

ROOT

An Object-Oriented
Data Analysis Framework



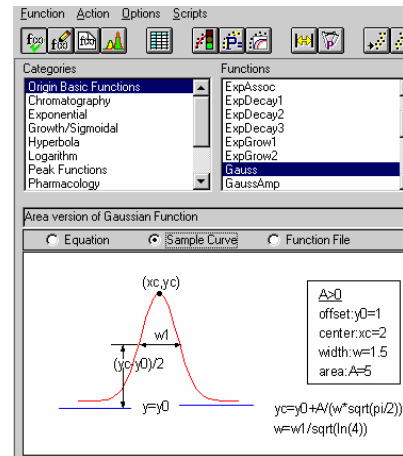
ROOT GUI

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- Designing interactive ROOT application to support people in their everyday and working lives, i.e. to cover all tasks that real users can perform with ROOT.
 - Object Editors
 - Fit Panel
 - Picks Finder
 - Tree Viewer
 - TMVA, RooFit
 - GUI Builder
 - GUI Event Recorder
- Integrate all system components and keep them up-to-date:
 - Software, documentation, help functions, training tools
- Screen-Cast tutorials on web
 - Introductory demos & Advanced tutorials



Function Action Options Scripts

Name: Gauss Type: Built-in Function

Number of Parameters: 4 User-Defined Param. Names

Parameter Names: y_0, x_c, w, A

Independent Var.: x

Dependent Var.: y

Description:
 $y = y_0 + (A / (w \sqrt{\pi/2})) \exp(-2[(x-x_c)/w]^2)$





Main Goals

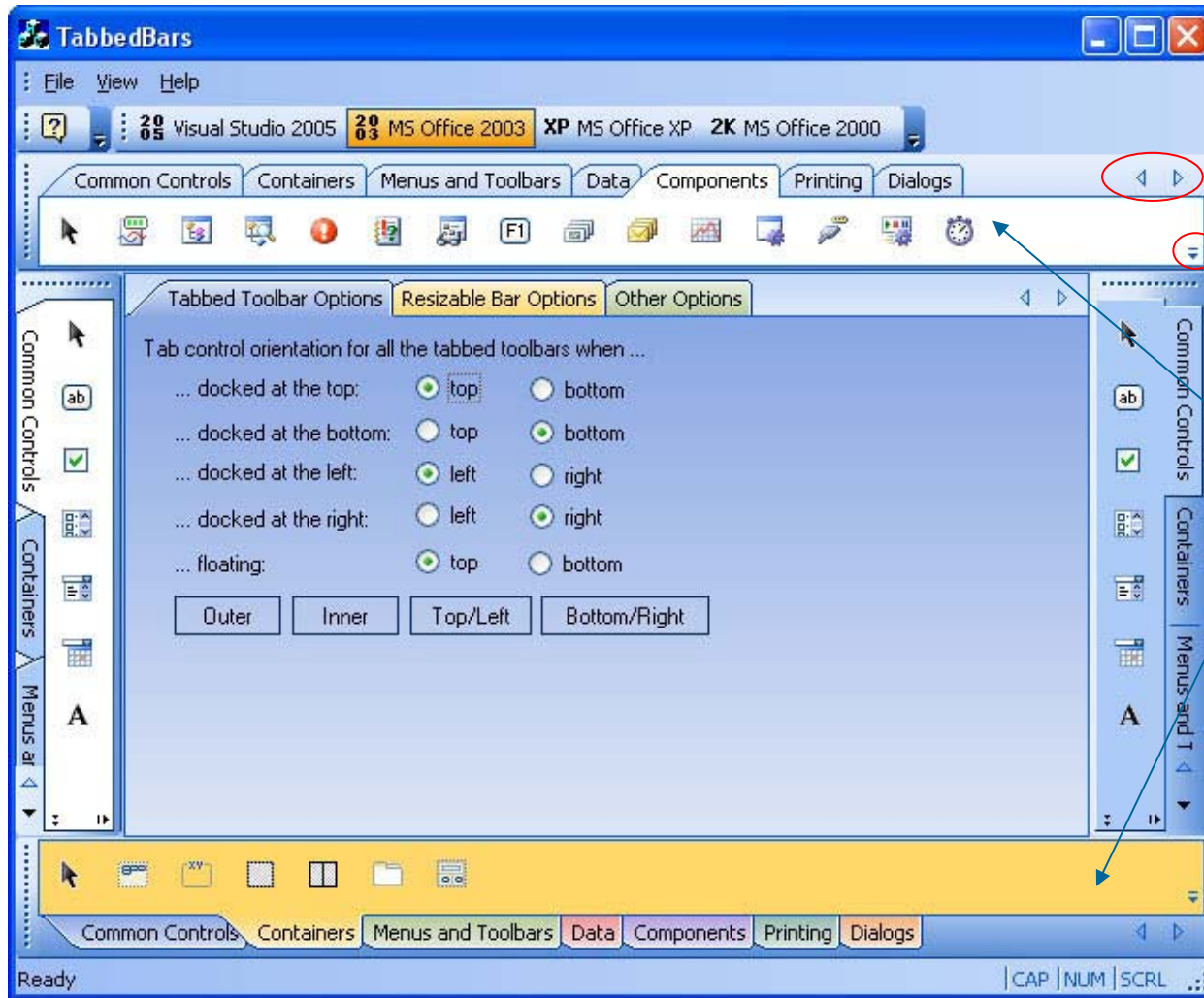


- Allow users to recover from mistakes – undo/redo features.
- Different icon modes for any application (small, normal, large; image, text, image & text).
- Application Wizard - allows generation of an application skeleton within minutes.
