Set up prices and discounts in all currencies
- Set up future prices and discounts without affecting current setup
- Automatically retrieve prices and discounts when entering orders
- Automatically calculate multi-line and total discounts on orders

Benefit statement:
Trade Agreements in Microsoft Dynamics AX helps you increase the speed of order entry and helps ensure correct pricing in sales and purchasing transactions. The module makes it easier to work with complex price and discount structures, because the system can automatically give your employees the correct price based on the details of each transaction. You can also easily maintain your price and discount structures by changing the prices and discounts of your items in batches.

Key question:
Can you easily keep track of all your price agreements with your customers and vendors?

Prerequisite: Trade

LOGISTICS
Logistics in Microsoft Dynamics AX helps you simplify your entire logistics process. You can easily describe and maintain items by using up to three item dimensions and predefined combinations, including configuration, size, and color. You can also specify dimensions for advanced inventory control and tracking purposes using inventory dimensions such as site, batch, and serial number. With multisite support, you can define different costs, prices, and cost category rates; view BOM items and route data by site; and support multiple time zones at the user level. Quarantine management enables you to set apart items that need to go through quality control. The forecasting capabilities help you manage inventory. The module also contains a flexible and robust bills of material (BOM) designer.

Forecasting
- Enter and edit sales and purchase forecasts
- Use item and period allocation keys to allocate forecasts to individual items and time periods
- Consolidate sales and purchase forecasts into one inventory forecast

Item Dimensions
- Describe any item using up to three item dimensions: configuration, size, and color
- Rename easily the size and color dimensions to suit your specific business needs
- Maintain valid combinations of item dimensions—can be allocated manually or automatically
- Specify the number of item dimensions used per group of items
- Set up specific prices and discounts per item dimension combination

Inventory Dimensions
- Choose from six inventory dimensions, including site, warehouse, pallet, location, serial, and batch
- Use the new Site inventory dimension across the system to support multisite scenarios
- Define different costs, prices, and cost category rates; set default financial dimensions for sales orders; control delivery dates in different time zones; and run master planning to view BOM items and route data by site
- Use an enhanced inventory dimension framework in which storage dimension and site are kept the same for a source transaction and inventory transactions generated with the same lot ID
- Describe storage by individual warehouse
- Track items using the serial and batch number dimensions
- Maintain centralized control of all site parameters from any location, whether site-specific or company-specific, including inventory, BOMs, routing, costing, and profit and loss dimensions
Advanced On-Hand Tracking
• Get an overview of current on-hand inventory per warehouse
• Drill down to the current on-hand situation by looking at any item or storage dimension or combination of dimensions
• Tools for tracking batch and serial numbers throughout the system

Quarantine Management
• Set aside items in quarantine using quarantine orders, either manually or automatically, when receiving items
• Look up quarantine inventory at any stage in the quality control process

ABC Analysis
• Calculate the ABC analysis based on revenue, cost, margin, and carrying costs, or with user-defined limits

Bills of Material (BOM) Management
• Maintain multi-level BOMs, with version and date control of multiple BOMs
• Approval routing
• Formulas for calculation of variable or constant consumption
• Support phantom BOMs
• Variance configurator
• Make allowances for scrap in the consumption calculation
• Where-used feature
• BOM explosion for materials planning and pricing calculation on all BOM levels
• Dependent BOM versions

Graphical BOM Designer
• Graphical suite for designing and maintaining BOMs and gaining insight into existing BOMs, based on Microsoft drag-and-drop functionality
• All levels and sub-levels of the BOM are visible in a graphical tree structure
• Drag items from the inventory table to the BOM, and from the BOM to the route operations
• Simplified item configuration and configuration possibilities on all levels of the BOM

Barcode Support
• Maintain multiple barcodes per item
• Read and write the following four different types of barcodes: EAN128/UCC128, Code 39, Interleaved 2 of 5, Code 128

Returns Management
• Control who can return items, which items can be returned, and the destination for the returned items
• Returns can be categorized according to return reasons or methods of disposition, and specific charges can be combined with the different return categories
• Manage the return order process

Shipping Carrier Interface
The shipping carrier interface provides integration to a shipping carrier’s software. The integration automatically transfers information that is received from the shipping carriers, such as freight charges and tracking numbers, to Microsoft Dynamics AX 2009 sales orders and invoices to help eliminate manual entry and improve tracking visibility. The interface currently supports integration with software from FedEx, UPS, and Kewill Clippership.
• Calculate freight charges and add to invoices as miscellaneous charges
• Facilitate a will-call request by using the sales pickup form
• Request and manage tracking numbers by generating them in the shipping carrier software, and then copying them into Microsoft Dynamics AX 2009
• Print labels with the carrier software using address information from Microsoft Dynamics AX 2009

Arrival Journals
• Use the Arrival Overview form and Production Input Journal to estimate and plan the resource capacity necessary to handle incoming goods efficiently
• Use the Item Arrival Journal to register items more quickly upon arrival with access to location and warehouse information based on the previous setup
• Use-for item registration
• Make items available in inventory immediately after posting arrival journal
**Benefit statement:**
Logistics helps you flexibly manage inventory and purchasing by connecting production, purchasing, and sales. With the ability to use up to three item dimensions and specify inventory dimensions, you can achieve tighter inventory control and simplify tracking. A flexible BOM designer simplifies the creation and tracking of BOMs. You can also reduce logistics costs by optimizing purchasing processes and management of your inventory and warehouse.

**Key questions:**
- Can you track and trace your goods?
- Does your company need to control inventory across multiple sites and warehouses?
- Do you have simple product assemblies to support?
- Do you have a rapidly growing item table that is hard to maintain due to the large number of unique products based on slightly changing product attributes?
- Can you quickly find previously used BOMs and transform them into new ones if needed?

**Prerequisite:** Trade

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**Configuration and Development**

**BUS LAYER RUNTIME**
Partners and independent software vendors (ISVs) can develop vertical or horizontal solutions or modules that use the BUS layer in Microsoft Dynamics AX. If you want to implement a BUS layer solution, you can choose to license only the BUS Layer Runtime needed to execute the partner-developed solution, without licensing the entire MorphX® Development Suite for Microsoft Windows. This saves some expense, but the BUS Layer Runtime without the MorphX Development Suite for Microsoft Windows will not allow you to make additional modifications to the partner-developed solution.

**Key question:**
- Do you want to implement a third-party add-on module without using X++, MorphX, and Web development for future customizations?

**Prerequisite:** Base Package

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**MORPHX DEVELOPMENT SUITE FOR MICROSOFT WINDOWS**
The MorphX Development Suite for Microsoft Windows allows you to personalize Microsoft Dynamics AX to your needs by using its Integrated Development Environment, or IDE. MorphX is integrated to standard development tools like Microsoft Visual Studio® and the .NET Framework.

This end-to-end life cycle of development is provided in a central location. From application design to change management, MorphX provides tools that guide you through the process, including tools for simple projects or extensive new module development. These are the same tools that Microsoft uses to build the application functionality—they are made available to you so you can quickly and safely adapt the application to your business.

MorphX includes the Application Object Tree (AOT), which enables you to navigate the models that underlay the business application. In addition, you can use the Reverse Engineer tool to view the data model and class hierarchies in familiar tools like Microsoft Office Visio® to identify where you need to make a change.

Quickly make changes by dragging model data types to a new or existing table, and change the database design to capture the data that you need. You can present those fields for user input by developing the user interface in either Windows or the Web.

Changes you make to the application are protected with the unique, built-in layer technology and you can easily track and audit changes. Change control can be incorporated by using integrated source control with tools like Visual Studio Team System. These features help you keep up with updates and new releases from Microsoft by providing a complete picture of system changes that can be upgraded to a new version.

MorphX also gives you the freedom to quickly modify existing functionality with limited coding. Licensing the MorphX Development Suite for Microsoft Windows gives you the power to create, modify, and delete Application Objects, which are the building blocks of the Microsoft Dynamics AX application. Objects in Microsoft Dynamics AX are stored in the AOT.

You need the MorphX Development Suite for Microsoft Windows to run modifications to Microsoft Dynamics AX or to vertical add-on solutions that require objects
listed in the MorphX Objects section below. An exception to this rule applies if you license the VAR or BUS Layer Runtimes described elsewhere in this guide.

A detailed technical description of each of the tools and Objects listed is available beyond the scope of this document. For more information, refer to the appropriate technical documentation or ask your Microsoft Partner Technical Specialist.

MorphX Development Tools (Windows Client)
Microsoft Dynamics AX offers an integrated development environment that includes:

- Application Object Tree
- Version Control with integration to Visual Studio Team System for team development
- Project Designer
- Integrated Programming Language Editor and Compiler
- Reverse Engineer Tool with integration to Visio
- Cross Reference Tool
- Workflow Template Editor
- Reporting and Business Intelligence
- Integrated Help
- Code Upgrade
- Test Tools
- Integrated Label system

MorphX Objects
By using MorphX development tools in the object-oriented architecture of Microsoft Dynamics AX, you can quickly change or create new application objects such as forms, menus, and reports. Each object is an entity that performs one or several functions within Microsoft Dynamics AX.

In the AOT, you can simply drag and drop items in windows that contain the model of a given application object. The objects provided by MorphX include:

1. Data Dictionary development: Tables, Classes, Data Sets, Resources, References
2. Windows UI development: Forms, Menus, Menu Items, Queries, HTML Help Files, Application Developer Documentation, Application Documentation, System Documentation, Web, Services

If you prefer to have system adjustments or new developments made to your installation onsite or locally, you may need to license the MorphX Development Suite for Microsoft Windows, Web MorphX Development Suite, and X++ Source Code.

Benefit statement:
MorphX provides a user-friendly development environment for partners and customers to help speed the development process and result in a lower implementation cost for the solution.

With the power, flexibility, and ease of use of MorphX, you can decrease the time and costs associated with upgrading and modifying the solution to keep pace with growing business needs. Furthermore, you can modify and extend Microsoft Dynamics AX with greater confidence because the layered structure of the solution keeps modifications separate from the core solution. You can revert to an earlier state during the upgrade process if you need to, without affecting the core solution.

Key question:
Do you need an integrated business application that you can upgrade and modify quickly and confidently?

Prerequisite: Base Package

VAR LAYER RUNTIME
Any partner can develop customized vertical or horizontal solutions or modules for Microsoft Dynamics AX that use the VAR layer. If you want to implement a VAR layer solution, you can choose to license only the VAR Layer Runtime needed to execute the partner-developed solution, without licensing the entire MorphX Development Suite for Microsoft Windows.

This saves some expense, but the VAR Layer Runtime without the MorphX Development Suite for Microsoft Windows will not allow you to make additional modifications to the partner-developed solution.
**APPLICATION INTEGRATION FRAMEWORK**

The Application Integration Framework (AIF) in Microsoft Dynamics AX provides an extensible framework that supports multiple asynchronous transports, as well as synchronous transport using Web services or other transport methods, to reliably exchange documents in XML format with trading partners or other systems. An exchange starts with a document, that is, a document class defined using Microsoft Dynamics AX business logic. The document is serialized into XML and header information is added to create a message, which may then be transferred into or out of your Microsoft Dynamics AX solution.

An asynchronous exchange uses an adapter to convert the document into the proper format for exchange by means of a particular transport mechanism, such as Microsoft Message Queuing (also known as MSMQ). Adapter-based exchanges are asynchronous in that they involve moving the document into a queue where it waits for processing by a Microsoft Dynamics AX batch job. Adapters handle the following types of exchanges:

- **Send Documents**—Microsoft Dynamics AX sends documents to another system
- **Receive and Create Documents**—Microsoft Dynamics AX receives documents from another authorized system and creates new records in the Microsoft Dynamics AX database
- **Respond to Read and Query Requests**—Microsoft Dynamics AX receives requests for documents from another authorized system, retrieves the requested information (whether a document or a list of documents) from the Microsoft Dynamics AX database, and returns it to the requesting system, with appropriate filtering and security

### Key question:
Do you want to use a partner-developed custom solution, without using X++, MorphX, and Web development for future customizations?

### Prerequisite:
Base Package

### Benefit statement:
The Application Integration Framework can help businesses support document exchange with customers, vendors, and other partners.

### Key questions:
- Does your company need to exchange documents and business data with customers and suppliers to improve the efficiency of your business?
- Do you need to create new electronic documents frequently, and do you require support of a system that provides many electronic document formats right out of the box?

### Prerequisites:
- Trade
- Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services
- Microsoft BizTalk® Server 2006 R2 may be required for some installations

Note: Application Integration Framework is included in Business Essentials, but to use this functionality, BRL customers will need to license a Microsoft Dynamics Client for Microsoft Office and Microsoft Windows SharePoint Services named user for each employee requiring access to Microsoft Dynamics AX. Microsoft Dynamics Client for Microsoft Office and Microsoft Windows SharePoint Services is only available with Advanced Management. For more information, please refer to the Microsoft Dynamics AX price list supplement available on PartnerSource.
Other Business Essentials Functionality

DATABASE LOG
Microsoft Dynamics AX has its own built-in logging feature, which enables users or administrators to see when a record was created or last changed, and who changed it. However, this information is only tracked for the last change made to each record. For example, if five users edit a given record, information will only be stored about the final edit.

Database Log in Microsoft Dynamics AX gives users and administrators a history of the inserts, updates, renames, and deletes for tables and fields that they choose within a set of company accounts. The log can track every transaction and change in the system, or it can track only selected tables. Users or administrators can view information about:

- The type of change to each selected record, and the old and new values of the record that has been changed
- The date and time of the change
- The user who performed the change

Benefit statement:
Database Log can give administrators a detailed history of every transaction and every change that was made to any record in the system, or to a selected set of tables. This improves administrators’ oversight of company data.

Key question:
Can you view a history of the changes made to your tables and records, including a log of who made each change?

