Using Your Single Computer Dynamics AX 2012 R3 Installation as a Sandbox for Curriculum Development

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Abstract: Dynamics AX has a unique design that contributes to its fitness as a tool for classroom instruction. By virtue of the fact that multiple companies (separate legal entities) can be maintained within a single database, AX lends itself to the development of shared resources among these legal entities and streamlines intercompany transactions. Furthermore, with AX being a global ERP solution, students can each maintain these unique and separate companies to demonstrate such real world scenarios as multi-entity and multi-national configurations. Using AX as a sandbox, the instructor can set up baseline data that serves as a template for student submissions.

INTRODUCTION

This paper picks up the sequence of a standard AX 2012 R3 installation where the program has been compiled, the registration keys have been entered and the initial application data is ready to be created. The issues that are addressed are the advantages and disadvantages of loading the Contoso Demo Data as opposed to just loading the default DAT company and starting with that. The Contoso Demo Data contains a great deal of setup data that might be undesirable for creating certain student assignments and scenarios. Therefore it might be more beneficial to forgo loading the Contoso Demo Data and simply build on the default DAT company that comes with the installation code.

WHAT DATA IS CREATED WITH THE DEFAULT DAT COMPANY

Dynamics AX, by virtue of the fact that all companies can reside within the same database, allows for the creation and utilization of what is termed 'shared resources'. Shared Resources are tables of data that are available to be sued by multiple companies in the one database. This enhances integration and reduces data entry requirements. The shared resource data that is created with the default DAT company are the currency codes, the Categories for the Chart of Accounts, Units of Measure.......

WHAT SHARED RESOURCES ARE IMPORTED WITH THE CONTOSO DEMO DATA

The Shared Resource tables that are not automatically created with the default DAT company but that are populated with data when the Contoso Demo Data is loaded are listed below:

1. Charts of Accounts
2. Account Structures
3. Advanced Rules
4. Fiscal Calendars
5. Currency Exchange types
6. Currency Exchange rates
7. Denomination currencies

8. Display currencies
9. Financial Dimensions
10. Financial Dimension sets
11. Operating Units

Most of this data is required in order to operate AX, however, you may not want the values that are imported with Contoso, and part of the student assignments might be to have them create these values so they can use their own data and better understand the process and how the data is used. Alternately, you as the instructor might want to create the data in order to lay the foundation for your own custom scenarios.

DYNAMICS AX STUDENT GROUP PROJECT SCENARIOS

1. **General Ledger setup -** Given a list of companies from different industries, students individually or in teams pick one and create a Chart of Accounts with Account Structures and optional Advanced Rules specific to that industry. They are required to give justification for data values they enter in relation to the processes and reporting requirements of that industry.
2. **Multi-national localization -** Students are asked to configure the operating units of a multi-national company. Issues to be addressed are differences in countries where the operating units reside with respect to localizations, tax requirements, currency requirements, language requirements and translations, intercompany requirements, etc.
3. **Trading partners scenario -** Students choose from a predefined list of complementary industries and set up merchandise and service buy/sell relationships between the distinct legal entities.
4. **Self sufficient Conglomerate -** Students set up the Child companies of one Parent Conglomerate. The Children supply each others business needs as much as possible without engaging external suppliers or customers.   This model supports a manufacturing environment well.   Issues to be addresses are intercompany trade processes and consolidations.
5. **Human Resource and Payroll -** Students assume the roles of employees of an organization with the roles of staff employees, contractors and HR administrators. Roles can be rotated to give a 360 view of the processes revolving around timesheet and expense report submission and approval, skills, certification, education and training records and queries, recruitment and hiring, payroll processing and terminations and transfers.
6. **Project Management -** Forming teams, students create and administer each of the six types of projects with the processes of establishing the Work Breakdown Structures, Forecasts and Budgets, entering transactions, reporting results and analyzing the effects on the Balance Sheet and Income Statement.
7. **Procurement -** Students assume roles of internal Procurement managers, employees and external vendors. Each participates in the processes of Vendor requests, Procurement catalog submission and approvals, RFQs, Purchasing policies and requisition requests.
8. **Marketing and CRM -** Students assume the roles of Customers and Customer Service agents with regard to Prospecting, lead and opportunity development, Sales campaigns, Telemarketing and Mailings and Service Cases.