

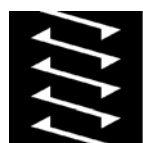
Andreas Luszczak

Using Microsoft Dynamics AX 2009

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# Using Microsoft Dynamics AX 2009

With 177 Figures



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# Preface

When looking for a business management solution supporting business processes in mid-sized and large companies, Microsoft Dynamics AX is likely to be your favorite. Because of its deep functional and technological integration, it is as well a good choice for universities teaching ERP systems.

## Reading This Book

The primary purpose of this book is to provide you with a good knowledge of the standard application concept and functionality, which is required to run business processes in Microsoft Dynamics AX 2009. This book therefore is for you, if you are an end user, student or consultant, interested in learning how to use Dynamics AX.

Going beyond the operations on the user interface, you will also learn how the different parts of the application tie together. As a result, you will as well take advantage learning the end-to-end application concept, if you are a system administrator, developer, IT executive or experienced consultant not knowing the complete application already.

Actually working in an application is the best way to learn it. Therefore, the chapters of this book include exercises that build up on each other in a comprehensive case study. If you need support to solve the exercises, you may access a free download of sample solutions.

This book is the English version of the successful book “Grundkurs Microsoft Dynamics AX”, recommended by Microsoft in Germany. Based on the second edition of the German volume, it includes the core improvements of Dynamics AX in version AX 2009.

Since Dynamics AX is a very comprehensive business solution, it is not possible to cover all parts of the application in a single book. In order to provide a profound understanding of the core application, this book addresses the primary functionality in supply chain management (including trade, logistics and production) and finance management. It shows the application, but does not cover tasks in system administration and development.

## Applicable Settings

In Dynamics AX, you may individually choose the language that applies to your user interface. Descriptions and illustrations in this book refer to the language “EN-US”. Whereas it is obvious, that the Dynamics AX client will display different labels when choosing languages like Spanish or Russian, you will also notice differences when selecting British English. As an example, the label for the field “Sales tax” is “VAT” in British English.

Multisite activation in Dynamics AX 2009 is another setting, which is important throughout the whole application. In this book, we generally apply the multisite functionality, as it is Dynamics AX standard when setting up a new company account. If your company does not activate the multisite functionality, skipping the dimension “Site” in the sentences of the book will apply the explanations to your situation.

## Preface

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Other sources of possible differences from your application to the descriptions in the book are applicable local features as well as specific modifications implemented in your Dynamics AX system.

In order to benefit from the explanations, it is useful to access a Dynamics AX application. A separate test application, where you may do the exercises, minimizes the risk to affect real company data.

The exercises and illustrations in this book are based on the sample company “Anso Technologies Ltd.”. In order to ensure a clear understanding, this company shows a simple setup, limited to the functionality described. You may download the sample company, containing sample exercise solutions, as described below. Nevertheless, the tasks in the exercises are specified in a way, that you may choose a different test environment as well.

### Available Support

In order to download the sample company as well as solutions of the exercises in this book, you may access the online service of the publisher or choose the following Web site:

*<http://axbook.addyn.com>*

In the download links, you may also find additional information and errata, if applicable.

If you have any comments or questions regarding the book or the related exercises, please contact me through the Web site mentioned above or via e-mail to *[alu@addyn.com](mailto:alu@addyn.com)*.

You may also contact me, if you are interested in my training and consulting services, including areas of the Dynamics AX application not covered in the limited number of pages in this book.

### Acknowledgements

Many people have been involved in finalizing this book, directly and indirectly, from the first edition in German to the English edition available by now. I want to thank all of them. In particular, I would like to mention Harald Paul, Hubert Grossinger, Peter Sturm, Ingo Maresch, Helga Zopf, Herbert Leberbauer and Keith Dunkinson. Thank you as well to the people of the AxPact World Alliance. An important contribution also comes from the publisher, in the beginning Günter Schulz, and later Sybille Thelen and Christel Anne Roß. Finally, my special thanks go to my family, Sonja, Felix and Caroline.

Andreas Luszczak

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# 1 What is Microsoft Dynamics AX?

Dynamics AX is Microsoft's core business management solution, designed to meet the requirements of mid-sized companies and multinational organizations. Based on state of the art architecture and deep integration, Dynamics AX shows comprehensive functionality while ensuring high usability at the same time.

With version AX 2009, Dynamics AX shows additional modules and improved functionality in numerous areas. Main innovations include the new user interface with role centers to support a role tailored user experience on the one hand, and the multisite foundation to support company structures with subsidiaries and sites within a legal entity on the other hand.

## 1.1 Axapta and the History of Dynamics AX

Dynamics AX in its origin has been developed under the name *Axapta* by Damgaard A/S, a Danish software company. The first version released to market has been published in March 1998. At that time, the founders of Damgaard – Erik and Preben Damgaard – have already had more than ten years of experience designing ERP systems. Among others, they have been co-founders of PC&C, where they joined the development of *Navision* (now Dynamics NAV).