Prerequisite: Base Package

APPLICATION OBJECT SERVER
An Application Object Server (AOS) executes business logic for thin clients, enables multiple connections to the Microsoft Dynamics AX database, conducts load balancing, and much more. One or more AOSs are required to implement a Microsoft Dynamics AX installation. This three-tier architecture enables Microsoft Dynamics AX to be run on thin clients over Wide Area Network (WAN) connections, and can result in a lower total cost of ownership (TCO) for the whole solution. The Microsoft Dynamics AX Base Package includes one AOS.

Three-Tier Environment Support
- Three-tier thin client
- Lower requirements for client machinery and bandwidth
- Improved database security, because only the AOS has a connection to the database, eliminating the need for multiple client connections

Cluster Technology
- Automatically balance users between servers in the cluster
- Increase redundancy and capacity, simply by adding extra AOSs
- If one server fails, clients only have to reconnect to continue working, reducing downtime

Remote Site and User Support
- Remote sites and users can use AOS to connect to a central Microsoft Dynamics AX solution through a WAN, without the need for any additional software

Prerequisite: Financials I

ELECTRONIC BANKING
Electronic Banking in Microsoft Dynamics AX supports the import and export of payment files from and to financial institutions in several countries. The functionality is spread across accounts receivable and accounts payable.

Electronic Bank Management
- Supports export and import formats for handling electronic payments

Benefit statement:
By handling incoming and outgoing payments electronically, you can reduce time-consuming manual processes, increase the speed of business, and reduce the chance of human error.

Key questions:
- Does your company spend too much time and too many resources managing payments manually?
- Is your company cut off from certain customers or vendors who require electronic bank exchanges for payments?

Prerequisite: Financials I
Web Development

- Install, update, configure, or launch Microsoft Dynamics AX with the touch of a button
- An ActiveX® component on a Web page shows the status of the local installation

**Benefit statement:**
Microsoft AOS technology supports the scalability of Microsoft Dynamics AX. AOSs can help companies enhance and utilize the flexibility, performance, redundancy, and connectivity of their Microsoft Dynamics AX solution.

**Key questions:**
- Can you add users to your solution without system downtime?
- Do you want your company’s subsidiary offices to be able to connect to your solution at a low cost?

**Prerequisite:** Base Package

**RECORD LEVEL SECURITY**
This functionality enables administrators to set security and permissions for Microsoft Dynamics AX user groups at the individual record level. Restrictions can be placed on any number of tables on a per-user group basis. Security restrictions are applied within individual companies, and therefore enable different settings to be applied within different companies.

For example, a Microsoft Dynamics AX solution with Record Level Security enabled can be set to allow salespeople within a user group to view and edit business information for only the customer records assigned to that user group.
- Enables administrators to specify user group–based permissions to each individual record within a table, or multiple records within the table based on a condition, rather than setting a blanket permission for the whole table
- Restrictions to tables must be explicitly set by administrators; if no Record Level Security has been specified, then all records in a table are accessible

**Benefit statement:**
Record Level Security works in addition to the standard permission system within Microsoft Dynamics AX, and provides greater flexibility in setting permissions.

**Key question:**
Can you control security options for employees who only need to view and edit a subset of your business data, such as individual customer, project, group of vendors, or employee accounts?

**Prerequisite:** Base Package

**MICROSOFT DYNAMICS ADMINISTRATION CONSOLE ADD-IN FOR WINDOWS ESSENTIAL BUSINESS SERVER**
The Microsoft Dynamics Administration Console Add-in for Windows Essential Business Server is designed for easy integration with Microsoft Dynamics AX. You can streamline common IT tasks using a unified administration console that serves as a single starting point for viewing, deploying, managing, and administering all infrastructure resources.

The add-in requires Windows Essential Business Server, which is intended for organizations with up to 300 users.

**Benefit statement:**
Use the Microsoft Dynamics Administration Console Add-in for Windows Essential Business Server to increase efficiency and simplify common tasks; there’s a single point of access where you can view, deploy, manage, and administer Microsoft Dynamics AX smoothly with your IT systems.

**Key question:**
Does your organization need to streamline common IT tasks to improve efficiency and help reduce costs?

**Prerequisite:** Windows Essential Business Server
**TASK RECORDER**

Task Recorder in Microsoft Dynamics AX helps you quickly document business processes and simplify training efforts. When activated, the recorder automatically tracks and records your actions in the application for a given business process. The output is a step-by-step guide describing the process, including a description of the actions with screen shots. You can choose the type of output you want, such as Microsoft Office Word, Microsoft Office PowerPoint®, or Microsoft Office Visio. Use this tool to provide training to new users or share critical business processes with employees, including those working remotely. The Task Recorder documentation can easily be made available in a Document Library or in the Compliance Center.

**Benefit statement:**
Use Task Recorder to simplify employee training, support remote users, and help maintain consistency for business procedures across your organization.

**Key question:**
Do you need a more efficient way to train new employees and share critical business processes with all employees, regardless of location?

**Prerequisite:** Base Package

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**ELECTRONIC SIGNATURE**

The electronic signature functionality confirms the identity of a person who is about to start or approve a change in Microsoft Dynamics AX. Electronic signatures are a regulations compliance requirement for several regulated industries, such as pharmaceuticals, food and beverage, and aerospace and defense. They are also necessary for compliance with regulations in 21 CFR Part 11 issued by the Food and Drug Administration (FDA) in the United States. A system administrator can set up custom signature requirements on tables and fields in the Microsoft SQL Server database.

**Benefit statement:**
Use electronic signatures to identify and register the person changing and/or approving changes in the application.

**Key question:**
Do you need to gain greater control over certain processes and do you need to document changes/approvals within the system?

**Prerequisite:** Base Package

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**Business Intelligence**

**BUSINESS ANALYSIS**

With Business Analysis in Microsoft Dynamics AX, you can compare vendor data, analyze warehouse operations, develop strategies to retain preferred customers and attract new customers, create customer profiles and segmentation analyses, and more. Use OLAP cubes to automatically extract information from key business areas and analyze it using multiple dimensions or combinations of dimensions. With SQL Server Reporting Services, you can create, modify, and share ad-hoc reports from Microsoft Dynamics AX data, and retrieve data in real time from a primary or replica application database.

You can also create security-enhanced reports using drag-and-drop report authoring, and display key performance indicators (KPIs) directly in your Role Center. Learn more about [Role Centers for finance](#).

**General**

- Easy-to-use, intuitive layout and structure
- View OLAP cubes within Microsoft Dynamics AX or by using PivotTable® views in Microsoft Office Excel to visualize the data in different ways
- Predefined cubes include KPIs for key business areas, which can be viewed from Role Centers

**Microsoft SQL Server Analysis Services**

- Query data efficiently and perform complex analyses using various dimensions and aggregations
- Create, maintain, and control OLAP databases and cubes, which automatically extract key data for formulating effective business strategy and analyzing results across your organization
• Predefined OLAP cubes extract information from key business areas using SQL Server Analysis Services, and the results of the predefined cubes can be displayed in Excel spreadsheets and PivotTable views
• Available on Microsoft SQL Server 2008, Standard or Enterprise editions; or Microsoft SQL Server 2005 Standard or Enterprise editions

Microsoft SQL Server Reporting Services
• Extend business intelligence to all employees with the ability to create, modify, and share standard and ad-hoc reports
• Developers can create custom reports based on the current needs of your organization
• Users can modify reports with SQL Server Reporting Services and SQL Server Report Builder
• Available on Microsoft SQL Server 2008, Standard or Enterprise editions; or Microsoft SQL Server 2005 Standard or Enterprise editions
• A variety of production reports based on SQL Server Reporting Services is available

Business Intelligence Metadata
• Fully integrated metadata in the Microsoft Dynamics AX development environment
• Fine-tune ad-hoc reporting experience as needed
• Automatically generated SQL Server Reporting Services report models for Report Builder

Third-Party Products
Any Microsoft or third-party product or add-on that supports Microsoft SQL Server Analysis Services, such as Excel, can be used for viewing cubes and exploring cube data more comprehensively than with the native Microsoft Dynamics AX viewing tools. However, additional Microsoft or third-party add-ons are not strictly necessary.

To learn more about Business Intelligence in Microsoft Dynamics AX 2009, refer to the white paper, “Empower Your People with Self-Service Business Intelligence,” on PartnerSource.

Benefit statement:
Business Analysis helps you analyze the factors that affect your bottom line with flexible and customizable OLAP analysis tools. You can share information such as customer purchasing and vendor inventory, and identify weak spots in your company’s supply chain so you can make the necessary changes.

Key questions:
• Do your people have the right information to do their jobs effectively on a day-to-day basis?
• Can you get actionable business information from your mass of business data?
• Can you explore your business data using any set of parameters?

Prerequisites:
Microsoft SQL Server 2008 and Microsoft SQL Server 2008 Reporting Services; or, Microsoft SQL Server 2005 and Microsoft SQL Server 2005 Reporting Services (for Report Builder Tool)

INTEGRATION WITH MICROSOFT OFFICE PERFORMANCEPOINT SERVER 2007
Integration with Microsoft Office PerformancePoint® Server 2007* extends the performance management tools in Microsoft Dynamics AX so you can simplify monitoring, deeply analyze business performance, and enhance planning and budgeting. Establish a collaborative, consistent budgeting process and use KPIs that align with performance to effectively monitor and improve business processes.
• Gain tight control of budgeting with integrated planning tools that simplify forecasting and data sharing
• Expand monitoring and analysis with scorecards and executive dashboards that offer real-time data
Benefit statement:

Key questions:
• Do you need to simplify monitoring and improve budgeting and collaborative planning processes across the organization?
• Do you need to improve analytic capabilities to monitor real-time business performance, identify variances, or evaluate personal or organizational performance?

Prerequisite:
Microsoft Office PerformancePoint Server 2007

* In mid-2009, Microsoft will release Office PerformancePoint Server 2007 Service Pack 3 (SP3). Thereafter, Microsoft will no longer continue with a stand-alone version of Office PerformancePoint Server 2007, but will offer PerformancePoint Services for SharePoint. For more information, visit the Microsoft Office PerformancePoint Server 2007 home page.

Workspace Collaboration

ENTERPRISE PORTAL FRAMEWORK
With Enterprise Portal Framework in Microsoft Dynamics AX, your employees can use a rich client environment to access relevant business information through personalized Role Centers. These Role Centers are based on Microsoft SharePoint technology, so they are accessible through the Microsoft Dynamics AX client or by using Enterprise Portal in Microsoft Dynamics AX. The flexible technology enables the user to easily personalize their predefined Role Center. Learn more about Role Centers.

Note: Customers who need additional functionality will need to license a named user for each employee for either Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services or Microsoft Dynamics Client for Microsoft Office and Microsoft Office SharePoint Server. To accommodate unlimited third-party users or applications, customers will need to license the Microsoft Dynamics External Connector.

UNIFIED COMMUNICATIONS
Unified Communications in Microsoft Dynamics AX helps streamline communications between people and organizations by bringing together e-mail, calendaring data, voice mail, instant messaging, Voice over Internet Protocol (VoIP), audio, video, and Web conferencing. With Unified Communications, capabilities are extended so that the presence information provided by Microsoft Office Communications Server 2007 is embedded within the Microsoft Dynamics AX client application. With this integration, you can:
• View enhanced presence information—such as available, out of office, or online—and initiate communications from any screen within Microsoft Dynamics AX
• Access contact information that is stored and maintained in a single location so that you collaborate easily with coworkers, business partners, vendors, and customers using accurate data

Benefit statement:
Unified Communications provides integrated presence and contact information so you can communicate with coworkers easily using e-mail, voice mail, instant messages, VoIP, audio, video, or Web conferencing. The ability to start a conversation directly from the ERP system offers a context to the conversation without the distraction of switching back and forth from an e-mail application.

Key question:
• Do you need to simplify communications across your organization with accurate, up-to-date contact information and the ability to initiate communication from any screen?

Prerequisites:
Base Package
Microsoft Office Communications Server 2007
(Using instant messaging or VoIP phone services requires the purchase of additional components or services)
ADVANCED MANAGEMENT

The Advanced Management edition is the preferred option for growing organizations that need an adaptable solution with complex, highly functional financial, supply chain, manufacturing, project accounting, and sales and marketing business processes. This edition helps customers obtain the key business intelligence and reporting they require to manage their organizations. Advanced Management includes the functionality in the Business Essentials edition plus the modules in the following section.

Advanced Management Foundation Pack

Microsoft Dynamics CRM Server

Microsoft Dynamics CRM Server can be delivered with the purchase of your first Microsoft Dynamics CRM client access license (CAL). If you license Microsoft Dynamics CRM together with Microsoft Dynamics AX, you can receive a license for Microsoft Dynamics CRM Server at no additional cost. Learn more about Microsoft Dynamics CRM.

Note: Business Essentials edition customers can purchase Microsoft Dynamics CRM Server CAL licenses as Additional Components.

Financial Management

FINANCIALS III

Financials III in Microsoft Dynamics AX includes extended support for printing customer statements and using allocation rules. Any company within the enterprise can create and print a statement for any customer, and the enterprise can create a single, consolidated statement for multiple companies. In addition, you can define allocation rules using Fixed Percentage, Spread-even, Fixed-weight, or Basis to distribute posted amounts to destination accounts or to dimensions at any time from automatically created journal entries.
**Benefit statement:**
Financials III simplifies the creation and printing of customer statements, including the ability to create a consolidated statement for multiple companies, and automate allocation processing.

**Key questions:**
- Do you need to extend customer statement capabilities, including the ability to create a single statement for multiple companies, across the enterprise?
- Do you need to automate allocations to destination accounts or dimensions?

**Prerequisite:** Financials II

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**COMPLIANCE MANAGEMENT**

Compliance Management in Microsoft Dynamics AX helps simplify compliance with one central location for viewing, managing, and controlling business process content, internal controls, and reporting. The Compliance Center provides easy access to all compliance-related information and activities and helps keep business information secure with a comprehensive set of tools to manage and control sensitive data and critical KPIs. You can view graphs representing the efficiency and effectiveness of internal controls, manage action items from alerts or workflow, and add links to important external compliance sites.