- Multilingual applications – all textual elements are separated in resources and allow translation with no changes into the source code. A layout editor allows editing application windows and dialogs during translation.
- GUI skinning – changing the current theme on the fly with ‘one line’ of code.
- Up-to-date GUI widgets...





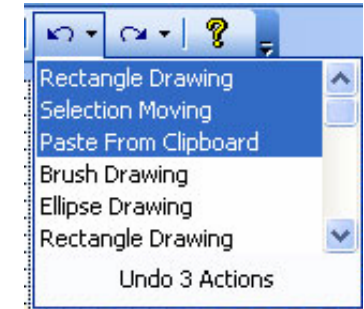
Toolbars & Tabs



Navigation Buttons

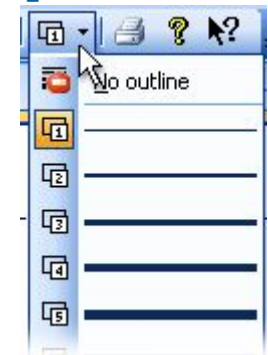
Add/Remove Button

Tabbed toolbars



Undo Button

Split Button





Table/Grid Widget



6	12 - 8 oz jars	25	120	0	25	<input checked="" type="checkbox"/>
7 ▶	12 - 1 lb pkgs.	30	15	0	10	<input checked="" type="checkbox"/>
8	... 12 - 12 oz jar ▼ ...	40	6	0	0	<input checked="" type="checkbox"/>
9	18 - 500 g pkgs.	97	29	0	0	<input type="checkbox"/>
10	12 - 200 ml jars	31	31	0	0	<input checked="" type="checkbox"/>

10266	Wartian Herkku	Leverling, Janet	26.07.1996
10273	QUICK-Stop	Leverling, Janet	05.08.1996
10283	LILA-Supermercado	Leverling, Janet	16.08.1996
10309	Hungry Owl All-Night Grocers	Callahan, Laura	19.09.1996
10321	Island Trading	Davolio, Nancy	03.10.1996
Ready		Dodsworth, Anne	
		Fuller, Andrew	
		King, Robert	
		Leverling, Janet	
		Pearck, Margaret	