**Axapta**

Version 1.0 of Axapta has been available in Denmark and the USA only. Version 1.5, published in October 1998, included support for several European countries. Releasing version 2.0 in July 1999 and version 3.0 in October 2002, the development of Axapta continuously increased the application functionality as well as the support of additional countries. Until releasing Axapta under the new brand Dynamics AX in version 4.0, improvements have been deployed in a number of service packs.

After signing a merger agreement in November 2000, Damgaard A/S united with their rival Navision A/S, a successor of PC&C. Finally, Microsoft acquired Navision-Damgaard in May 2002 accepting their main products, Navision and Axapta, as the core business solutions of Microsoft. Whereas Navision focuses on small companies in technological and functional respect, Axapta is the product for mid-sized and large companies.

**Company  
history**

When releasing version 4.0 in June 2006, Microsoft rebranded Axapta to Dynamics AX. Microsoft Dynamics AX 4.0 differs from previous versions not only by functional enhancements but also by a new user interface, showing a complete redesign with a Microsoft Office-like look and feel.

**Dynamics AX**

**AX 2009** Dynamics AX 2009 has been published in June 2008. Including role centers, workflow functionality and a user interface matching with the current versions of Microsoft Windows and Microsoft Office, Dynamics AX 2009 shows a familiar and intuitive user experience even further improved. Enhanced functionality, including the multisite foundation and additional modules, provides an end-to-end support for the requirements of global organizations.

**1.2 Dynamics AX 2009 Product Overview**

Microsoft Dynamics AX is an adaptable business management solution, which is easy to adapt and nevertheless applies to installations of multinational companies. Another characteristic is the deep integration to Microsoft technologies and applications like Microsoft SQL Server, SharePoint Services and BizTalk Server.

**User interface** Most people are familiar to Dynamics AX from the very first start, since the user interface is already known from Microsoft Windows and Microsoft Office products. The intuitive user experience helps to start working in Dynamics AX easily and efficiently, supported by a tight integration to other Microsoft software. Role centers grant an easy and fast overview of information required by the individual employee.

**Functionality** The end-to-end support of business processes in supply chain management (SCM) and customer relationship management (CRM) allows integrating external business partners like customers and vendors on the one hand as well as internal departments and subsidiaries on the other hand.

Multi-language, multi-country and multi-currency support together with the option to manage several sites within one company make it possible to manage complex global organizations in a common database.



**Figure 1.1: Business processes covered by Dynamics AX (Source: Microsoft)**

The functionality of Dynamics AX includes following main areas:

- Customer relationship management (CRM)
- Supply chain management (SCM)
- Service management
- Financial and compliance management
- Project management and accounting
- Human resources management
- Collaboration  
(Enterprise Portal, Application Integration Framework)
- Business intelligence and reporting

High scalability and adaptability make it easy to implement Dynamics AX initially and to manage later changes in the organization and in business processes. As an example, you may limit deployment to functions like finance at the beginning and simply add new modules like production or warehouse management later, when you need them. Enhancing Dynamics AX with additional users or companies is as well possible any time.

In order to access data for analysis, integrated functionality for reporting and business intelligence grants a fast and reliable presentation of business data. Business intelligence features are not only available for analysis in finance, but also for users in all other areas of Dynamics AX who need to analyze their data.

**Business  
Intelligence**

Collaboration functionality to connect external partners is available in two ways: The Enterprise Portal on the one hand and the Application Integration Framework on the other hand.

**Collaboration**

The Enterprise Portal grants direct access to Dynamics AX through a regular Internet browser like Microsoft Internet Explorer. Limiting access to role-specific data, you may deploy the Enterprise Portal to internal employees as well as external customers and vendors.

The Application Integration Framework (AIF) on the other hand supports automatic data exchange with other business applications inside and outside your company. Receiving and sending documents like invoices, packing slips or price lists works in XML format. Applying an external converter, you may convert the documents to any other format like EDIFACT if necessary.

Industry solutions certified by Microsoft – Microsoft Dynamics Industry Solutions (MDIS) – enhance the core functionality of Dynamics AX to meet the specific requirements of various industries. Industry solutions are designed by selected ISVs and partners in accordance with Microsoft's technical guidelines and quality standards. Worldwide sales and support for these solutions is available directly from Microsoft.