The Compliance Center contains a document library that stores and shares important information about compliance, including business process documentation that enables users to view statistics and control effectiveness of the organization’s internal controls.

Compliance activities require recording, documenting, and reporting exactly what happened, when, and by whom. This is fundamental to an effective compliance program. Microsoft Dynamics AX enables the user to view database logs quickly (Database Log is required) and store compliance documents in the document library. From the Compliance Center, the Database Logs page enables you to view and filter data of changes to the database, for example, who made the changes and when. The view is sorted by table name and shows a description of the record, date, type of change, created time, created date, user who created the record, current value, and previous value.

In addition, Microsoft Dynamics AX provides a number of reports to help monitor an organization’s compliance activities—including user permissions, object permissions, database log setup, alert setup, alert tracking, and audit trail and workflow tracking—and makes them available from the Compliance Center.

The Compliance Center is easily accessible through Enterprise Portal in Microsoft Dynamics AX.

**Benefit statement:**
Compliance Management simplifies compliance and helps ensure consistency across your organization by providing one central location for viewing and managing all compliance-related business process content, internal controls, and reporting.

**Key questions:**
- Does your organization have a difficult time keeping up with compliance-related activities?
- Do you need to improve the consistency of company-wide business processes for regulatory compliance?

**Prerequisites:**
- Financials II
- Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services

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**Supply Chain Management**

**WAREHOUSE MANAGEMENT I**

Warehouse Management I in Microsoft Dynamics AX provides inventory dimensions for warehouse, pallet, and location, which you can add to all your inventory items to trace not only which warehouse they are in, but also precisely where they are stored in each warehouse.

**Inventory Dimensions**

The Location dimension enables you to specify the exact put-away location when receiving items. When selling items, the user can specify exactly where the selling items were taken from. On-hand inventory can be viewed with location for a clear and complete overview of items.
**Benefit statement:**
Warehouse Management I gives you a way to trace precisely where your inventory is stored across your warehouses. This helps reduce the time your employees spend searching for items or products, and can speed up your response time for fulfilling orders and delivery.

**Key questions:**
- Do your employees spend too much time searching your warehouses for items or products?
- Have you ever lost orders because your employees couldn’t find items in your warehouses quickly enough?

**Prerequisite:** Logistics

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**Benefit statement:**
Create purchase requisitions and define workflows to control the entire purchase requisition process before a purchase order is created and submitted to vendors. When the purchase department has approved the requisitions, purchase orders are created automatically.

**Key questions:**
- Do you need to increase efficiencies with a fast, easy way to manage the purchase requisition process?
- Do you need help enforcing consistency for business and approval processes for all employees?

**Prerequisite:** Trade

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**PURCHASE REQUISITION**
Purchase Requisition in Microsoft Dynamics AX gives you the ability to streamline procurement with an end-to-end process that includes requests for proposals (RFPs), vendor comparison and selection, and integrated purchase processes (workflow). With the workflow template provided in Microsoft Dynamics AX, you can define a workflow that controls the purchase requisition process before the purchase requisition is accepted and a purchase order is created and submitted to vendors.

You can create purchase requisitions in the Microsoft Dynamics AX client and by using Enterprise Portal in Microsoft Dynamics AX.

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**QUALITY MANAGEMENT**
Quality Management in Microsoft Dynamics AX offers full integration for managing quality processes and non-conformances. It helps you manage, track, and handle quality processes and issues throughout a company. Quality management processes can be applied to purchase, sales, quarantine, and production orders, as well as to route operations. This module includes two components: quality control and quality management.

**Quality Control**
Quality control is used to set up and manage the quality testing requirements for a company.
- Specification of the test instruments used to perform the tests
- Identification of test locations
- Definition of the test specifications such as sampling, test groups, and test outcomes that determine whether test items meet quality standards
- Perform destructive tests
- Creation of the quality order (manually or automatically)
Quality Management
Quality management is used to manage the test process and non-conforming products and items, such as damaged or defective goods, and to track and resolve customer or vendor problems, such as product complaints or performance issues.

- Manage turnaround times for non-conforming products or items
- Track and resolve issues by problem type
- Link production activities to action items to determine problems immediately and take appropriate action to prevent recurrence
- Determine temporary and permanent solutions
- Tag non-conforming items for quarantine

Benefit statement:
Simplify quality control with the ability to set up and manage testing requirements, such as specifications, test locations, and destructive testing. Simplify quality management for non-conforming products and items, such as damaged goods, with the ability to manage turnaround times, quickly resolve issues, and link production activities to action items.

Key questions:
- Do you need to streamline quality control for receiving, production, and route operations?
- Do you need to simplify quality testing requirement processes, such as test specifications and locations?
- Do you need to improve test management processes for non-conforming products and items?

Prerequisites:
Trade
Production II (optional)
Logistics (optional)

MASTER PLANNING
Master Planning in Microsoft Dynamics AX uses information from across your company and supply chain to help you optimize production and materials planning and scheduling. Finite materials and capacity scheduling can be performed at the same time so that available capacity, inventory levels, and purchase lead times are taken into consideration in production planning and inventory replenishment.

Forecast Scheduling and Master Planning
- Forecast scheduling provides an overview of longer-term purchase, production, and resource requirements—based multiple forecast scenarios
- Create multiple plans for short-term master scheduling to explore material and capacity requirements based on existing orders or different scenarios
- Run master planning across multiple sites by allocating sites to BOM levels and intercompany master planning
- Master planner helps run concurrent processing of master planning calculations

Coverage Groups
- Coverage groups enable you to attach different time fence controls to different items
- Products or items that are more time-consuming to produce should have a longer time fence so you can extend production planning over a longer period

Scheduling Methods
- Set two different levels of scheduling: operations scheduling, which schedules operations and lead times by day; and job scheduling, which schedules operations by day and time
- Perform bottleneck scheduling by designating a work center as a bottleneck and use a time fence to allow finite scheduling for the work center (requires Production III)

Messages
- Messages flag orders that cannot be delivered on the requested date in the future; the message shows the earliest possible delivery date based on materials and capacity requirements
- Action messages suggest changes to existing orders and planned orders to confirm adequate quantity in inventory to meet requirements, and will also suggest updated delivery dates based on times
Order Promising

• Sales order explosion gives you the ability to break down a BOM item and calculate an earliest possible delivery date based on route and incoming items
• Available-to-promise (ATP) calculates delivery date based on available inventory and current production orders
• Capable-to-promise (CTP) calculates delivery date based on available materials and production capacity*
• Sales and Marketing in Microsoft Dynamics AX enables you to tie quotations to planning materials in Master Planning

* CTP functionality requires Production II in Advanced Management Enterprise.

Benefit statement:
Master Planning can help you minimize lead times and maximize on-time deliveries to customers, respond quickly to changes in demand for materials and capacity, and reduce inventory levels through improved production planning and forecast scheduling. Tightly plan production, purchase and transfer orders, and net requirements. You can respond quickly to changes in demand and reduce inventory levels.

Key questions:
• Does your organization need to reduce lead times and respond quickly to changes in demand?
• Do you maintain large safety stocks distributed across different sites to keep from running out of inventory unexpectedly at any of those sites?
• Does your sales staff sometimes promise delivery dates that you cannot fulfill?

Prerequisites:
Trade
Production II (optional)
Production III (optional)

Manufacturing

RESOURCES
All the resources your company uses for production can be divided into four work centers: machinery, people, tools, and vendors. Resources in Microsoft Dynamics AX helps you register and organize all your production or project resources, so you can use other modules, such as Production II or Project I, to get the maximum benefits from these resources.

• Categorize resources across four work centers as groups or individual resources
• Define each resource in terms of efficiency, to track whether some resources complete jobs more quickly than others
• Set the capacity of each work center with a unique calendar that shows the work center’s availability over time
• Define a setup cost and running cost per hour for each work center and an incremental cost per item to gain insight into total production or project costs

Prerequisite: Production II or Project I

PRODUCTION I
Production I in Microsoft Dynamics AX gives you the ability to create a production BOM and process production orders so you can track the raw materials that go into your finished products and control the status of the order. Actual raw material consumption and finished product information is automatically posted to the general ledger from this module.

Role Centers
Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for production:
• Operation Manager
• Production Manager

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.
Creation of Production Orders
- Manual creation of production orders
- Create production orders through planned production orders in Master Planning
- Create production orders directly from a sales order line

Production Orders
- Production orders can be categorized into pools for scheduling or groups to be posted in the general ledger
- Quick overview of the status of the production order
- Track actual production costs against estimated and standard costs
- Split a single production order into two or more orders
- Link sub-contractor purchase orders to the production order
- Plan production orders directly from sales orders

Subcontracting
- Purchase of services from subcontractors
- Order includes shipping documents for raw material and work description (operation and route) to subcontractor

Production Bill of Materials
- A standard BOM is copied to the production order, where it can be modified if needed
- Supports measurement formulas to calculate consumption
- Supports negative quantity on BOM lines to handle by-products of production
- Each item within a BOM can be controlled by line-types, such as sub-production, phantom BOM, subcontract, or raw material
- A graphical BOM display gives you a visual representation of changes you make to create “what-if” scenarios

Scheduling
- Production scheduling can be done forward or backward with different dates as starting points based on lead time of raw material
- Finite or infinite material scheduling
- Rough cut or detailed job scheduling (requires Production II and Production III)

Production Status
- Production orders follow these steps:
  - Created
  - Estimated
  - Scheduled
  - Released
  - Started
  - Reported as finished
  - Costed

Production Status Control
- The production order can be rolled back and deleted if required until the costed stage

Financial Integration
- Online updating of WIP (items in progress and work centers in progress) and actual cost to the general ledger when updated in Production
- Supports reporting of production variances to standard cost

Production Consumption
- All consumption is reported through journals; journals can be automatically generated and posted
- Supports backward flushing of items
- Scrap can be handled either as a constant or a variable
**Benefit statement:**
Production I helps you minimize lead times and satisfy customer demand with flexible BOM scheduling options. Online updating of work in progress (WIP) and actual costs to the general ledger mean that you can always have an up-to-date picture of where products are in your production process. If a customer is using a standard cost method, then the general ledger would be updated with standard costs and variances.

**Key questions:**
- Can you get an up-to-date, on-demand overview of raw materials consumption in your production process?
- Do you need to simplify purchasing and shipping processes for subcontractors?
- Do you need the ability to roll back or delete production orders until the costed stage?
- Could you speed production with online updates to WIP and actual cost in the general ledger?

**Prerequisites:**
Logistics  
Master Planning  
Production II  
Production III (optional)

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**Project Accounting**
Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for project accounting:
- Project Manager
- Project Team Member

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.

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**PROJECT I**
Project I in Microsoft Dynamics AX enables you to track time and materials consumed and follow up on time and material projects and internal projects with the ability to measure utilization rates. Itemize time and materials for invoicing, while retaining sales prices and cost of items and man hours, and compare actual cash flow with budgeted cash flow. Manage costs by summarizing actual cost, committed cost, and remaining budget to discover total expected cost.

**Registration and Data Entry**
- Itemize project costs, employee hours, materials used, and fees incurred by the customer and enter them into the journal
- Enter hours remotely over the Internet with Enterprise Portal in Microsoft Dynamics AX
- Create your own project hierarchy comprising multiple sub-projects in order to be able to better manage the entire project
- Offer project quotations (hours, fees, expenses, and items) and promote quotations to projects
- Follow up on status of deliveries and sales and purchase orders
- Workflow templates for projects and project purchase requisition (purchase requisition is required)

**Invoicing**
- Invoice each project or project group, and retain itemized time and resource costs
- Sub-projects can also be invoiced separately or together, which makes it possible to have a single project with multiple invoices for different customers
- Approval procedures can be set for invoices, to make sure that responsible managers sign off on invoices before they are sent to the customer
- Prepayments can be tracked and applied to future invoices
- Enter project costs directly into accounts payable or purchase orders
- Use flexible line property setup to capture chartable and non-chartable costs
- Adjust transactions before creating your invoice proposals, and edit invoice proposals before final invoicing
- Invoice control form provides an easy overview of invoiced and non-invoiced transactions
Project Management
• Break down the time and materials used on projects and assign individual hours or items to sub-projects for more detailed control of costs and consumables
• Project structures can be saved so that budgets, sub-projects, and activities can be copied from previous projects and applied as a template to new projects
• Schedule tasks and allocate resources and capacity to future tasks

Accounting
• Project I is tightly integrated with general ledger functionality, so that dimensions can be applied to every transaction in a project
• Detailed posting profiles can be set up, so that transactions can be posted to specified ledger accounts depending on preset criteria
• Track and control project costs

Inquiry and Reporting
• A report generator enables extended reporting with load and save capabilities
• A statistic form compares project budgets to consumption over time
• General ledger integration makes it easy to follow transaction details for a single project or group of projects
• Calculate employee and hour utilization
• Export to Excel functionality with project control available

Project Supply Chain
• Gain early visibility into project-based manufacturing by recognizing actual costs to avoid potential cost overruns during or at the end of production
• Track project purchase orders, project purchase requisitions, and project requests for quotation (RFQs) to manage costs and identify potential cost overruns
• Create project quotations and project sales orders to offer customers the right price
• With the integration of the Project module to the Production module, you can display a production order that is linked to a project; a production order can be created directly from a project and can automatically create and post project transactions simultaneously with the production posting

Integration with Microsoft Office Project Server 2007*
• Leverage smooth, bi-directional integration with Office Project Server 2007 for projects, activities, and tasks
• Use powerful scheduling and tracking tools to allocate resources effectively

* This functionality is optional for Project I. To access this functionality, you must be running Microsoft Office Project Server 2007.

Benefit statement:
Project I is designed for project-focused companies, and also companies that run projects such as research programs, services, IT installations, and product support. The module can analyze progress in real time, comparing the financial performance of each project or the entire company against predefined goals.

Key questions:
• Can you quickly analyze the financial performance of internal and external projects by comparing resources consumed and revenue earned to the project budgets?
• Are you concerned with your ability to effectively manage your cash flow because of delays in invoicing customers for work performed?

