



Windows Vista & IE7 Readiness Tour

Tips & Tricks for Using Key Windows Vista Native APIs from Managed Code

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What We'll Cover Today

Tips & Tricks

Windows Vista & IE7 Readiness Tour

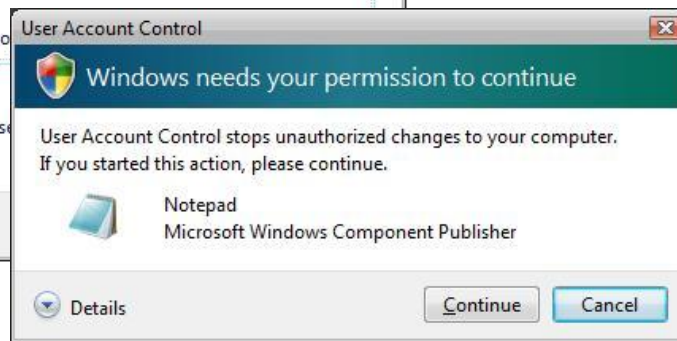
- User Account Control (UAC)
 - *How to make your app UAC-aware*
- Windows Vista Desktop Search
 - *How to integrate desktop search into your app*
- Windows Vista Win32 User Interface Elements
 - *How to use command links in Windows Forms*
 - *How to use the new common file dialogs*

User Account Control

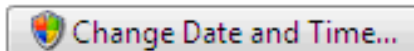
Feature Review

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- Apps run as standard user
- Privilege elevation requires user consent



- Security shield icon identifies privileged operations




Making an App "UAC-Aware"

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What managed code developers need to know:

- How to embed a manifest in a managed executable
- How to launch an elevated process
- How to set the security shield icon
- How to debug UAC-aware apps in Visual Studio 2005



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Demo: Making an App UAC-Aware

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Developer Evangelist Microsoft EMEA

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Windows Vista Desktop Search

Feature review

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- Search is fully integrated in Windows Vista
 - Start Menu, Control Panel, Explorer Windows
- Single, built-in, client indexing platform and a new Property System
 - Used by Explorer, Outlook 2007 and OneNote 2007
 - Can be used by third party applications
 - OLE DB Provider for Windows Search
 - ISearchQueryHelper


Windows Desktop Search

OLE DB Provider for Windows Search

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What managed code developers need to know:

- The provider can be easily used from ADO.NET
 - System.Data.OleDb classes
- Connection string format
- Query syntax



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Demo: Using the OLE DB Provider for Windows Search

Dave Webster

Developer Evangelist Microsoft EMEA

Windows Vista Desktop Search

*Hidden slide:
covered in demo*

OLE DB Provider connection string format

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- Beta 2 and later

```
"Provider=Search.CollatorDSO;Extended  
Properties='Application=Windows';"
```

- Feb CTP and previous builds

```
"Provider=USearch.CollatorDSO;Extended  
Properties='Application=Windows';"
```