**Industry  
solutions**

<b>How to buy</b>	Microsoft does not directly sell Dynamics AX to customers, but provides an indirect sales channel. Customers may purchase licenses from certified partners, which also offer their services to support the implementation of Dynamics AX. This support includes application training and consulting as well as system installation and the development of enhancements to the core functionality.
<b>Implementing</b>	<p>In order to assist the implementation of Dynamics applications, Microsoft provides a standardized implementation methodology for partners – Microsoft Dynamics Sure Step.</p> <p>The Microsoft Dynamics Sure Step Methodology is a comprehensive approach to implement Microsoft Dynamics solutions including project management principles as well as solution-specific guidelines and tools. Within Sure Step, the Dynamics AX Rapid Configuration Tool (RCT) contains the tools and templates to implement Dynamics AX.</p>
<b>Internet resources</b>	<p>Additional resources including product information, customer stories and online demos are available on the Microsoft Dynamics AX web page <a href="http://www.microsoft.com/dynamics/ax/default.msp#x">www.microsoft.com/dynamics/ax/default.msp#x</a> in a global version as well as in a local version accessible through the Microsoft homepage of your country.</p> <p>The Microsoft web pages also provide support to find an implementation partner and to access the Microsoft Dynamics Solution Finder available to look for industry solutions.</p>

### 1.3 Technology and System Architecture

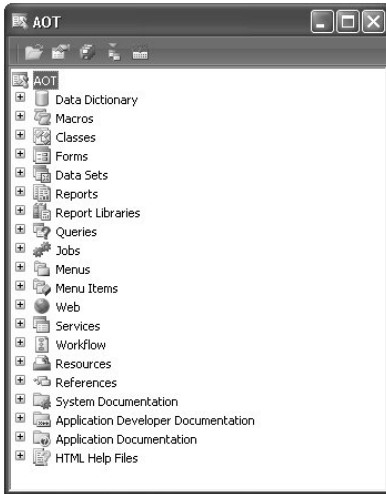
The development of Dynamics AX (formerly Axapta) from the very start aimed to support international implementations through multi-language, multi-currency and multi-company support as well as through a deep integration of components. Integration does not only cover components within Dynamics AX, however, it also includes the Microsoft software stack with Windows operating systems and applications.

Three core technological characteristics are essential in Dynamics AX:

- Integrated development environment (MorphX)
- Layer-technology
- Three-tier architecture

<b>MorphX</b>	Dynamics AX shows an integrated development environment called MorphX. It allows designing, editing, compiling and debugging code within the Dynamics AX client. In order to provide an efficient way to design the programmable objects like tables and forms, the development environment shows a tree structure – the Application Object Tree (AOT).
---------------	---





**Figure 1.2: The Application Object Tree (AOT) to design programmable objects**

The programming language in Dynamics AX is X++. X++ is an object-oriented, proprietary language in Dynamics AX, which is similar to C# and Java.

**X++**

Since application objects in MorphX show an open source code, you may adjust and enhance Dynamics AX functionality in the development environment. You may open the development environment directly within the Dynamics AX client, if an appropriate license is available.

Applying a layer structure, Dynamics AX provides a hierarchy of levels in the application source code separating the standard application from modifications. Different application object layers make sure that your modifications will not interfere with standard objects stored in the system layer. The layering system therefore facilitates release upgrades on the one hand and industry solutions implementations on the other hand.

**Layer  
technology**

The lowest object level in Dynamics AX is the SYS layer, which together with the GLS layer contains the core Dynamics AX standard objects. The HFX layer containing applicable standard hot fixes together with higher layers only include objects different to the SYS layer. The layers SL1, SL2 and SL3 are reserved for industry solutions provided by the Microsoft Dynamics Industry Solutions program (MDIS). The highest object level is the USR layer, which contains your specific modifications.

In addition, every layer except for HFX, SL1, SL2 and SL3 refers to a patch layer with a name ending with "P" (e.g. "USP" for the USR layer). The

patch layers are reserved for application updates to the related regular layer.

When accessing the Dynamics AX application, the kernel looks for a version of every object required. This version search starts from the highest layer, the USR layer. If no object version is available in the USR layer, the kernel will go through the lower layers until finding the object – locating it in the SYS layer if no modifications apply.



**Figure 1.3: Hierarchy of application object layers in Dynamics AX 2009**

If you have modified the item form as an example, Dynamics AX will run the form *InventTable* that you have modified in the USR layer and not the standard object with the same name in the SYS layer.

**Three-tier architecture**

In order to support large implementations with a high number of users, Dynamics AX consequently shows a three-tier architecture. The three-tier architecture is characterized by separating database, application and client.