Prerequisites:
Trade
Resources (optional)
Logistics (optional)
Production I (optional)
Purchase Requisition (optional)
Microsoft Office Project Server 2007 (optional)
Customer Relationship Management

Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for sales and marketing:

- Account Manager
- Dedicated Sales Representative
- Marketing Manager
- Marketing Staffer
- Sales and Marketing Executive
- Sales Manager
- Super Sales Representative

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.

Global Address Book

Maintain, centralize, and share contact information across your organization and with other companies using the Global Address Book, including employee, customer, vendor, vendor organization, and other contact information.

MARKETING AUTOMATION

Marketing Automation in Microsoft Dynamics AX enables you to divide your customers and prospects into groups, based on sales and demographic information from Sales Force Automation in Microsoft Dynamics AX. By extracting groups of customers and prospects based on your sales and CRM data, you can group your customers and prospects into campaigns. You can develop tightly targeted marketing campaigns to optimize your sales performance. You can also use this module to manage non-sales-related communications such as newsletters and membership drives.

Communications Management

- Divide campaigns into sub-campaigns to reach more specific audiences
- A campaign can be linked to a project, so that cost and revenue on the campaign execution can be recorded (requires Project I)
- Broadcast campaigns via e-mail, Web, fax, mail, and phone
- Use existing campaign structures as templates for new campaigns

Marketing Encyclopedia

- Common repository for all of your sales and marketing collateral
- Exchange sales and marketing knowledge
- Review sales material such as information about product lines, products, and price lists
- Categorize sales and marketing materials (product line, white papers, graphics, Web sites, and videos) for quick access
- Access information in the encyclopedia, which supports Web links, audio/video clips, presentations, and graphical software
- Track and review competitor information, trends, and Web sites

- Create campaigns based on sales and communication and demographic information from across the Microsoft Dynamics AX database
- Assign communication tasks to sales or marketing staff based on responsibilities and specializations
- Automatic generation of marketing campaign activities based on company-defined policies
- Link campaigns, questionnaires, projects, and Web responses
Benefit statement:
Marketing Automation helps you make campaign planning, execution, and analysis easier by grouping customers and prospects together based on criteria you can specify, and by placing all relevant marketing information at your fingertips. You can base campaigns on back office and front office information, which helps you organize, execute, track, and analyze them more easily and with greater insight.

Key questions:
• Do you have an easy way to segment your customer or prospect base and send a consistent package of marketing materials or communications to any given segment?
• Can you pull up an in-depth analysis of customer feedback from your last marketing campaign, so you can learn how to make your next campaign even better?
• Do your marketing professionals have enough customer feedback to build a picture of who your customers are and what they want?
• Do you need to make employee, customer, and vendor contact information easily available to employees across your organization?

Prerequisite: Sales Force Automation
Extends with:
Questionnaire
Project

TELEMARKETING
Designed for sales teams or telemarketing groups, Telemarketing in Microsoft Dynamics AX supports telephone-related customer support and marketing programs, including sales-lead generation, customer surveys, direct marketing campaigns, and customer support.
• Create call lists based on contact data
• Automatic dialing
• Calls that were not initially successful are identified so that further attempts can be made
• Automatic generation of telemarketing activities based on company-defined policies
• Integration between campaigns and call list
• Integrate questionnaire data in the sales process

• With the Questionnaire functionality, you can build custom call scripts to guide staff through phone call interactions
• A telemarketing window contains all the relevant information your marketing and customer support specialists need on their calls
• Computer Telephone Integration (CTI) via Telephony Application Programming Interface (TAPI)
• Full call logging that includes time, date, duration, caller, and more
• Extract customer groups and allocate responsibility for calls to these groups across your telemarketing or phone support staff
• Analysis tools measure employee performance and call statistics

Benefit statement:
Telemarketing helps users execute and manage telephone-assisted sales and marketing activities from one connected solution. The module enables users to improve lead generation and qualification, execute guided calls efficiently with call center functionality, and use data from telemarketing activities directly in the sales process.

Key questions:
• Do you know how effectively your telemarketing personnel use their time?
• Do your marketing and customer support specialists have a single tool that gives them all the information they need about leads and customers, and that helps them manage individual calls consistently?
• Can you take information from your telemarketing processes and spread the knowledge out to support your overall sales processes?

Prerequisite: Sales Force Automation
Extends with:
Marketing Automation
Questionnaire
**SALES FORCE AUTOMATION**
Sales Force Automation in Microsoft Dynamics AX registers prospect and customer information and the details of each interaction between your sales staff and the outside world, and the process from initial bid to sales order.

**Contact Management**
- Store information about prospects, customers, vendors, and other business contacts
- Register activities associated with the sales process
- Synchronize activities as appointments and tasks with Outlook
- Configurable mapping of Microsoft Dynamics AX fields to Outlook
- Data protection in Outlook synchronization process
- Drag files, documents, and e-mail messages from Windows Explorer and Outlook into the document handling system of Microsoft Dynamics AX
- Log transactions on selected records
- Import prospects with business and contact details
- Computer Telephone Integration (CTI) via Telephony Application Programming Interface (TAPI)
- Send e-mail and Short Message Service (SMS) messages to individuals or groups
- Track all additions, changes, and deletions to contact and sales process information performed by your sales staff
- Track all mail, telephone, and e-mail communications between sales staff and the outside world
- Generate and record communications to groups of customers based on selected criteria applied to customer data

**Sales Process Management**
- Generate leads by importing them from external sources, then allocate responsibility for leads to your sales staff and track the quality of leads
- Extend offers to groups of leads, based on customized profiles
- Full integration with other parts of Microsoft Dynamics AX gives you easy access to sales-related information
- All the relevant product, project, and financial data, such as manufacturing cost, item availability, and delivery time, can be available to sales staff, depending on the Microsoft Dynamics AX modules licensed in your solution
- Sales quotations are extended to highlight the sales process, integrating sales orders and master planning
- Track the effectiveness of sales and marketing staff
- Assign probability percentages to your sales quotations in order to get a better overview of your sales pipeline and help optimize your purchasing and production decisions in Master Planning

**Lead Management**
- Create, review, update, and manage information about leads, and associate responsibilities, employees, and campaign data with stored information

**Opportunity management**
- Create, develop, and close sales deals while tracking the information through a central location; all contacts, competitors, partners, products, quoted prices, quantities, and sales stages are stored together to ensure that you always know where a potential sale is in the sales process

**Enterprise Portal**
- Provide access to Sales Force Automation through Enterprise Portal to support remote workers—including the ability to map customer addresses with Microsoft Virtual Earth™ (requires Sales Representative Role)
Benefit statement:
Sales Force Automation helps you manage your customer relationships effectively. Users can increase sales force productivity and effectiveness, easily identify and seize sales opportunities, and gain a company-wide overview of all customer- and prospect-related activities.

Key questions:
- Do you need to record your contact and communication information for all your customers and prospects?
- Do you have easy access to information about what customers have bought and what they could potentially buy before you make a customer call?
- When talking to a customer on the phone, are you able to identify at a glance what type of customer they are and what activities your colleagues have previously undertaken with this customer?
- Are you able to record sale orders and agreements with the customers directly into the system, minimizing the time spent on reporting?

Prerequisites:
Financials I
Trade
Sales Representative Role (optional)

SALES MANAGEMENT
Sales Management in Microsoft Dynamics AX enables you to analyze the performance of your sales staff, sales teams, and the entire sales organization. With user-defined graphs you can retrieve and work with data from anywhere in Microsoft Dynamics AX to gain a better understanding of your sales processes and drive it to success.

Sales Staff Budgeting
- Define sales targets for individuals
- Automatically compare sales figures with budgets to measure sales performance
- View sales performance by multiple selected dimensions to aid sales flow analysis

Management Statistics
- Extract data from anywhere in Microsoft Dynamics AX
- Define groups of data by any table value or period intervals
- Sum values from any numerical table fields or table methods you choose
- Find your highest, lowest, average, and count in any data set
- Manage and monitor the activities of sales teams
- Create queries based on default query templates including the status of sales activities, pending sales quotations, and lead management
- Define queries by individual employees or teams
- Display sales data graphically for an intuitive understanding of your business flows
- Export sales data and graphics to external applications

Benefit statement:
Sales Management helps you make detailed queries about sales and market data from Sales Force Automation. The query results help you gauge effectiveness and measure performance across your sales organization, so you can simplify and improve the management of your sales pipeline.

Key questions:
- Do you need to measure the performance of individual members of your sales staff?
- Do you need to know where your leads are in the sales process compared to last year?
- Do you need a full overview of your sales performance—both past and present?
- Can you easily get details about your sales pipeline—today and tomorrow?
- Do you need to follow up with your sales representatives on a daily basis?

Prerequisite: Sales Force Automation

Extends with:
Marketing Automation
Telemarketing
Project I
Questionnaire
EXPENSE MANAGEMENT

Expense Management in Microsoft Dynamics AX enables you to streamline expense entry, itemize and split expenses, and attach receipts. Enter expense reports and expense report line items over the Internet using Enterprise Portal in Microsoft Dynamics AX, where they can be approved and transferred back to the general ledger, or rejected.

Note: Expense administration and approval can be done in the Microsoft Dynamics AX client, but all expense entry requires Enterprise Portal in Microsoft Dynamics AX. Therefore, customers will need to license a named user for each employee that enters expense information for either Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services or Microsoft Dynamics Client for Microsoft Office and Microsoft Office SharePoint Server.

Set per diem rules and define policy violations

• Create per diem rules around multiple sets of criteria, such as different countries
• Administrators can define policy violations to set the minimum and maximum values to be entered against expense types so employees cannot submit an expense report that violates the policies determined for expenses

Personal expense options

• Reconcile employee’s personal expenses charged to a company account in two ways: Pay the expenses and then debit the employee’s account for the transaction amount; or, do not pay the expenses, but create a report that shows that personal expenses were charged on the expense report
• Itemize hotel bills into line items when creating an expense report to separate items, such as the cost of the hotel stay, broadband Internet use, and room service
• Import credit cards and travel account transactions so that employees can add the transactions to their expense reports

Split expenses at the transaction level

• Split expenses at the transaction level across projects, accounts, and dimensions, and view the transactions in the expense report form
• Administrators can define policy violations to set the minimum and maximum values to be entered against expense types so employees cannot submit an expense report that violates expense policies

APPLICATION INTEGRATION FRAMEWORK WEB SERVICES EXTENSION

Web Services in Microsoft Dynamics AX are programmatic interfaces that can facilitate application-to-application (A2A) communication between a business and its external trading partners. AIF includes support for Web services that are exposed to trading partners (known as outbound Web services) and an adapter to specify documents and use Web services exposed by other trading partners (known as inbound Web services).

You can create generic Web services and turn X++ classes into Windows Communications Framework (WCF) services. You can also publish any Web services through asynchronous adapters of AIF or through WCF. AIF also provides functionality that you can use to consume external Web services from within Microsoft Dynamics AX.

By using Microsoft BizTalk Server 2006 R2 with Microsoft Dynamics AX 2009, you can further extend automated business processes and enhance communication between systems and people. BizTalk Server Adapter for Microsoft Dynamics AX 2009 adds additional flexibility for growth, and enables you to connect easily and with enhanced security to LOB data. The adapter has a schema import wizard that is integrated with Microsoft Visual Studio, so you can import schemas and service descriptions from Microsoft Dynamics AX 2009.
Note: Customers will need to license a named user for each employee who needs to access this functionality for either Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services or Microsoft Dynamics Client for Microsoft Office and Microsoft Office SharePoint Server. To accommodate unlimited third-party users or applications, customers will need to license the Microsoft Dynamics External Connector.

**Benefit statement:**
By using AIF to expose Web services to external trading partners, you can increase the efficiency of your supply chain by enabling trading partners to create, update, read, delete, or query for records in the Microsoft Dynamics AX database. Microsoft Dynamics AX 2009 provides a wide range of standard business documents, as shown in the following table.

**Key questions:**
- Is your company looking for ways to communicate more effectively with trading partners?
- Do you need to increase the efficiency of your transactions with trading partners?

**Prerequisites:**
Application Integration Framework
Microsoft BizTalk Server 2006 R2 (optional)

### Microsoft Dynamics AX 2009 Standard Business Documents

<table>
<thead>
<tr>
<th>Address</th>
<th>Inventory Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>Inventory Transfer Order</td>
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<tr>
<td>ASN</td>
<td>Out</td>
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<tr>
<td>Asset Condition</td>
<td>Item</td>
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<td>Asset Group</td>
<td>Payment Terms</td>
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<tr>
<td>Asset Location</td>
<td>Picking List</td>
</tr>
<tr>
<td>Asset Major Type</td>
<td>Price Discount Journal</td>
</tr>
<tr>
<td>Bills of Material</td>
<td>Price List</td>
</tr>
<tr>
<td>Cash Discount</td>
<td>Production Picking List</td>
</tr>
<tr>
<td>Chart of Accounts</td>
<td>Production Route Card</td>
</tr>
<tr>
<td>Configuration Table</td>
<td>Profit Loss Journal</td>
</tr>
<tr>
<td>Contact Persons</td>
<td>Project Electronic Invoice</td>
</tr>
<tr>
<td>Counting Journal</td>
<td>Project Hour Journal</td>
</tr>
<tr>
<td>Custom Payment Journal</td>
<td>Purchase Invoice</td>
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<tr>
<td>Customer</td>
<td>Purchase Requisition</td>
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<td>Customer Groups</td>
<td>Return Order In</td>
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<tr>
<td>Delivery Modes</td>
<td>Return Order Out</td>
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<td>Dimensions</td>
<td>RFQ Send</td>
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<td>Exchange Rates</td>
<td>Sales Electronic Invoice</td>
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<td>Expense</td>
<td>Sales Invoice</td>
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<tr>
<td>Fixed Asset</td>
<td>Sales Order</td>
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<tr>
<td>Free Text Invoice</td>
<td>Sales Packing Slip</td>
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<td>General Journal</td>
<td>SMA Order</td>
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<td>Inventory Color</td>
<td>Transfer Journal</td>
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<td>Inventory Dimension</td>
<td>Trv PBS Maindata</td>
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<td>Combination</td>
<td>Unit</td>
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<td>Inventory Item Group</td>
<td>Unit Convert</td>
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<td>Inventory Location</td>
<td>Vendor Group</td>
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<td>Inventory On Hand</td>
<td>Vendor Payment</td>
</tr>
<tr>
<td>Inventory Size</td>
<td>Vendor Table</td>
</tr>
</tbody>
</table>
ADVANCED MANAGEMENT ENTERPRISE

For organizations with complex needs, Advanced Management Enterprise edition extends the Advanced Management edition by also providing a rich set of advanced supply chain management, configuration, manufacturing, and development capabilities. See the Microsoft Dynamics AX price list for more information.