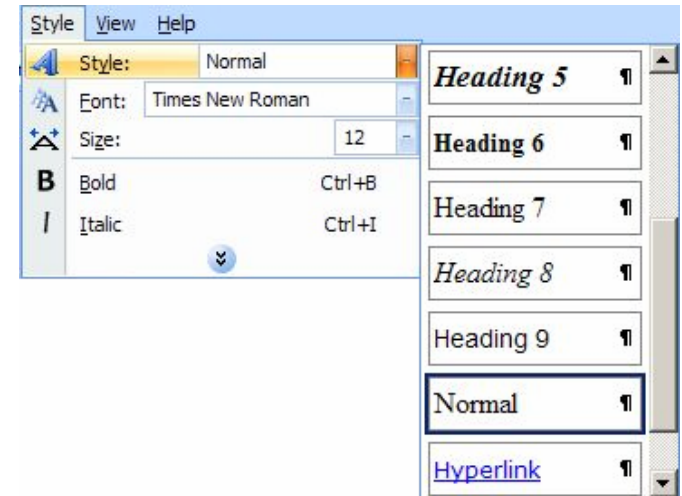
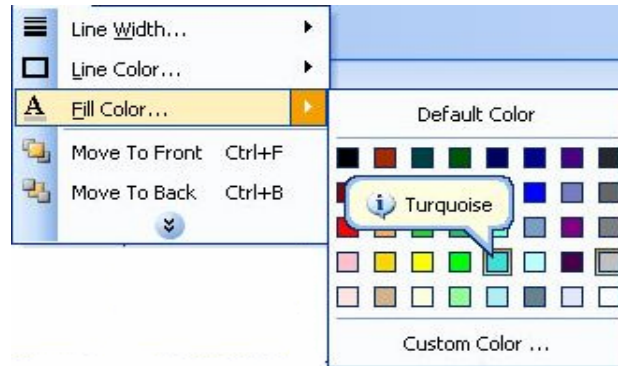
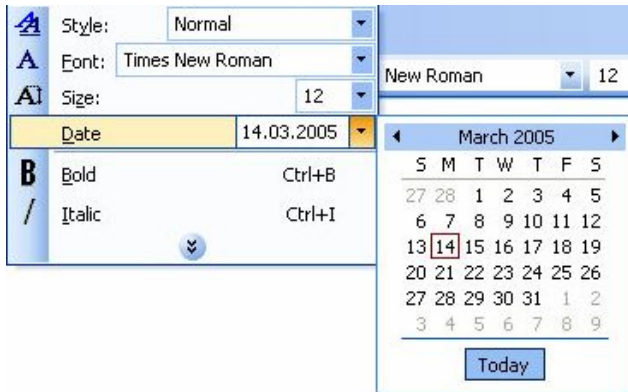




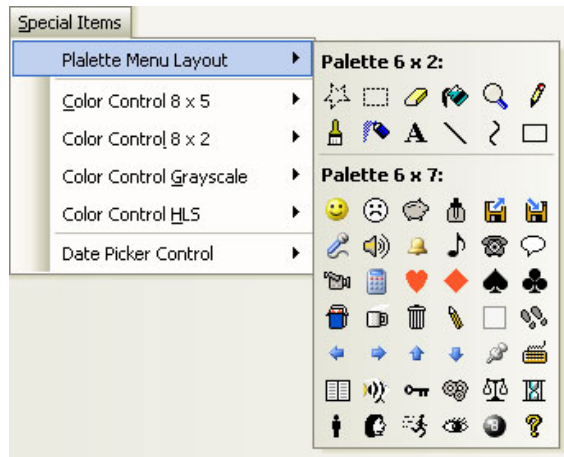
New Menu Features



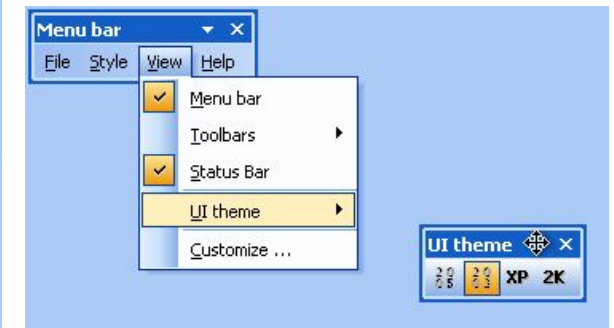
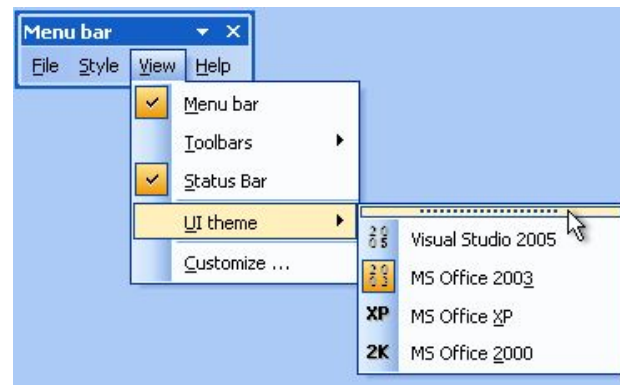
Complex Menu Entries