**Database**

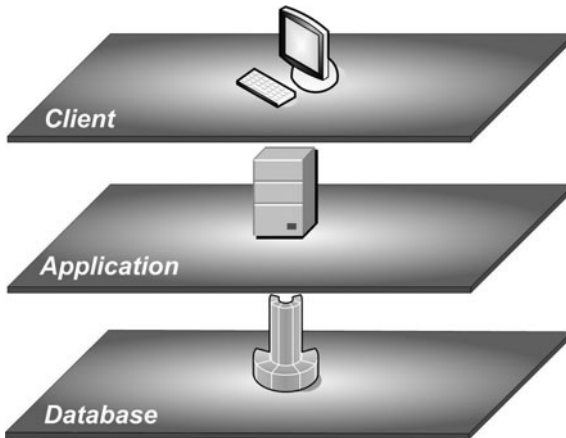
Data managed in Dynamics AX are stored in a relational database, which may be either a Microsoft SQL Server or an Oracle database. For large installations, you may use a database cluster.

**Application**

The application tier contains the business logic of Dynamics AX, executing the code designed in the development environment. It may run on a single AOS server or on a server cluster to support large implementations.

**Client**

The client tier contains the graphical user interface, which is required to process data input and output. The regular user interface in Dynamics AX is a Windows client.



**Figure 1.4: The three-tier architecture in Dynamics AX**

Database, application (AOS) and client usually run on different computers. In case of small implementations, you may also install database and application together on a single server. For testing purposes, all three tiers may run on a common device.

**Installation**

When working in a module of Dynamics AX (or any other business software), you manage data describing processes (e.g. item transactions). On the other hand, you also need to manage data describing objects (e.g. customers).

**Data structure**

In order to group the different kinds of data, you may distinguish three data types:

- Setup data
- Master data
- Transaction data

Setup data determine the way business processes work in Dynamics AX. As an example, you may select in the setup to apply warehouse locations, pallets or serial numbers.

**Setup data**

Besides modifying programmable objects, setup therefore is the second way to adapt the application according to the requirements of your company. Usually you will enter setup data when initially setting up the system. Later modifications of core setup data need to be checked carefully.

Master data describe objects like customers, ledger accounts or items. Therefore, master data will change only when the related object changes, as an example when a customer gets a new address.

**Master data**

	<p>Master data are entered or imported initially before a company starts working in the application. They do not change regularly, therefore you will need to insert or edit master data only when there are changes.</p>
<b>Transaction data</b>	<p>Transaction data are continuously created when processing business activities. Examples for transaction data are sales orders, invoices or item transactions.</p> <p>In Dynamics AX, the application generates transaction data for every business activity. Registration and posting of transaction data complies with the voucher principle.</p>
<b>Voucher principle</b>	<p>Vouchers base on master data like ledger accounts, customers or items. If you want to post a transaction, you need to register a voucher containing a header and one or more lines first. It is not possible to post a voucher, as long as it does not comply with the rules defined by settings and Dynamics AX-internal business logic. Once a voucher is posted, it is not possible to change it any more.</p> <p>Some minor vouchers like quarantine transactions show exceptions regarding the voucher structure, however. They do not contain a separate header and lines part.</p> <p>Examples for vouchers in Dynamics AX are orders in sales or purchasing as well as journals in finance or inventory management. After posting, the posted documents are available as packing slips, invoices, ledger transactions or inventory transactions.</p>

### 1.4 Application Components

<b>Role centers</b>	<p>Microsoft Dynamics AX 2009 provides a role-tailored user experience, which aims to show an interface exactly matching the needs of the individual user. The goal is to support efficient standard processes, avoiding to show unnecessary, confusing data on the one hand and ensuring to display all required data immediately on the other hand.</p> <p>The core feature referring to the role-tailored access is the role center functionality, providing fast and personalized access to required information like alerts, tasks and reports (see Section 2.1.5). Dynamics AX ships with more than 30 role centers designed for standard roles like accountant or marketing manager, which are generally applicable.</p> <p>In order to comply with individual business requirements, you may easily add new roles or adapt existing roles. User profiles, which represent the different roles, are assigned to users based on their function in the company. Beside the user groups in permission management, user profiles are the second dimension for grouping users, therefore.</p>
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The workflow system in Dynamics AX provides configurable workflows to support routine procedures like the approval process for a purchase requisition. The workflow infrastructure in Dynamics AX is based on the Windows Workflow Foundation enabling workflow messages in Microsoft Outlook, the Enterprise Portal or the regular Dynamics AX client.

**Workflow**

Functionality in Dynamics AX is packed in modules, including following main functional groups:

**Modules**

- Financial management
- Customer relationship management (CRM)
- Supply chain management (SCM)
- Production and shop floor control
- Project management
- Service management
- Human resources management

**Financial management** in Dynamics AX supports the business processes in accounting, controlling and budgeting. The deep integration of Dynamics AX ensures that transactions in all other areas of the application like sales, purchasing, production, inventory and project management are immediately available in finance.

**Financial  
management**

Core features in financial management are general ledger, accounts receivable and accounts payable as well as fixed assets and liquidity management (bank management and payments).