Financial Management

COST ACCOUNTING I (COST CENTER ACCOUNTING)

Cost Accounting I in Microsoft Dynamics AX is an internal cost flow analysis tool that helps you achieve a deeper insight into the costs incurred by your business. With Cost Accounting I you can measure in detail the economic performance and profitability of your business operations and business units.

- Flexible mapping of cost accounts into cost categories
- Dimensions setup for cost accounting
- Service categories for quantity itemization (integrated with Production and Project)
- Flexible reporting system featuring multiple line definitions and structural hierarchies
- Integrated cost accounting journals for booking internal cost accounting transactions on cost amounts or quantities
- Flexible and versatile allocation and distribution capability, including multiple parallel calculation versions
- Specific budgeting and forecasting capability, linked to ledger budget

Prerequisite: Base Package
COST ACCOUNTING II (OPEN DIMENSIONS)
License up to seven more financial dimensions to complement the three provided in the Base Package to perform more extensive analytical accounting. Cost Accounting II enables allocation via debit/credit from one dimension type value to another.

Prerequisite: Cost Accounting I

COST ACCOUNTING III
(INTERNAL COST ACCOUNTING)
With Cost Accounting III in Microsoft Dynamics AX, you can allocate or apportion costs through cost rates.

Prerequisite: Cost Accounting I

COST ACCOUNTING IV (FLEXIBLE PLANNED COST)
Cost Accounting IV includes accounting and budget forecasting features. Flexible cost calculation capability enables cost planning based on capacity usage and measures deviation of the target cost according to actual capacity usage and costs.

Prerequisite: Cost Accounting I

Supply Chain Management

INTERCOMPANY
Intercompany in Microsoft Dynamics AX automates trade between several subsidiaries or distribution centers internally within one Microsoft Dynamics AX installation. Sales and purchase orders can be created manually or automatically across your subsidiaries.

• Define and apply different trading policies when trading between different Microsoft Dynamics AX companies
• Create intercompany order chains directly and automatically from sales order to end customer with and without direct delivery
• Create sales orders in real time, and update intercompany sales orders from purchase orders and vice versa
• Full order and logistics transparency upstream and downstream in the intercompany chain
• Support for master scheduling across companies

• Support for automatic payment and settlement
• Support for multiple intercompany pricing policies
• Support for various degrees of process automation for sales and purchase orders
• Exchange of information between companies, subsidiaries, and distribution centers without having to use identical identification for customers, vendors, items, or units
• Receive items based on the selling subsidiary’s delivery note, and invoice items based on the selling subsidiary’s invoice
• Make stock-on-hand inquiries in all subsidiaries
• Process return orders

Benefit statement:
Intercompany automates and therefore reduces the cost of manual transactions resulted from intercompany trade. This module can also give you and your customers more accurate information about on-hand inventory and delivery times. You can minimize backorders on items you’ve promised customers and reduce your stockholding costs by having visibility into inventory in all subsidiaries and sourcing inventory across locations.

Key questions:
• Can one site at your company order inventory electronically directly from other sites in your organization?
• Is your company forced to tie up funds in large safety stocks distributed across different sites to keep from running out of inventory unexpectedly at any of those sites?
• Can you determine the exact inventory levels of items at all your sites to make sure you can give your customers what you promised them?

Prerequisite: Trade

WAREHOUSE MANAGEMENT II
(INCLUDING RFID)
Warehouse Management II enables you to automate the materials handling in your warehouse. The module adds logic and rules to inbound, replenishment, and outbound movements in your warehouse. When you receive inventory items, this module suggests optimal placement for storage in your warehouses based on preset rules. When you receive an order, the functionality generates an optimized picking route based on preset rules. Picked
items can be rearranged and repacked after the picking process and an Advanced Shipping Notification can be sent to the recipient.

Warehouse Management II in Microsoft Dynamics AX also supports basic radio frequency identification (RFID) integration scenarios with core business processes, such as inbound receiving, pick, pack, and ship processes.

Role Centers
Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for warehouse management:
- Warehouse Manager
- Warehouse Worker

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.

Placement and Storage
- Specify different location and storage policies at both the warehouse level and the item level

Random Location Storage
- Determine storage location based on rules regarding warehouse zone, size, volume, and height
- Allocate storage based on priority of picking locations first and then buffer locations

Storage Dimensions
- Describe storage by individual warehouse, pallets, and locations

Warehouse Zones and Locations
- Organize warehouses into storage zones to prioritize selection of locations for incoming inventory, and define zones with different conditions in the warehouse (such as climate-controlled zones)
- Specify warehouse locations on five levels: warehouse, aisle, rack, shelf, and bin

Pallet Transports
- Create pallet transports to move groups of items within and between warehouses
- Create pallet transports from the following order types: input, output, or refill orders

• Prioritize according to order types
• Consider different pallet types corresponding to different sizes when selecting locations

Output Orders
- Derive output orders from sales order lines or production order lines
- Generate output orders as requisitions to warehouse
- Define shipments (grouping of output orders) so that they result in the creation of optimized picking routes

Pick and Shipments
- Define shipments manually or automatically using easy-to-define rules and shipment templates, and drive picking routes per customer, per order, or both
- Picking reservations can be done on picking, bulk, and in- and outbound locations
- Staging provides an overview of shipments in the outbound dock and enables you to rearrange and repack shipments
- Shipments reservations
- Send out electronically advanced shipping notification (ASN) to the recipient

Support for Barcoding Integration
- Print pallet label, location label, and bill of lading labels that include barcodes for automatic tracking

Support for RFID Integration
Simplify real-time traceability with support for location-, pallet-, and item-level tagging that is compliant with electronic product code (EPC) global standards to improve insight into your inventory. You can read and write to RFID-EPC (radio frequency identification-electronic product code) tags, and interface with RFID devices through Microsoft BizTalk Server 2006 R2.
- Gain out-of-the-box RFID integration with core business processes, such as inbound receiving, pick, pack, and ship processes
- Register pallets and inventory items and control them throughout the supply chain, and gain an overview of the entire RFID environment
**Benefit statement:**
Warehouse Management II can help you respond more quickly to orders and reduce handling costs. Save time and resources when receiving items by suggesting optimized placement for storage in your warehouses. Optimized picking routes can also save time when picking and shipping items from your warehouses. Overall, this module helps you respond more quickly to orders and reduce handling costs.

**Key questions:**
- Do you need to improve quality and accuracy for handling specific items in your warehouse, down to the individual pallet?
- Do your employees spend too much time trying to find the best place to store newly received items in your warehouses?
- Are your warehouse operations less efficient than they should be because your employees don’t use picking routes?
- Are customers demanding that your organization comply with new policies in terms of tagging item/cases or pallets?

**Prerequisites:**
- Warehouse Management I
- Logistics
- Microsoft BizTalk Server 2006 R2 (optional)

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**Benefit statement:**
With Demand Planner you can quickly access demand information to generate forecasts, reducing planning time and horizons. You can define the information hierarchies and detail level you need to create more accurate forecasts. With reliable forecasts, you can hone inventory levels and time purchasing to optimize inventory levels and lower costs. Share forecasts to improve organizational buy-in and drive business decisions.

**Key questions:**
- Can you quickly retrieve information needed for forecasting?
- Do you spend an excess amount of time planning due to poor access to essential information?
- Are you unable to achieve the level of insight and detail you need to accurately forecast?
- Do you have the ability to share forecasts within your company to improve business insight?

**Prerequisites:**
- Master Planning
- Microsoft SQL Server

---

**DEMAND PLANNER**
Demand Planner in Microsoft Dynamics AX* helps you more accurately forecast sales and materials requirements to reduce costs, increase customer satisfaction, and drive better business decisions. Collaboration features of the module make it easy to consolidate input, manage consensus, and share your forecasts with other departments and business processes.

- Flexible forecast generation
- Three-dimensional, configurable data hierarchies
- Improved information management
- Collaboration tools
- Setup and configuration with import and export capabilities
- Simplified authentication
- Compliance with trustworthy computing standards

* Please see the latest Microsoft Dynamics AX price list to ensure availability in your area.

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**Production II (Routing Management)**
Production II in Microsoft Dynamics AX enables you to plan and execute routes, operations, and rough capacity to get accurate lead times. You can use finite or infinite scheduling, and you can track costs and calculate scrap while posting all business information automatically to the general ledger.

**Route Complexity**
- Plan simple, sequential routes, or complex networks of routes
- Plan simultaneous operations in route networks by using primary and secondary operations in a route
- Multiple work centers attached to the same operation
- Designate a work center as a subcontractor
Route Simplicity
• Share route information between items that have the same characteristics

Scheduling
• Use finite or infinite scheduling, forward and backward from various dates
• Use rough-cut capacity planning

Operation Components
• Describe each operation component in the production route by any of a number of descriptors, such as: queue time, setup time, run time, transit time, queue time after operation, overlap quantity, cost categories, multiple-resources control, and capacity load per operation

Scrap Calculations
• Calculate expected waste per operation as a percentage, both by individual operation and by accumulated scrap over the whole production process

Cost Tracking
• Track detailed costs related to resources and throughput
• Include work center costs in production cost estimation
• Use automatic work center consumption when starting or finishing production orders

Benefit statement:
Production II helps you plan your resources to get the greatest efficiency out of your production process. You can track production progress and easily make changes to increase efficiency and reduce costs. Real-time updating of resource data helps you manage capacity and optimize your resource usage to drive down production costs and get more accurate delivery dates.

Key questions:
• Is your production floor less efficient than it should be because a lack of visibility into your resource capacity makes it difficult to create good routes and plans?
• Do you know at any given moment where your biggest production costs are?

Prerequisites:
Resources
Production I

PRODUCTION III (SHOP MANAGEMENT)
Production III in Microsoft Dynamics AX provides a Gantt chart to give you a graphical overview of your production process. You can reschedule jobs simply by dragging them around on the Gantt chart. The module also gives you detailed job management and production scheduling, including the ability to schedule jobs in each work center by the minute and second.

Gantt Chart
• Get a graphical presentation of your production schedules for easy visualization
• Reschedule your jobs simply by dragging items in the Gantt chart

Task Group
• Use alternative work centers for an operation in case of scheduling overloads
• Set up basic rules for which alternative work centers can be used
Bottleneck Scheduling
• Easily determine where your production bottlenecks are by checking future and current capacity loads
• When Microsoft Dynamics AX reschedules jobs to avoid a bottleneck, it automatically reschedules the rest of the route to reflect the new capacity loads

Job Monitoring
• Track the setup job or the process job per operation
• Report resource consumption based on job number

Scheduling Properties
• Set up jobs that require the same work center to all reach that work center simultaneously

Benefit statement:
The Gantt chart in Production III helps you easily visualize your production process and work center utilization as a whole, so you can anticipate and avoid bottlenecks. The simple drag-and-drop rescheduling function helps you save time in planning, and the detailed job management functionality gives you tight control over every aspect of your production floor.

Key questions:
• Can you get a quick visual overview of the present and future status of your production floor?
• Can you anticipate bottlenecks far enough in advance to prevent them from occurring?

Prerequisite: Production II

PRODUCT BUILDER
Product Builder in Microsoft Dynamics AX enables you to set configuration for your products with an automatically generated BOM, and it provides automatic route selection to ensure the best route for every order. Create validation rules to help ensure that customers don’t choose a combination of product options that you will not be able to produce; each variable is a product option that can be chosen by your customers.

By licensing Product Builder with Enterprise Portal in Microsoft Dynamics AX and the Product Builder for Enterprise Portal functionality, you can extend your product configuration capabilities to your customers and users over the Internet. Please see Product Builder for Enterprise Portal.

If you currently have any of the Product Builder modules for Microsoft Dynamics AX 4.0 (I, II, III, or IV), you will receive this combined module, and the Production II module if you do not already have it, at no extra charge when you upgrade to Microsoft Dynamics 2009. For more information, refer to the Microsoft Dynamics AX price list supplement on PartnerSource.

Product Configuration
• Set configuration options for your products to help users customize products to their own preferences
• Automatically generate a bill of material (BOM) to capture the final custom product configuration chosen by the customer or user

Routing Builder
• Set up default routes through your production process—for every order placed, Product Builder automatically chooses the most efficient route based on the item configuration and quantity ordered by the customer

Validation Types
• Create validation rules for variables, groups of variables, and the complete product configuration to help ensure that customers don’t choose a combination of product options that you will not be able to produce; each variable is a product option that can be chosen by your customers

Advanced Product Building
• Create more complex rules and formulas using X++ code, which affects the options your customers and users can choose while configuring products
**Benefit statement:**
Product Builder simplifies and streamlines the process of ordering, creating, producing, and routing customized products to help you improve productivity and increase customer loyalty. Automatic route selection helps ensure that you use the best route for every order, and support for validation types gives you an automated way to maintain product configurations and keep customers satisfied. By applying complex rules and formulas, you can create sophisticated product options to present to customers.

