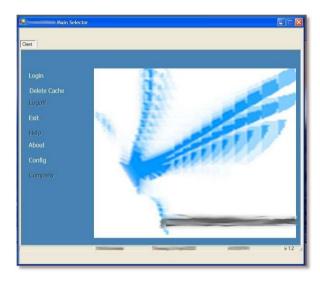
## Windows Application Framework

Some of the highlights of the Windows Application Framework that I have developed

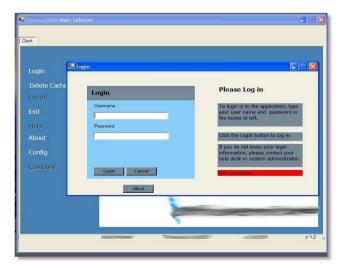
- Dynamically built user interface components, auto updatable assemblies.
- Web-services for data access allow non dependency on database drivers on the client side.
- Security through role-based authorization for user access only to specific applications.
- New and updated application can be deployed transparently to the user.



The Windows Application framework is the entry point for all deployed applications.

The architecture of the windows framework is as follows.

 The setup for the framework contains the base libraries for the UI and reporting. Minimalism is the norm for what is packaged with the setup. The signature of all auto downloadable assemblies is inserted into the client machine's .Net framework security sub-system. Hence, the auto downloadable assemblies obtain full trust on instantiation.



- The authentication assembly is automatically downloaded from the specified code-base and instantiated through reflection. This removes all dependencies on versioning and hence new functionality can be incorporated into the assembly without deploying a new setup.
- The Authentication assembly contacts the authentication web-service and after authenticating the user, obtains his/her company profiles as well as menu profiles.
- A very interesting aspect of this framework is that the Menu file is built dynamically from a Dataset which is provided by the authentication assembly

 Web-services are used for all data access by client applications. This removes the need for database drivers to be installed on the client side hence removing any incompatibilities with database driver versions.



after authorization. Hence new applications can be called from a centrally updated menu.

- The click event of the menu file automatically downloads the latest version of the assembly from an intranet/internet location and instantiates the specified object through reflection. Hence new and updated application can be deployed transparently to the user.
- The user can belong to multiple companies and the authentication assembly populates the company combo box with the multiple companies an authenticated user belongs to. A change in company updates dynamically the company profile and rebuilds the menu in accordance to the new company's menu dataset.
- Security is applied on the dynamically built menu since the menu dataset contains access permissions which are checked against the user's groups and then accordingly, the menu item(s) are enabled or disabled.



## Screenshots of some applications built on the above mentioned framework

	M <b>▼</b> + B
<b>₩</b> • • 3	Selector Results/ Order Details
Selection Results Order Details	Standard Entry
Standard Entry Press for Makidaten entry Linee Summary Drder Header Entry	Press for Muldi-Stare entry Lines Summary Order Lines Entry Order Header Entry
Bill for:	
Division Department V	Edit Mode: 🗫 🥯 🔯
Shipte: Quote Basis: Quote Basis:	Item Previously Edited Sylesthems:
Simple Fill Percent     Y	Salesmark Salesmark Commission nate Descriptore
Location: Communication:	
Customer Order®	<sup>29</sup> Drig Sell Unit Sell Disc % Disc Amt Hett Sell Gross Value GST Nett Value Currency
Daliver Mer	
DeliverTo Address:	
Terms Description:	Item Code Line No 🖤 Quantity Onig Sell Unit Sell Disc % Disc Amt Tax Amt T
Back Order:	
Forward Statemant Date:	
GST Exempt Reason for GST Exemption:	
Comment Type: Comment Description:	
Comment Type: Comment Description:	
	je za
	J¢ X
0%	
M	8
	0%
Selection Results/ Order Deails/ Customer Information Header Information Order Status	Sar
Billto: Record 1 of 54 Division: Customer Oxfor	
OrderType: Customer OrderDate:	Add a New User Add a New Group Edit User Information
- Customer Order Type: V Deliver Alter:	Username: Group Name Username:
	Full Name: Description:
Ship to Address:	Full Name:
Header Information Cont:	Add Group
DeliverTo Address: Communication: Fill Percent: Orig Opy:	Confirm Password:
Communication: Filt: Open Open Open Salesman: Back Order: Ship Open	Start URL: Cycle Look Company.
Commission Percent GST Exempt Alloc Oby:	Company: Unset
	Member Of
Line Information:	Member Of
Line Information: Citical By Rosses Consolity Courses 1983 1 Item Code Disc Aret Ship Opy:	Select Group Name
Line Monadon Calability Constant Inter No. Sec. Ship City Inter No. Sec. Sec. Ship City Inter No. Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec	Select Group Name
Dire Monados.     Dire Monados.     Dire Monados.       Consid ig House     Consid ig House     Dire Monados.       Line No     Description     If im Code.       Dire No     Dire No     Dire No       Line No     Description     If im Code.       Dire Oper     Tax Amt     Allon City:       Origi City:     Oper City:     Salesmark	Select Group Name
Une Monador.     Outro di Controli di Cont	Select Group Name
Une Monador     State (Constructing Construction)     Value     Item Code     Direc Aret     Ship Opy       Line No     Iben Code     Description     Ipy     Orig Opy     Salesman     Canadol Opy       Control Opy     Salesman     Canadol Opy     Control Opy     Orig Opy     Canadol Opy       Orig Sate     Direc Aret     Allon Copy     Control Opy     Canadol Opy     Canadol Opy     Canadol Opy     Orig Sate     Direc Aret     Noti Opy     Direc Aret     Noti Opy     Canadol Opy	
Line Homadon Strank (ground ground and ground grou	
Line Information: Constant Security Constant Line No Incode Constant Security Constant Constant Constant Con	
Line Information	Result or Passed
Line Information	
Line Monador.	
Line Information	