**Cost accounting** provides a comprehensive cost flow analysis of cost centers and purposes. **Balances scorecard** shows a specific analysis of achieving company targets in multiple dimensions like economic efficiency and customer satisfaction. **Expense management** allows web-based registration of travel and entertainment expenses.

**CRM** (customer relationship management) in Dynamics AX supports the sales and marketing processes. Core feature is the sales force automation managing customers, contact persons, leads and opportunities. Marketing automation includes activity management showing a tight integration with Microsoft Outlook and marketing campaigns.

**CRM**

**SCM** (supply chain management) supports the complete logistic chain of materials, information and financial transactions from the vendor to the customer including purchasing, inventory management, production and sales. The tight integration of data throughout the whole application grants a common, accurate and immediate access to data for all involved people.

**SCM**

The functionality of supply chain management includes **Inventory management** along with warehouse locations, pallets, RFID support, bills of

materials and quality management. Sales and purchase order management is available in the **Accounts receivable** and the **Accounts payable** module, including numerous options like direct deliveries, replacement items and comprehensive pricing features.

**Product Builder** (product configuration) and **Master planning** (operations planning) are additional options to meet the requirements of supply chain management.

The support for **Intercompany** processes enables automatic purchase and sales processes between companies in a Dynamics AX database.

The **Enterprise Portal**, enabling role-based web access, as well as the **Application Integration Framework** (AIF), automatically exchanging business documents like invoices, provide direct access to your Dynamics AX application for customers and vendors.

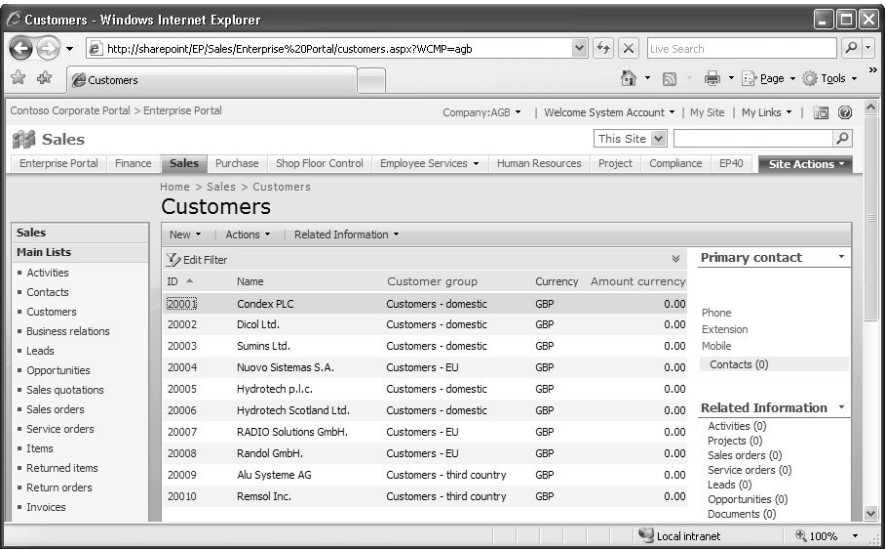


Figure 1.5: Web access to Dynamics AX through the Enterprise Portal

Production

**Production** in Dynamics AX controls the complete manufacturing process, starting from production scheduling, component and work center management to stocking of finished goods.

In order to support the tasks in manufacturing, numerous features like integrated Gantt diagrams, production order management, options for subcontracting and the module **Shop Floor Control** are available.

**Project** in Dynamics AX supports financial planning and controlling of projects. Based on the registration of project times, consumed items, expenses and fees, Dynamics AX grants correct invoices and ledger transactions even in highly complex, hierarchical projects.

**Project**

Apart from external projects like time and material, or fixed-price projects, you may also manage internal activities like investment projects. An interface to the Microsoft Office Project Server provides synchronization with Microsoft Project.

**Service** in Dynamics AX, designed to manage the service operations of your company, is based on the project module. Service management features include service subscriptions and agreements as well as service orders for periodical activities and repair orders for sudden incidents.

**Service**

**Human resources** in Dynamics AX supports employee administration including positions, competencies and payroll data as well as the management of organizational structures. In addition, management of absences, courses and applications is available as well.

**Human  
resources**

**Business intelligence** in Dynamics AX is based on the Business Intelligence platform of the Microsoft SQL Server. Therefore, you may apply all features provided by the SQL Server like the SQL Report Builder to examine Dynamics AX data, which are continuously updated while analyzing.

**Business  
Intelligence**

In addition, you may access multi-dimensional OLAP queries directly within the Dynamics AX client. Therefore, OLAP queries are easily accessible for every user with appropriate permissions.

In order to comply with country-specific requirements, local features are available. In order to activate local features, you need to apply appropriate parameter settings or configuration keys.