**Key questions:**
- Do you give your customers a way to easily pick custom options for your products, without needing to involve sales staff?
- Does your company have to maintain a large catalog of possible routes, and do you spend time choosing routes manually for each order?
- Have your salespeople ever promised your customers item configurations that you were unable to produce and deliver?
- Are your product models too sophisticated or complex for your sales staff to work with quickly, accurately, and consistently?

**Prerequisites:**
Logistics
Production II
X++ Source Code

**SHOP FLOOR CONTROL I (TIME AND ATTENDANCE)**
Shop Floor Control I in Microsoft Dynamics AX helps you reduce manual data entry with automated collection of employee time and attendance. Set up profiles to track employee attendance, and capture actual attendance and absence time automatically to calculate work time and paid time for each employee.

**Collection of Employee Time and Attendance Information**
- Set rules for flexible working hours while maintaining control of the total hours your employees spend on the job, including collection and management of overtime
- Advanced time profile setups
- Automatic profile search and profile calendar
- Work planner tool for setting up shift schedules
- Register personnel absence and integrate with human resources
- Notice board with individual messages and receipt feature
- Two-step validation procedure available to check time calculation and approval status—compare actual time registered to planned time
- Configure registration forms
- Password specification possible on validation

**Benefit statement:**
Shop Floor Control I helps you accurately and inexpensively track employee attendance patterns.

**Key question:**
Does your human resources department sometimes get into disputes with employees over attendance issues?

**Prerequisite:** Financials I

**SHOP FLOOR EMPLOYEE RECORDS**
Shop Floor Control I provides a license for 50 employee records. By licensing additional shop floor employee records, you can register additional employees in the shop floor employee table, so the activities of those employees can be tracked. Additional records are available in these configurations:
- Each, for records from 51–100
- Each, for records from 101–250
- Each, for records from 251–500
- Each, for records from 501–1500
- Each, for records greater than 1500

In addition to these records, Microsoft Dynamics AX users are needed to work with this module.

**Prerequisite:** Shop Floor Control I
SHOP FLOOR CONTROL II (JOB REGISTRATION)
When a production order is scheduled or project activities are created, a number of jobs are created on the shop floor to support the collection and posting of time and quantity on these production orders and project activities. Shop Floor Control II in Microsoft Dynamics AX registers the time and resources used, and the items created, for each job. This data can then be transferred to Production or Project for analysis of actual costs of the items produced.

- Register jobs by time and units
- Bundle jobs together so the same employee can work on several jobs simultaneously
- Create a team function by appointing a “pilot” or team leader to register information on behalf of a team of employees
- Register machine time
- Register non-productive time
- Integrate with the production and project modules
- Quantity feedback on production orders with use of multiple error causes, integrated picking list update, and validation on quantities
- Track progress of ongoing jobs, and simulate completion time based on current progress

Benefit statement:
Shop Floor Control II can improve the efficiency of your shop floor operations with fast registration of real-time production information. The module can also give you an overview into expected completion times of ongoing jobs, and all data can be transferred to Production or Project for further analysis. The information also creates an entry in the general ledger.

Key questions:
- Do you lack insight into all the jobs and processes taking place on your shop floor?
- Do you have the information you need to calculate the actual costs of your products?
- Do you want to avoid unnecessary paperwork on production orders or projects?

Prerequisites:
Shop Floor Control I
Production II or Project I

SHOP FLOOR CONTROL III (PAYROLL GENERATING)
Shop Floor Control III in Microsoft Dynamics AX uses the data collected in Shop Floor Control I and II to generate payroll data, complete with pay types and rates. For each employee, the module calculates the hourly wage as well as all types of bonuses and premiums. The payroll data generated by this module can be exported to an external payroll system for output.

- Categorize payroll data into pay categories (standard time, overtime, break time, flextime, premiums, and absences)
- Save flextime and overtime in a flex account
- Calculate overtime based on hours worked
- Track payment data for piecework jobs
- Set up payroll periods
- Employees can define if overtime should be paid or allocated as time off
- Specify pay for on-call duty
- Generate payroll statistics
- Payroll expenses can be allocated to individual production jobs and operations or to projects
- Payroll data is exported as a comma-separated file which can be read by virtually any external payroll system

Benefit statement:
Shop Floor Control III can automatically categorize pay items and generate detailed payroll data. It enables you to view statistics about your employees’ pay and premiums for deeper insight.

Key questions:
- Do you spend too much time preparing the necessary data for the payroll system?
- Can you reliably track overtime and other non-standard hours worked by your employees?

Prerequisite: Shop Floor Control I
Project Accounting

**PROJECT II**

Project II in Microsoft Dynamics AX provides advanced financial management for multiple project types, including time and materials, fixed price, and internal projects like investment, cost, and time projects. It also provides revenue recognition, work-in-progress (WIP) posting tools, and project supply chain functionality.

**Revenue Recognition and Work in Progress Projects**

- Periodically match cost and revenue in the same general ledger period
- Accrue revenue or capitalize cost for time and materials in order to recognize the gross margin on the date the cost occurred or the invoice date
- Post and accrue revenue for fixed price based on completion percentage or completed contract
- Handle WIP for investment projects during the project and before final elimination of the WIP value to a fixed asset upon completion
- Track and control costs with the Cost Control form
- Gain insight into cash flow with the Cash Flow form

**Benefit statement:**

Project II gives you the financial management tools you need to gain an overview of your projects’ work in progress. The solution helps take the guesswork out of fixed price and time and materials projects by incorporating WIP principles that only affect the profit and loss statement in accordance with accepted accounting principles. You can periodically match cost and revenue; measure the progress of your projects at any given moment, and post and accrue revenue for fixed price based on a completion percentage or completed contract.

**Key questions:**

- Can you book costs and revenue for your projects as they are in progress to help ensure you come in on time and budget?
- Do you need to improve visibility into project-based manufacturing to avoid potential cost overruns during or at the end of production?
- Do you need to optimize resource scheduling and allocation?

**Prerequisite:** Project I

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**PROJECT TIME MANAGEMENT**

Project Time Management in Microsoft Dynamics AX delivers time entry and approval functionality to project and professional services organizations. You can tailor time entry and approval processes to meet business needs with flexible time periods and a workflow-based approval engine. Because Project Time Management is available via the Microsoft Dynamics AX client or in Enterprise Portal, all project participants can use it from any location.

**Benefit statement:**

Project Time Management gives all project participants a consistent way to report time from the office or any location using Enterprise Portal. Project managers can gain greater visibility into project status and profitability with up-to-date, accurate reporting of hours. In addition, your organization can invoice customers faster to help improve cash flow.

**Key questions:**

- Does your organization need a reliable time-reporting tool for all employees, regardless of location?
- Do your project managers need greater visibility into actual time reported on a per-project basis?
- Do you need to streamline the approval process for hours reported?

**Prerequisite:** Project I

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**Service Management**

Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Center for service management:

- Customer Service Operations Manager

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.
SERVICE MANAGEMENT
Use Service Management in Microsoft Dynamics AX to plan, track, and analyze service operations to maximize efficiency, gain a complete overview of costs and revenue, and improve profitability for service operations. You can also speed and simplify service order dispatch with the ability to quickly assess personnel and resource availability and optimize assignments for the best fit.

Service Agreements
• Work with flexible templates and quickly create detailed, multilevel agreements
• Define tasks and frequency for service calls
• Link agreements to projects in Project for advanced pricing and accounting possibilities
• Tailor agreements to a wide range of customer requirements and payment arrangements
• Include service intervals and time values as part of service level agreements

Service Objects
• Register objects such as machines or equipment to be serviced
• Quickly link object forms to service agreements
• Maintain and access detailed spare part replacements over the lifetime of an agreement

BOM Templates
• Create accurate default structures of parts replacement with bill of material (BOM) templates for object subcomponents

Service Orders
• Set up service orders to be created manually or automatically at periodic intervals from a service agreement
• Define individual service calls and register the actual work done by field service technicians
• Speed dispatch with greater visibility into resource status and fit with the Dispatch Board Form
• Track incoming or planned service requests for each service visit
• Record service, technical, and staff hours; record and invoice hours, expenses incurred, items consumed, and fixed fees payable
• Plan item requirements in advance and help ensure that stock is available for service operations

Repair Management
• Customer service personnel can register repair tasks grouped with standardized conditions and symptoms
• Service technicians can track the diagnosis and record the resolution of repair tasks
• Service managers can evaluate histories to identify faulty products, problem resolution issues, and future customer needs

Integration with Project and Sales
• Accurately track costs and revenues, manage invoicing, and handle multiple revenue models all from within Project
• Analyze service operations, budgeted versus actual expenses, and customer requirements to determine service needs and profit or loss associated with the service engagement
• Make sales information available in the service module to empower users of the service module

Integration with Microsoft Office Outlook
• Create service tasks and appointments within Outlook to enable remote or offline access
• Automatically update information entered in Outlook across Microsoft Dynamics AX

Enterprise Portal
• View and create service orders using Enterprise Portal (Customer Role)
Benefit statement:
Service Management streamlines the process of creating and maintaining a wide range of service agreements, and it enables you to transform information about your services into profitable insight. Tight integration with Project I in Microsoft Dynamics AX helps you track exact costs for service orders, manage invoicing, and handle multiple revenue models based on resource consumption or periodic payments. With greater insight into scheduling and dispatch, you can match the best resources to every task to reduce response times, lower costs, and increase customer satisfaction.

Key questions:
• Does your business management solution enable you to run your company’s service-related operations as a business, by tracking service operations in detail?
• Are you able to track key service operations and tasks easily and effectively, even for services you provide that are tailored for individual customers or that occur on a non-regular basis?

Prerequisite: Project I

SERVICE SUBSCRIPTION
Use Service Subscription in Microsoft Dynamics AX to create and process service subscriptions for businesses that offer fixed-price service over a period of time.
• Accommodate revenue based on fixed or irregular periods and multiple price arrangements and adjust for reduction days and price increases
• Set current and future pricing based on prices that can be indexed
• Run Service Subscription independently or as a part of Service Management

Benefit statement:
With Service Subscription, users can create, process, post, and invoice service subscription transactions. Tight integration with Project I in Microsoft Dynamics AX enables users to tap into that module’s ledger integration, time and material invoicing, and reporting system functionality.

Key questions:
• Do you have a warranty service?
• Are you able to leverage key processing information—such as time and materials invoicing—to help you effectively manage your service subscription transactions?

Prerequisite: Project I

Human Resource Management
Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for human resource management:
• Human Resources Manager
• Training Manager

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.

HUMAN RESOURCE MANAGEMENT III
Human Resource Management III in Microsoft Dynamics AX can give your human resource professionals an overview of your resources and identify potential skill gaps in your organization. Course administration tools help your human resource staff administer training opportunities within your organization.

Employee Development
• Personal development plan with activities and deadlines
• Periodic interview management
• Book or transfer appraisal interviews from Microsoft Dynamics AX to Outlook
Competence Management
- Graphical tools for skill-gap analysis
- Skill-gap analysis based on job profiles
- Skill searches support filtering and weighting of skills

Course Administration
- Register course details, instructors, participants, and locations
- Manage training agendas, tracks, and sessions
- Link course completion and CV or résumé information
- A participant list captures participants’ training history
- Reports for waiting list, confirmation, and certificates

Note: Human Resource Management I and II are available through Additional Components.

Benefit statement:
Human Resource Management III enables your employees to define challenging and compelling career goals that align with the company’s business strategy. Employees, their managers, and the human resource department can then view these agreements and evaluate progress in a continuous dialogue.

Key question:
Do you have enough information to drive the strategic aspects of your employees’ and organization’s development?

Prerequisites:
- Human Resource Management I
- Human Resource Management II

Workspace Collaboration

MICROSOFT DYNAMICS CLIENT FOR MICROSOFT OFFICE AND WINDOWS SHAREPOINT SERVICES
Microsoft Dynamics Client for Microsoft Office (DCO) and Windows SharePoint Services extends the power, insight, and process control of Microsoft Dynamics AX to all employees to help increase individual productivity and drive business success. DCO users are named users, and DCO includes the Employee Role. For more information, read the FAQ document on PartnerSource.

The package consists of a number of self-service applications, such as Microsoft Dynamics Snap, Enterprise Portal in Microsoft Dynamics AX, and FRx WebPort and FRx DrillDown Viewer, which can simplify access to business information and help connect employees closely with business processes. There are two versions of the package available:

- Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services is the main access license.
- Microsoft Dynamics Client for Microsoft Office and Microsoft Office SharePoint Server comes with the same rights as the Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services but also includes Microsoft Office SharePoint Server (MOSS); one (1) MOSS Standard Client Access License (CAL); and one (1) MOSS Enterprise Additive CAL.

Also included in this offering are licensing rights for customers or industry partners to build their own Office Business Applications, a new category of programs where Microsoft Office becomes the front end for accessing the back-end business management functionality of Microsoft Dynamics AX. The premium and standard versions provide the following ways for employees to access the Microsoft Dynamics AX application:

Enterprise Portal Roles
- Tailored for specific roles, Microsoft Dynamics portals provide Web-based access for employees to interact with Microsoft Dynamics AX

Employee Role
The employee role connects Enterprise Portal users, including remote users, to employee information that helps them do their jobs. Users in different time zones can access personalized information over the Internet whenever they need to—from any location.
- With the employee role, users can: view a phone book, view a department list, and view and update personal information stored by human resources
- Managers can view and update the results of annual appraisal interviews
- Internal training courses can be advertised across the company
Microsoft Dynamics Snap
• Microsoft Dynamics Snap sample applications enable employees to use the Microsoft Office applications with which they are most familiar to interact with Microsoft Dynamics AX data
• Employees can look up business data from within Outlook or Excel, such as a customer invoice amount that relates to an e-mail message they are writing, or to a spreadsheet on which they are working

FRx
• Using Microsoft FRx WebPort and DrillDown Viewer, managers can get quick access to financial data for their department, with the ability to drill down to supporting detail if they need it, all without having to go into the general ledger or use network resources

Windows SharePoint Services
• Windows SharePoint Services is the platform on which Enterprise Portal in Microsoft Dynamics AX is built
• Windows SharePoint Services can be used to create additional team sites where people can collaborate on projects and documents
• Windows SharePoint Services is also a prerequisite for Office SharePoint Server 2007, which uses a number of its components including the workflow engine, site management, and security model

Microsoft Office SharePoint Server 2007
• With Office SharePoint Server 2007, all of a company’s business data can be searched from one place, whether it is stored in Microsoft Dynamics AX, in a SharePoint site, or in e-mail
• The SharePoint Report Center provides a place to centrally store and manage all of an organization’s reports, in whichever format they were created
• Office SharePoint Server 2007 includes built-in workflow capabilities so tasks can be created for employees, such as document approval, and forms or documents can be sent out automatically based on the completion of predefined steps
• Office SharePoint Server 2007 provides a platform on which team sites can be built, business content managed, or KPIs and dashboards created, all based on the specific needs of a business

Benefit statement:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services provides a range of self-service applications that help extend the power, business insights, and process control of Microsoft Dynamics AX to all employees in a company.