Palette Menu

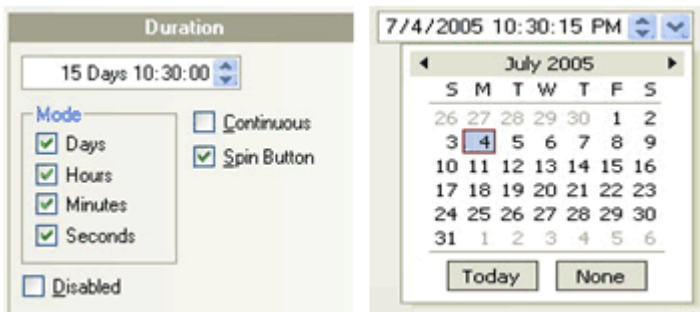


Tear-off Menu

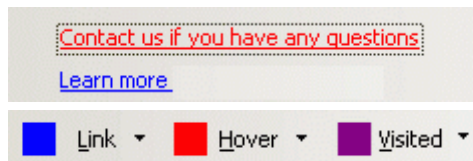




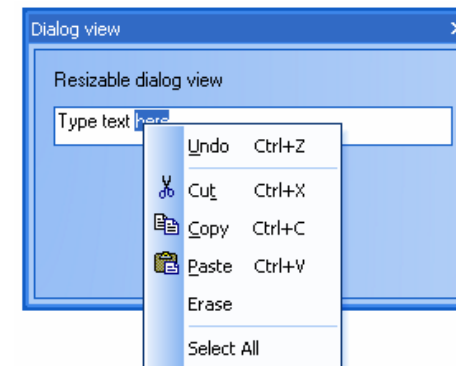
Date/Time Widgets



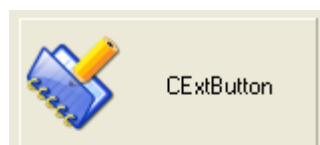
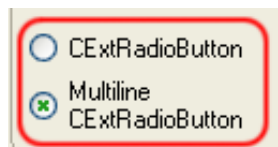
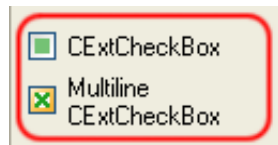
Hyperlink Label