**Local features**

System configuration and license codes control, which modules and features are available in your Dynamics AX implementation. In addition, permission settings will define which Dynamics AX functionality is actually available for you.

**Available  
modules**

Within Dynamics AX, modules group the application by functional aspects. The application logic complies with business processes, nevertheless, ensuring that all steps in a transaction are processed in an end-to-end procedure.

## 2 Getting Started: Navigation and Basic Setup

One of the core principles of Microsoft Dynamics AX is to grant a familiar look and feel to people, who are used to Microsoft software. However, business software has to adapt to business processes, which can be quite complex.

### 2.1 User Interface and Common Tasks

Before we start to go through business processes and case studies, we want to look at the general functionality in this chapter.

#### 2.1.1 Logon and Authentication

Microsoft Dynamics AX logon is Active Directory based, using Windows authentication. You do not need to log on to Dynamics AX with separate credentials as a result. After selecting the Dynamics AX icon on the PC desktop or in the start menu, you automatically connect to the Dynamics application using your Windows account.

**Logon**


The Dynamics AX user-ID, company and language derive from your user options, which you can change inside Dynamics AX.



**Figure 2.1: Icon for Microsoft Dynamics AX on the PC desktop**

Sometimes you need to use different user accounts within Dynamics AX – e.g., if you have to check user permissions. In this case, you have to make sure that the users you need are set up in Active Directory administration. In order to start Dynamics AX with a user that is different from your current Windows account, you need to choose the option “Run as” in the pop-up menu (which opens by right-clicking) of the Dynamics AX- icon.

**Different user account**

If you want to logoff from Dynamics AX shutting your session, you will choose the same way as closing other Windows programs: You may select the shortcut key *Alt+F4*, the menu option *File/Close* or the button  in the top right-hand corner of the Dynamics AX workspace. If you have opened several workspace windows, you will log off when you close the last workspace.

**Logoff**



### 2.1.2 User Interface

When you start Microsoft Dynamics AX, the Dynamics AX workspace will be the first window you see. The content of the workspace depends on license keys and system configuration on the one hand and your permissions and individual settings on the other hand. If your company applies role centers (see Section 2.1.5), the content pane in the center of the workspace will show your role center; otherwise it contains an area page.

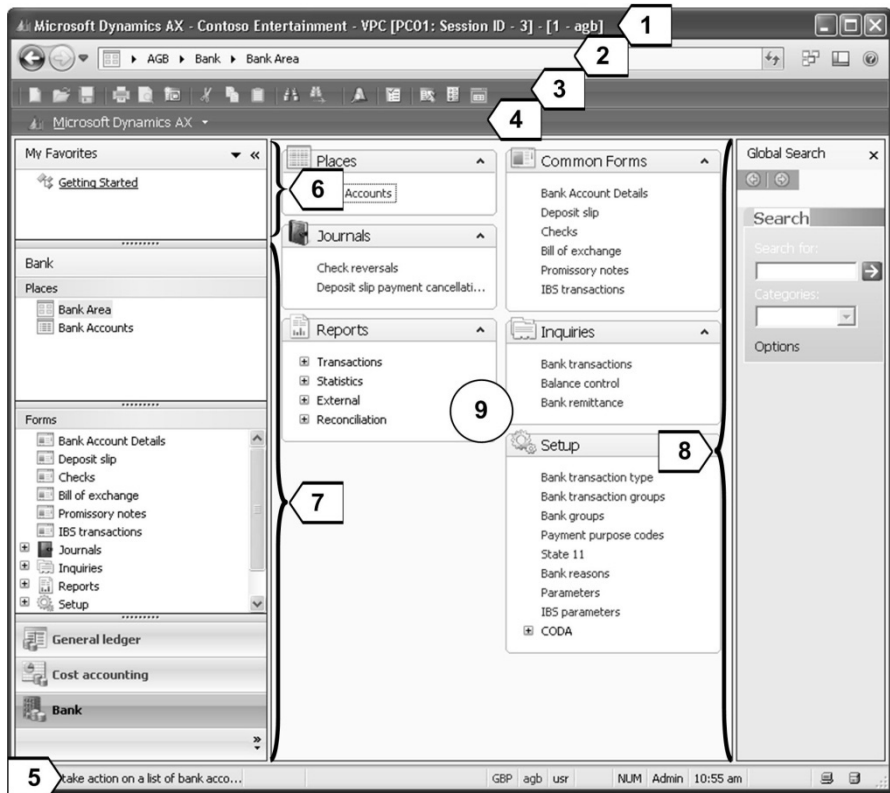


Figure 2.2: Dynamics AX workspace, showing an area page in the content pane

The workspace of Microsoft Dynamics AX 2009 consists of following areas as shown in Figure 2.2:

- Title bar [1]
- Address bar (Breadcrumb bar) [2]
- Toolbar [3]
- Command bar [4]

- Status bar [5]
- Favorites [6]
- Navigation pane [7]
- Task pane [8]
- Content pane [9]

The **title bar** shows the name of the application ("Microsoft Dynamics AX") as well as the name of the licensed company, the server name, the session ID and the current company.