Key questions:
• Do you want to make the critical business information and process control managed by Microsoft Dynamics AX available cost-effectively to many more employees across your company via a simple user interface?
• Do you want to improve the decision-making ability of your employees by enabling them to use self-service applications built into the Microsoft Office system and Office SharePoint Server 2007 as a front end for Microsoft Dynamics AX business management functionality?

Prerequisite: Advanced Management

ENTERPRISE PORTAL
Open your business to employees, customers, vendors, and other business partners around the clock. Enterprise Portal in Microsoft Dynamics AX makes it easy to provide RoleTailored data and business processes in real time over the Web, with full support for intranet, business-to-consumer, and business-to-business communications.

Based on Microsoft Windows SharePoint Services, Enterprise Portal enables you to drive down costs by decreasing paperwork and empowering people to access information, processes, and tools. For example, customers can view company and product information, reducing the need for customer service people to respond to common questions and demands. Vendors can work efficiently with your business by initiating transactions electronically and communicating in their language of choice.
General

• Simple, browser-based user interface and intuitive controls help employees understand and use Enterprise Portal with little or no training
• Supports intranet for internal employees and extranet for business-to-consumer or business-to-business communication
• Delivers Microsoft Dynamics AX business data and business logic in real time
• Enterprise Portal functionality can be developed using the standard MorphX development environment or ASP.NET
• Rapid deployment using Web site wizard
• The multilanguage and multicurrency functionality of Microsoft Dynamics AX is also available to remote users through Enterprise Portal
• Users can customize their Web portal to display their own language
• The system builds a searchable index so users can run back-office data searches
• Incorporate content from various information sources, including other back-office and front-office systems, using Web Parts and XML
• Category browsing enables easy drill-down of business data
• Richer content and document management

Role and Permission Management

• Individual users can personalize their Web portal to display the controls, functionality, and information they need to do their job
• Administrators use roles to personalize the structure, information, and functionality of Web portals, so users will see only the information and functionality designed for them (see roles sections below)
• All activities leverage the existing Microsoft Dynamics AX business logic

Benefit statement:
Enterprise Portal opens your business to your customers, vendors, employees, and other business partners 24 hours a day, every day. Remote users can access your business through an easy-to-use Web portal to get the information and functionality they need. With this framework, you can increase the speed of doing business while driving down costs.

Key question:
• Can your customers, business partners, and remote employees access your business anytime?

SALES REPRESENTATIVE ROLE
The sales representative role connects sales teams to the business information they need over the Internet, regardless of the time or their location. Whether sitting at their desks, at home, or on the road, sales representatives can easily access, view, and update customer and company information stored in Microsoft Dynamics AX.

• View and maintain your business relations and contacts
• Create quotations
• Create sales orders
• Perform price inquiries
• View various reports like price list, price list per customer, sales by customer, region, sales this week, and more

Prerequisite:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services: Module Based Licensing (MBL) customers should refer to the Microsoft Dynamics AX price list
CUSTOMER ROLE
The customer role helps companies connect and interact with their customers using the Web. Use the tools in this role to rapidly implement e-commerce Web sites for selling your products and services over the Internet. The role is connected to other areas of functionality in Microsoft Dynamics AX, including Supply Chain Management and the Sales Management and Marketing Automation modules. Information such as product availability is automatically generated and will always be up to date when customers view the site.

- Sign up as a customer
- Look in the product catalogue
- Answer a survey or respond to a campaign survey
- View your account, purchase orders, and invoices

Prerequisite:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services or External Connector: Module Based Licensing (MBL) customers should refer to the Microsoft Dynamics AX price list

VENDOR ROLE
The vendor role enables you to exchange item-specific documents, purchases, and shipping data with your vendor. Exchanging data on a shared Web site cuts down on phone calls, faxes, and e-mail messages, as well as manual errors due to multiple data entry. The vendor role helps you optimize your supply chain without an expensive technology upgrade. Your vendors can access your business information conveniently, using only a standard Web browser.

- View and change company-specific information
- Vendors can change existing contacts and create new ones
- Vendors can view and, if desired, make limited edits to each purchase order with your company
- Vendors can view details about all the items they deliver to your company, and they can add external descriptions and external item numbers
- View details of the journals selected
- Vendors can update list prices of their items
- Vendors can see a list of open receipts
- A supply performance function shows how vendors perform with on-time delivery, average days late, backorder status, and average lead time

Prerequisite:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services

CONSULTANT ROLE
The consultant role simplifies and streamlines the registration of hourly costs for projects in Microsoft Dynamics AX. Consultants, external partners, and remote project-based employees can log their working hours over the Internet. Registration is simple and direct, and consultants can choose from flexible time registration options to match the type of project they’re working on.

- Timesheet registration on projects
- Access anytime, anywhere, through a browser and Internet connection
- View invoiced transactions and invoice proposals
- View transactions for hours, costs, revenue, items, and accounts
- Review hour statements for projects
- Inquire about customers, projects, and inventory information

Prerequisite:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services or External Connector: Module Based Licensing (MBL) customers should refer to the Microsoft Dynamics AX price list
QUESTIONNAIRE FOR ENTERPRISE PORTAL

With this module, you can select a questionnaire you designed in Questionnaire I in Microsoft Dynamics AX, and deploy it on a Web page over the Internet. Whether reaching out to customers, vendors, employees, or other business partners, all participants only need a Web browser and Internet connection to view and respond to your questionnaire.

- Deploy questionnaires easily over corporate intranets and external Web sites
- Respondents can answer surveys over the Internet and view their own answers and evaluations afterward
- Administrators can view completed questionnaires over the Internet and drill down to specific responses

Prerequisites:
Enterprise Portal
Questionnaire I

HUMAN RESOURCE MANAGEMENT FOR ENTERPRISE PORTAL

Human Resource Management functionality for Enterprise Portal can connect your employees and your human resources department in a virtual online community. Whether they sit down the hall from one another or in different departments, subsidiaries, or countries, employees can easily view and update personal information stored by human resources, and managers can maintain employee records remotely. Making employees responsible for their own data saves your human resource professionals time and effort. Users in different time zones can access their personalized information over the Internet whenever they need to—not only during business hours.

Access to Employee Services
- View line, matrix, and project organization, and position information
- Users can view and maintain their own personal information
- View and create emergency contacts

Access to Manager Functions
- View and update personal information about your team members

Prerequisites:
Customer Role
Product Builder I
Web MorphX Development Suite

PRODUCT BUILDER FOR ENTERPRISE PORTAL

By launching the functionality of Product Builder in Microsoft Dynamics AX over a Web site, your customers can easily create their own products from home or the office via the Internet. After selecting the desired values for the product, the customer or vendor is presented with options such as price calculation or adjustment of configuration details. Customers can submit multiple orders and vendors can monitor the production status or view an expected date of delivery—all over the Web.

- Your customer can configure products over the Internet using your preselected product models
- Available as an add-on to Customer Role
- Uses the same user dialog as when configuring the item via the sales order line from the of Microsoft Dynamics AX client

Prerequisites:
Customer Role
Product Builder I
Web MorphX Development Suite

Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services
Human Resource Management I
Human Resource Management II (optional)
Human Resource Management III (optional)
PERFORMANCE MANAGEMENT FOR ENTERPRISE PORTAL
With this module you can view output from the Balanced Scorecard in Microsoft Dynamics AX module. Users can view their performance through different perspectives by drilling down to specific KPIs. They can also get a graphical output of performance for easy visualization.
• Users can view their performance related to past KPIs and their progress towards current KPIs
• View strategic plans linked to KPIs
• Make online calculations of performance data (for example, to look at average performance over time)
• Use online visual cockpits to drill into performance information about a specific management group

Prerequisites:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services
Balanced Scorecard

SHOP FLOOR CONTROL FOR ENTERPRISE PORTAL
Shop Floor Control for Enterprise Portal uses the Enterprise Portal Framework to provide employees access to the electronic time card features in Shop Floor Control. Employees can register time on activities through the portal.

Prerequisites:
Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services
Shop Floor Control

MOBILE SOLUTIONS
Mobile Solutions in Microsoft Dynamics AX extends the capabilities of Microsoft Dynamics AX to mobile devices for a familiar, flexible mobile solutions platform that enables you to:
• Extend the footprint of Microsoft Dynamics AX with best-in-class mobile solutions
• Speed mobile Microsoft Dynamics AX application development using tools on familiar platforms
• Choose from wide variety of highly flexible Windows Mobile–based devices

With Microsoft Dynamics AX Mobile Sales—the first mobile application from Microsoft Dynamics AX—field sales representatives and other mobile employees can plan visits, review relevant sales information, and create orders while they are out of the office. Microsoft Dynamics Mobile Development Tools enable Microsoft partners to develop and customize mobile applications for Microsoft Dynamics AX solutions, making it easier to extend the functionality of Microsoft Dynamics AX to mobile users.

Benefit statement:
Mobile Solutions extend the capabilities of Microsoft Dynamics AX to mobile devices to help you take advantage of new business opportunities, increase productivity, and reduce costs.

Key question:
Does your organization need to improve mobile employees’ productivity by providing them with the information they need from any location?

Prerequisite:
Microsoft SQL Server CAL for every named user

MICROSOFT DYNAMICS EXTERNAL CONNECTOR
Microsoft Dynamics External Connector enables unlimited third-party users and applications to interact with Microsoft Dynamics AX 2009. While the Microsoft Dynamics Client for Microsoft Office and Windows SharePoint Services facilitates Web/Portal-based access for users employed by the customer, External Connector is used to grant Web/Portal-based access to external users (not employed or retained by the customer organization, such as customers’ customers or vendors) to Microsoft Dynamics AX. It is designed for volume scenarios, such as e-commerce shops where large or unknown volumes of customers need access to Microsoft Dynamics AX to place orders or browse catalogues. For application to application integration (including Web Services) or access to Microsoft Dynamics AX by external (third-party) users, the External Connector is the licensing mechanism used.
External Connector provides external usage rights to the following components:

- Application Integration Framework
- Application Integration Framework Web Services Extension
- Enterprise Portal Framework
- Enterprise Portal users
- Microsoft Dynamics AX Business Connectors

Only one External Connector is needed per system database (license). A license for the Microsoft Dynamics External Connector is required to access the functionality of Enterprise Portal in Microsoft Dynamics AX, Application Integration Framework, and Web Services.

Benefit statement:
Microsoft Dynamics External Connector increases the connectivity of your entire business by enabling third-party individuals or devices to access the full functionality of Microsoft Dynamics AX.

Key questions:
- Do your company’s business applications remain disconnected, with no way of taking advantage of each other’s capabilities?
- Can your company’s various business applications connect to and capitalize on the power of your business solution?

Prerequisite: Base Package

Multiple Information Sources

- Support for Web parts enables content and functionality from a wide range of sources to be embedded in user Web pages, for example Outlook and MSN Business News

Benefit statement:
Web MorphX Development Suite expands the reach of your Microsoft Dynamics AX solution by developing applications that your employees, customers, and business partners can access anywhere by using a normal Web browser or mobile and handheld devices. The Web development tools are all based on the same principles and concepts as the MorphX Development Suite for Microsoft Windows, so developers who are already familiar with MorphX can easily begin developing Web applications for Microsoft Dynamics AX.

Key question:
- Can you develop and deploy customized applications over the Web to your company’s Microsoft Dynamics AX users, which deliver content and functionality from your Microsoft Dynamics AX solution or from other sources?

Prerequisite: MorphX Development Suite for Microsoft Windows

Configuration and Development

WEB MORPHX DEVELOPMENT SUITE

With Web MorphX Development Suite in Microsoft Dynamics AX, developers can create Web applications based on online data and the same business logic that is in the ordinary Windows interface of Microsoft Dynamics AX. You can develop Microsoft Dynamics AX Web applications for different devices, including browsers and mobile and handheld devices. A Web site wizard helps you easily deploy your Web applications.

MorphX Development Tools (Web)
- Drag Microsoft Dynamics AX elements from the AOT to Web projects

Other Advanced Management Enterprise Functionality

BALANCED SCORECARD

Balanced Scorecard in Microsoft Dynamics AX gives you the power to define KPIs to track almost any measurable aspect of your business. With KPIs, you can evaluate your overall business performance and measure fulfillment of business goals. With Balanced Scorecard, you can:

- Identify objectives for each scorecard and create the measures used to make a quantitative calculation of performance, so you can use your overall goals and measures to determine how the objectives are calculated
- View perspectives such as financial, customer, internal, and growth, and identify strategic objectives for each
• Set up and customize KPIs; compare KPI targets to actual results; and simulate future KPI results using different performance scenarios
• Link KPIs to data manually, from within Microsoft Dynamics AX, or from an external data source; and link KPIs to organizational units through Human Resource Management I
• Customize the graphical presentation of each KPI
• Target performance information toward a specific management team by selecting specific KPIs for specific team members
• Make individual scorecards and objectives available for selected users or user groups with cockpits

**Benefit statement:**
Balanced Scorecard helps you monitor and optimize your business performance by using KPIs. By comparing your results to the KPIs set by your business plan, you can take immediate action to fine-tune your operations and processes.