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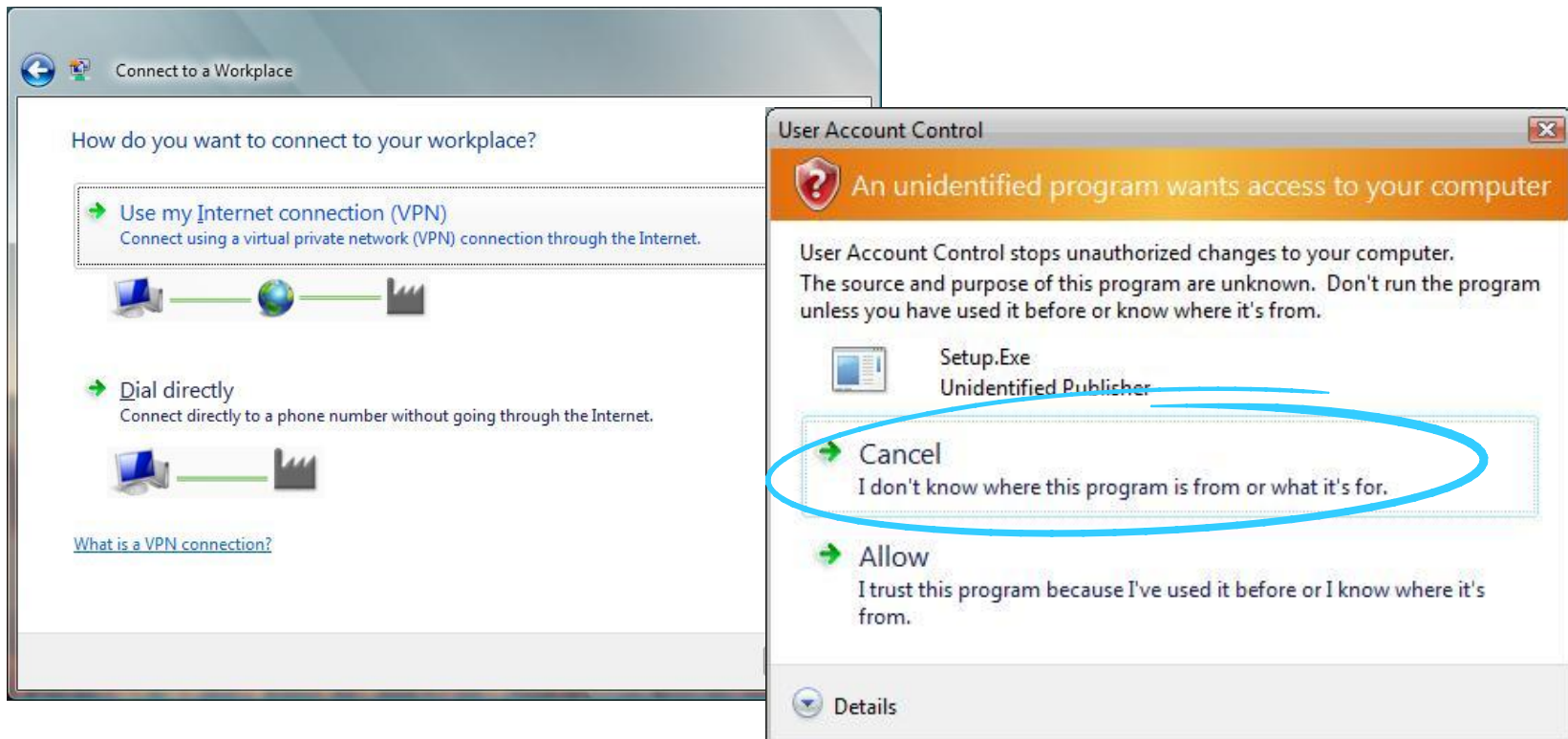
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Command Link

Feature Review

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- New Win32 UI element in Windows Vista
 - New button style (BS_COMMANDLINK)
 - New button messages (BCM_SETNOTE, BCM_GETNOTE)



Using Command Links in Windows Forms

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What you need to know:

- How to add the `BS_COMMANDLINK` style
- How to call the `BCM_SETNOTE` message
- How to provide design-time support (optional)