**Title bar**

The **address bar** (breadcrumb bar) provides navigation possibilities known from Windows Vista and present-day Internet browsers. It shows a "breadcrumb" trail of the pages that you have opened in the content pane, making it possible to go back and forward pushing the travel buttons "Forward" and "Back".

**Address bar**

The address field shows the path of the current page and allows navigation to other companies, modules and pages.



**Figure 2.3: Navigation possibilities in the address bar**

In the right part of the address bar, you may find following menu buttons:

- *Windows* (☐) to switch between forms
- *View* (🖨) to change workspace settings
- *Help* (🔊) to show the online help

Right below the address bar you may find the **toolbar**, which gives the possibility to access frequently required commands by clicking an icon. Depending on the page shown in the content pane, some icons are not visible. You may adjust the settings for the toolbar choosing the command *Tools/Customize*.

**Toolbar**

The **command bar** contains commands that are globally available within Dynamics AX. This includes common Windows commands like *Copy* and *Paste* as well as specific Dynamics AX commands like *Filter* and *Document handling*. Depending on the content page, some commands are not active. If a certain command is as well accessible by a shortcut key, it will show on the right hand side of the particular command selection.

**Command bar**



Figure 2.4: The command bar in the Dynamics AX workspace

Status bar

The **status bar** at the bottom of the Dynamics AX workspace consists of two different parts. On the left side of the status bar, you may see a short help text on the active element (field or menu item) of the workspace. On the right side, you may find information on the status of the session.

If you want to change the data shown in the status bar, you need to choose appropriate settings in your user options (command *Tools/Options*). As shown in Figure 2.5, you may select following fields:

- Help text [1]
- Unread notifications / Alert status [2]
- Currency – controls currency of displayed amounts [3]
- Current company account [4]
- Application object layer [5]
- Status of Caps Lock [6]
- Status of Num Lock [7]
- ID of the current user [8]
- Session date [9]
- Session time [10]
- AOS-Name – empty in Figure 2.5 [11]
- Activity: Shows database activity [12]





Figure 2.5: The status bar (all elements displayed)

The status bar not only displays information, it also offers additional functionality. You may start certain functions by double-clicking following fields in the status bar:

- *Alert status* (Opens the alert notifications form)
- *Currency* (Opens the currency converter, which gives you the possibility to show currency amounts in different currencies)
- *Current company* (Switch between company accounts)
- *Session date* (Default for the posting date in the current session)

The **navigation pane** on the left hand side of the Dynamics AX workspace provides access to pages and forms. Pages and forms are the place to work in the different modules of Dynamics AX as described in Section 2.1.3 and 2.1.4 more in detail.

**Navigation pane**


In order to hide the navigation pane completely, you may select the menu button *View*  */Navigation Pane* in the address bar. If you just want to prevent the navigation pane to show completely all the time, you may collapse the navigation pane automatically to a left-side sidebar by pushing the button *View*  */Auto-Hide Navigation*, the shortcut key *Shift+Alt+F1* or the double arrow (<<) in title bar of the navigation pane. If Auto-Hide is enabled, the navigation pane will show completely whenever you move your mouse pointer to the navigation sidebar.

Whereas the pages and forms area in the navigation pane grants access to all menu items in a uniform structure, the **favorites pane** (see Section 2.1.3) allows arranging menu items the way you need them personally. This way you can easily access pages and forms you need frequently. The functionality of favorites in Dynamics AX is similar to the administration of favorites in Microsoft Outlook or Internet Explorer.

**Favorites**

The **task pane** also is a known element of Microsoft Office. In Dynamics AX, the task pane contains the global search. The global search gives the possibility to look for information across several tables as described in Section 2.1.6 (appropriate setup required).

**Task pane**

In order to adjust the workspace elements according to your needs, you may show and hide the task pane and navigation items (favorites pane, navigation pane and forms area) by selecting the appropriate option in the menu button *View*  of the address bar.


The **content pane** shown in the center of the Dynamics AX workspace contains following types of pages:

**Content pane**

- List pages (see description below)
- Area pages (see Section 2.1.3)
- Role centers (see Section 2.1.5)

If you need a second workspace to work in Dynamics AX, you may either open Dynamics AX a second time – which consumes a second session in the Dynamics AX license administration – or open a second workspace within your current session.

**Workspace**

In order to open a second workspace within your current session, you want to choose the command *Windows/Open new workspace* or the icon . Another way to open a new workspace is to push the button *New Workspace* in the dialog box that displays when you want to change the company account.