**Key questions:**
• Do you know at any given moment where your current business is compared to the goals you’ve set?
• Does your company have a consistent, objective method of analyzing performance information?

**Prerequisite:** Financials I

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**BUSINESS PROCESS MANAGEMENT**
You can use Business Process Management in Microsoft Dynamics AX to analyze strengths, weaknesses, opportunities, and threats (SWOT analysis), and to create a strategy. Best practices templates help you define actions and processes that are aligned with the overall strategy.

**Strategic Planning**
• Create a strategic plan, step by step
• Identify status and end results
• Register SWOT analysis results
• Break down visions to define goals and milestones
• Plan and follow up with actions on initiatives
• Link to action management and KPIs in Balanced Scorecard
• Define templates for strategic plans
• Link strategic plans to organizational units in Human Resource Management I

**Action Management**
• Use detailed information about responsibilities, time, priorities, and status
• Register actions
• Track responses to actions and how different actions are related
• Structure responses and generate derived actions
• Send actions as an e-mail message, or create actions as tasks in Outlook
• Implement process design by using action templates
• Create actions with action planning, and distribute to the responsible people

**Benefit statement:**
Business Process Management helps you define a strategy and then assign actions that support the strategy to individual employees. With these tools, you can help every member of your organization focus on your business plan and strategic goals.

**Key questions:**
• Do you have clearly defined processes and action plans in your company that are tightly linked to your overall strategy?
• Do you have a tool that tracks the progress and fulfillment of your business plan, action by action?

**Prerequisites:**
Financials I
Human Resource Management I
QUESTIONNAIRE I

Questionnaire I in Microsoft Dynamics AX provides integration with sales and marketing functionality. You can design a questionnaire as part of your human resources procedure, to support Customer Relationship Management (CRM) processes, or to coach telemarketing personnel. You can also send questionnaires to a target group as part of a campaign, and collect responses over the Web.

Design and Execution
• Design and deploy surveys rapidly
• Deliver instructions to individual questions along with the questions
• Each question is linked to an answer mode identified by text, date, or numeric value, or to an answer collection defined by the questionnaire administrator
• Enable free-text answers to any type of question
• Openly define response options
• Deliver questions sequentially or in random order
• Indicate the percentage of questions in a specific questionnaire that need to be answered in order to obtain a valid result
• Accompany questions with media such as pictures, audio, or video
• Design a question with sub-questions
• Manage access control and user profiles

Scheduling
• Easily schedule employees and other individuals engaged in surveys
• Mail correspondence with all respondents before, during, and after response
• Track respondents and responses online

Result Management
• Advanced statistical analysis tool supports calculation, variance, and standard deviations
• Use integration with Excel to view statistics about individuals including age, geography, and more

Reports and Questionnaire Analysis
• Get a response history by questionnaire and individual
• Get a result report, answer report, and “wrong answers” report

Testing with Questionnaires
• Test people’s knowledge about virtually any subject, and set up parameters for passing the tests
• Allocate points based on the number of questions answered correctly or whether a certain number of points were achieved (either as numbers or percentages)

Questionnaire Web Portal
(This functionality is available in the Enterprise Portal Framework.)
• Easy Web execution of surveys through Enterprise Portal
• View and analyze results online

Sales and Marketing Integration
• Include a questionnaire as part of a campaign, and collect responses over the Web

Human Resource Management Integration
• Implement surveys for employee satisfaction, feedback analysis, performance appraisals, course evaluations, job development dialogue, and more
• Use questionnaire tool for learning and guidance purposes

Questionnaire and ERP in One
• Cross-reference master data (typically demographic) from survey responses with data collected from actors already registered in your system (a customer, vendor, manager, or employee) without the respondent reentering the data
**Benefit statement:**
Questionnaire I is a powerful tool for designing, constructing, and analyzing surveys that help you get feedback from employees, customers, managers, and other business contacts. You can use Questionnaire I to help qualify your leads by getting more information from prospects, while keeping existing customers separate. Responses are saved in the system, so you can run analyses on the stored survey results and make better surveys in future campaigns.

**Key questions:**
- Does feedback you receive from external surveys just disappear, or does your organization internalize what it learns?
- Is it a major burden on resources to design, deploy, and follow up on a survey?

**Prerequisite:**
Base Package
Sales Management (optional)
Marketing Automation (optional)
Telemarketing (optional)
Human Resource Management I (optional)

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**QUESTONNAIRE II**
Questionnaire II in Microsoft Dynamics AX offers advanced distribution functionality that enables you to select a specific group of respondents and send them a link in an e-mail message to a questionnaire that is tailored for them. The module also helps you carry out advanced statistical calculations and get an overview of your feedback by viewing survey results graphically.

**Scheduling**
- Manage questionnaire planning
- Plan and distribute surveys to selected respondents, such as employees, applicants, business partners, course participants, networks, or organizations
- Mail correspondence to survey participants

**Reports and Questionnaire Analysis**
- Break down survey results by the demographics of respondents
- Display results graphically, with PivotTable views and pivot graphics

**Benefit statement:**
Questionnaire II gives you the power to analyze survey results with past survey data, so you can get a 360-degree analysis of the market feedback your surveys provide.

**Key questions:**
- Do your company’s survey methods enable you to reach individual groups of respondents with custom-designed questionnaires?
- Is it hard to grasp the meaning of the feedback you get from surveys because the data is difficult to visualize?

**Prerequisite:** Questionnaire I
ADDITONAL COMPONENTS FOR BUSINESS ESSENTIALS AND ADVANCED MANAGEMENT

Microsoft Dynamics AX Business Essentials and Advanced Management customers can extend their solution by licensing a selection of additional components.

Human Resource Management

Role Centers present job-specific information based on roles within the organization to help people easily prioritize tasks and make quick business decisions. Microsoft Dynamics AX 2009 includes the following Role Centers for human resource management:

- Human Resource Manager
- Training Manager

Although the Role Center framework is included in the Base Package, you will need to license the functionality (modules), for instance, reports, cues, and other data that is displayed in the Role Centers.

HUMAN RESOURCE MANAGEMENT I

Human Resource Management I in Microsoft Dynamics AX can store employee information and agreements, note the reasons for a resignation, and keep track of transfers between departments. Human Resource Management I includes the first 100 employee records at no additional cost. Additional employee records can be licensed in the initial implementation or added as your company grows. See the Microsoft Dynamics AX price list for details.
### Core Human Resource Management

- Core human resource management administrative functionality
- Store payroll information, historical data, and job and position information
- Integrate employee information between human resources and payroll systems
- Facilitate pay-for-performance with various compensation and incentive plans
- Registration of employee benefits
- Manage items loaned to employees
- Manage and record actual employee skills
- Generate reports for follow-up, periodic reporting, and management decision support

**Benefit statement:**
The framework of Human Resource Management I can be easily adapted to fit the specific needs of your business, so your employees can access exactly the data and information they need.

**Key question:**
- Do your human resource employees spend too much time manually collecting and tracking employee information?

**Prerequisite:** Financials I

### Employee Development

- Conduct structured appraisal interview with employees
- Integrate with Outlook to book meeting times directly in attendee calendars
- Development planning capabilities help your employees define career goals that reflect business strategy
- Get an overview of the courses an employee has completed to help you review his or her skills and competencies

**Benefit statement:**
Human Resource Management II helps your human resources department learn from the experiences of previous recruitment campaigns and pinpoint the most effective media and methods for sharper, more effective recruiting messages. The module also helps human resources staff register and track statistics and trends on absences.

**Key questions:**
- Do your company’s recruiting communications and processes lack consistency and take too many resources to execute?
- Do you have an overview of absenteeism across your organization, and can you identify and quantify reasons for and trends in employee absences?

**Prerequisite:** Human Resource Management I

### HUMAN RESOURCE MANAGEMENT II

This module collects information to help you manage your company’s recruitment process, including recruitment correspondence, media responses, and statistical overviews. The module also helps you track absences and understand trends in absenteeism.

**Recruitment**
- Manage the recruitment process
- Automate correspondence through integration with Microsoft Office Word
- Copy interview appointments into Outlook
- Statistical overviews of the recruitment process
- Measure media response

**Absence Management**
- Define multiple absence categories
- Register absences individually and collectively
- Statistical and graphical presentation of absence data

**Benefit statement:**
Human Resource Management II helps your human resources department learn from the experiences of previous recruitment campaigns and pinpoint the most effective media and methods for sharper, more effective recruiting messages. The module also helps human resources staff register and track statistics and trends on absences.

**Key questions:**
- Do your company’s recruiting communications and processes lack consistency and take too many resources to execute?
- Do you have an overview of absenteeism across your organization, and can you identify and quantify reasons for and trends in employee absences?

**Prerequisite:** Human Resource Management I

### HRM EMPLOYEE RECORDS (MORE)

Human Resource Management I provides a license for 100 employee records. By licensing additional employee records, you can register additional employees in the human resource employee table, so the activities of those employees can be tracked by the Human Resource Management suite. Additional records are available in these configurations:
- Per block of 50 records from 101–250
- Per block of 50 records from 251–500
- Per block of 50 records from 501–1000
- Per block of 50 records from 1001–2500
- Per block of 50 records from 2500–unlimited records

**Prerequisite:** Human Resource Management I

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56
Environmental Sustainability

ENVIRONMENTAL SUSTAINABILITY DASHBOARD
With the Environmental Sustainability Dashboard for Microsoft Dynamics AX 2009, you can gain a new perspective on your business by tracking your energy consumption and greenhouse gas emissions (or carbon footprint) to help increase bottom-line cost savings and follow socially responsible business practices that minimize your company’s impact on the environment.

Benefit statement:
Use the Environmental Sustainability Dashboard to easily manage environmental data; achieve greater transparency throughout the supply chain to mitigate risks; increase process efficiencies and reduce energy costs; and pursue socially responsible initiatives. You can create and track your own greenhouse gas inventory to understand your affect on the environment and capture data over time that is auditable, helping you reduce your risk of exposure to potential regulations. The dashboard automatically calculates your organization’s carbon dioxide conversions and presents the data in an easy-to-read graph.

Key questions:
• Does your organization need to take a proactive approach to help minimize your impact on the environment?
• Do you need an easy-to-use reporting tool to track your organization’s energy consumption and greenhouse gas inventory?

Prerequisite: Base Package

Other

X++ SOURCE CODE
The X++ Source Code editor enables developers to create, view, modify, and delete the X++ classes that contain Microsoft Dynamics AX application source code. Methods can be copied from one element to another by using the drag-and-drop function. If developers need to create custom code, Microsoft Dynamics AX offers different functions to simplify their jobs and provide information about their options.

X++ Source Code has built-in runtime access for the VAR and BUS layer, and their associated VAP and BUP patch layers in Microsoft Dynamics AX (patch layers are additional application layers for handling patches, minor updates, service packs, hotfixes, and additional functionality). If the customer licenses X++, there is no need to license the BUS and VAR layer runtimes.
• Create, modify, and delete X++ classes
• Validate and monitor the functionality of your code with an integral X++ debugger

Benefit statement:
With access to X++ source code, you can customize and extend the capabilities of Microsoft Dynamics AX to meet your exact business needs. The X++ Source Code editor in Microsoft Dynamics AX can reduce the time and costs involved with making system modifications, customizations, and upgrades. The X++ Source Code editor also enforces certain methods of writing code and developing system customizations. This can result in better code, fewer errors, and lower TCO.

Key questions:
• Do you have specific or unique business processes that need to be supported by a customized business solution?
• Are your current business applications too difficult and expensive to customize or upgrade because of obsolescent coding languages or development tools?

Prerequisite: None

MICROSOFT SQL SERVER RUNTIME
You may choose to license Microsoft SQL Server Runtime through the Microsoft Dynamics AX price list. Learn more about Microsoft SQL Server.
Languages

LANGUAGES IN MICROSOFT DYNAMICS AX
Microsoft Dynamics AX can be implemented with any of the languages in the list below. The first language can be selected, and is included as part of the Microsoft Dynamics AX Base Package. Microsoft Dynamics AX has two options for working with additional languages. The first option is to license additional languages, and the second is to install but not license additional languages.

By licensing additional languages, each user on the system is given the option of presenting the Microsoft Dynamics AX user interface, the online Help, forms, reports, and menus in any of the licensed languages. Licensed languages can also be used in printed reports, invoices, purchase and sales orders, and other business documents, and by remote users in Enterprise Portal interfaces.

By merely installing additional languages, at no license cost, users can view and print reports in any of the installed languages, but the user interface must be chosen from the list of languages that have been licensed. Note that additional languages may be available from value-added resellers (VARs) or Microsoft Certified Partners.

Available Languages
Arabic (includes support for language and character set)
Chinese (simplified)
Czech
Danish
Dutch
Dutch (Belgium)
English (Australia)
English (Canada)
English (India)
English (Ireland)
English (Malaysia)
English (New Zealand)
English (Singapore)
English (South Africa)
English (United Kingdom)
English (United States)
Estonian
Finnish
French
French (Belgium)
French (Canada)
French (Switzerland)
German
German (Austria)
German (Switzerland)
Hebrew*
Hungarian
Icelandic
Italian
Italian (Switzerland)
Japanese
Latvian
Lithuanian
Norwegian
Polish
Portuguese (Brazil)
Russian
Spanish
Spanish (Mexico)
Swedish
Thai
Turkish

* Hebrew language functionality is planned to release in Q4 CY 2009. Please check language availability on PartnerSource.

Benefit statement:
By licensing additional languages, you can spread the power of Microsoft Dynamics AX internationally, to subsidiary offices in other language zones, and also to customers, vendors, and other business partners who speak different languages. Microsoft Dynamics AX also supports double byte character technology and the ability to read forms using a bi-directional user interface.

Key questions:
• Can you support users who prefer to use different languages in their daily job?
• Can you print and send business documents to customers and business partners in any of their preferred languages?

Prerequisite: Base Package
Notes
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