On-fly Edit Controls



Buttons



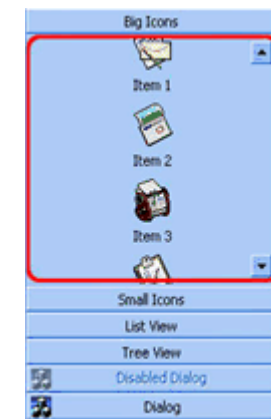
Zoom Slider



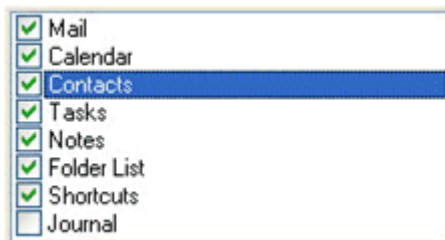
Multi-column Combo box



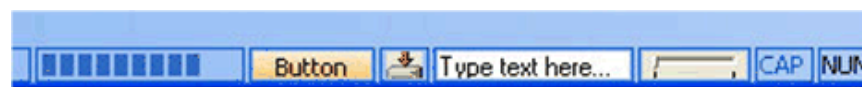
Shutter



Check-List box

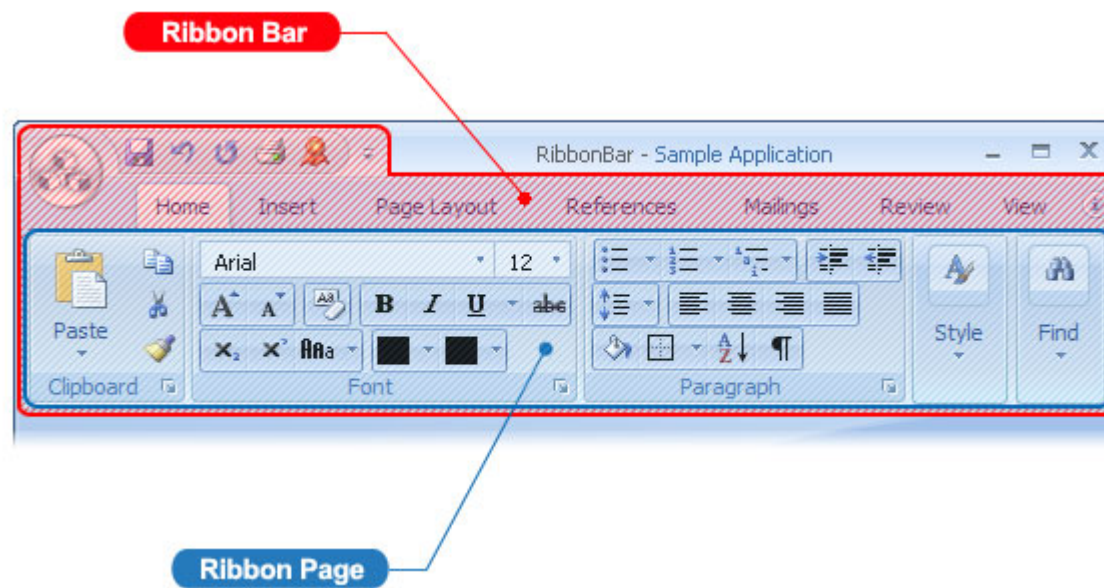
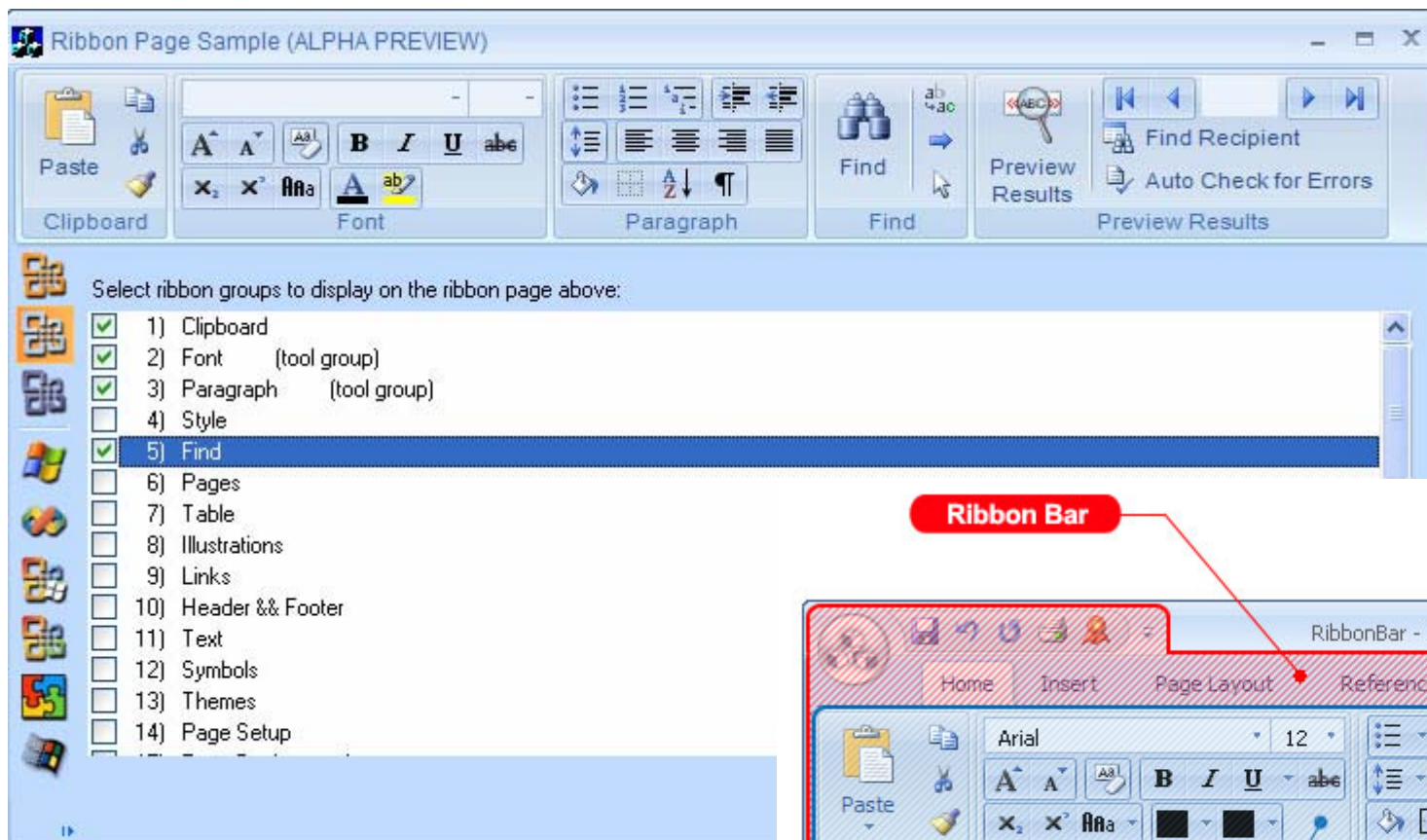


Enhanced Use of Status Bar





Ribbon Bar & Pages





- **Parallel and Web applications –gain performance as a result of:**
 - **Algorithm**
 - **Implementation**
 - **Compiler**
 - **Operating system**
 - **Underlying processor architecture**
 - **Interconnect technologies.**