List pages

A list page (like the item page shown in Figure 2.6) provides a list of records of a particular table. You may use list pages to view and to select records as well as to complete daily tasks on those records.

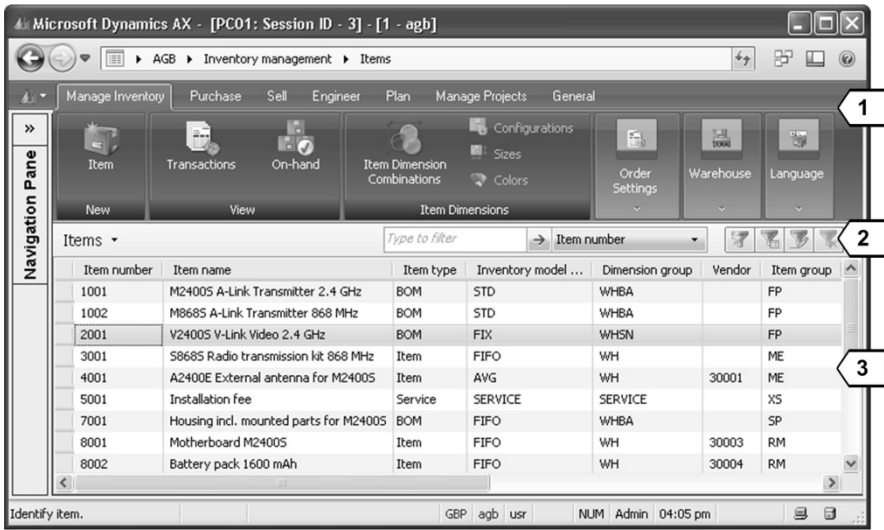


Figure 2.6: Items list page (*Auto-Hide Navigation* enabled)

List pages show a common structure, where some elements and functions depend on the table displayed. The common structure in list pages includes following basic elements:

- The **action pane** [1] consists of action buttons. Action buttons are there to execute activities related to the selected record on the one hand and to open forms, which display more information, on the other hand. Depending on the number of buttons, they show on several tabs.
- The **filter pane** [2] allows entering filter criteria (see Section 2.1.6).
- The **grid** [3] displays the list of records.

In addition to these three basic elements, some list pages contain a preview pane below the grid, which shows information related to the selected record.

Unlike list pages, which are a choice to view records, forms are the choice to insert and modify data. Therefore, if you choose to work on a record in a list page by double-clicking it, Dynamics AX will open the related detail form.

Forms

The direct way to open a form is to select the appropriate menu item in the area page or in the forms area of the navigation pane. Unlike list pages, forms do not show in the content pane of the workspace; they open separate windows, which you can move on your PC desktop.

Forms got a common structure. Some elements and functions depend on the particular form, however. Figure 2.7 shows the item form (*Inventory management> Item details*) as an example for the structure of forms.

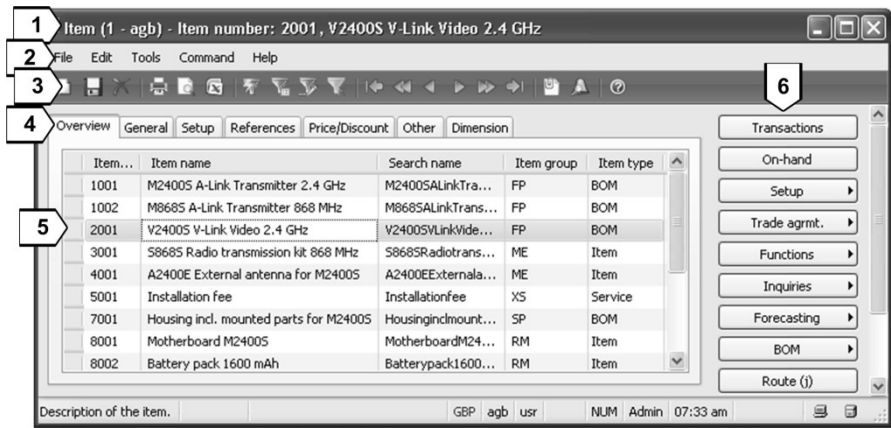


Figure 2.7: Elements in a form (shown on the item form)

The left part of the **title bar** [1] on a form shows the form name and the current company account (if chosen in the users options). Next to it, you may see the identification of the selected line. For illustration, the example in Figure 2.7 shows the number and name of item “2001” in the company account “agb”.

Title bar

The **command bar** [2] in a form looks different from the command bar in the Dynamics AX workspace. It offers similar options, however.

Command bar

Like the command bar, the **toolbar** [3] is available in forms and in the workspace. The toolbar in forms contains fewer icons, however, because it only shows icons that are necessary to work in forms.

Toolbar