Windows Vista File Open Dialog

Anatomy of a Dialog Box

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"friendly" address bar

enhanced column headers:
sort, group and filter

Live Icons

Instant
Search box

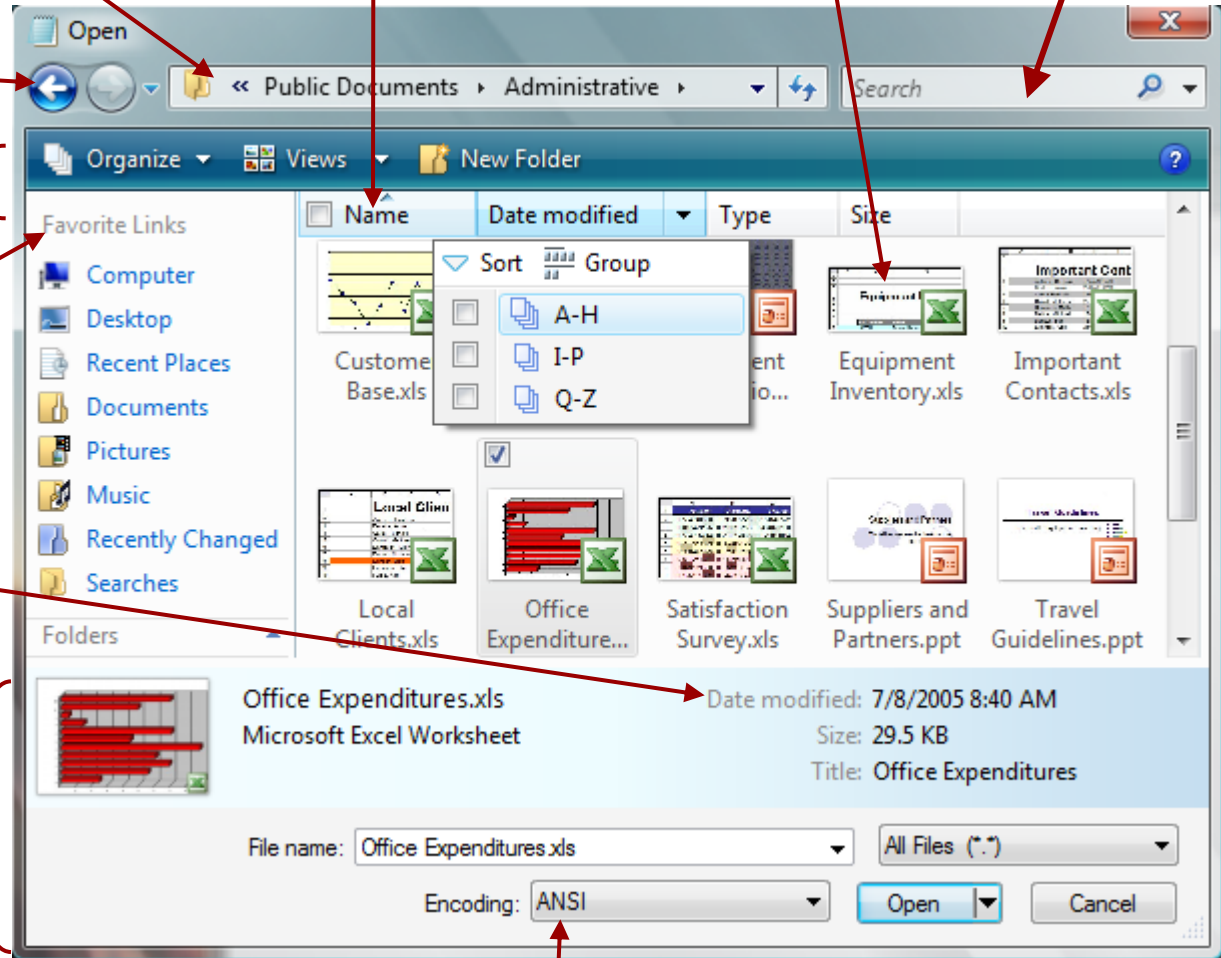
navigation
buttons

Command bar
(for context-based
tasks)

extensible
Favorite Links

file properties

Details Pane



custom controls

Common File Dialogs – The API Story

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- New COM API
 - IFileDialog, IFileOpenDialog, IFileSaveDialog
 - IFileDialogEvents, IFileDialogControlEvents
 - IFileDialogCustomize
- Existing Win32 API
 - GetOpenFileName / Get SaveFileName functions
 - Still supported on Windows Vista
 - Displays new Windows Vista dialogs (unless certain customization options are specified)

Using the New Common File Dialogs

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What you need to know:

- Windows Forms and WPF wrap the Win32 APIs - and they both provide a customization
- To get the new dialogs, you must change your code
- Current COM interop challenges

Using the New Common File Dialogs

Current COM interop challenges

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- Additional work is needed before you can call “Add Reference...”
 - No interop assembly available
- The new COM APIs are standard v-table based interfaces (i.e. they do not support IDispatch)
 - Defined in IDL
 - No type library available
- Also applies to other new COM APIs
 - KnownFolders API, Property Provider API, etc

Using the New Common File Dialogs

Options for managed code developers

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- Advanced techniques
 - Hand-craft the interop definitions
 - Build a managed wrapper using C++
- More approachable options
 - PInvoke to Win32 APIs
 - Use the Windows “Vista Bridge” SDK samples!

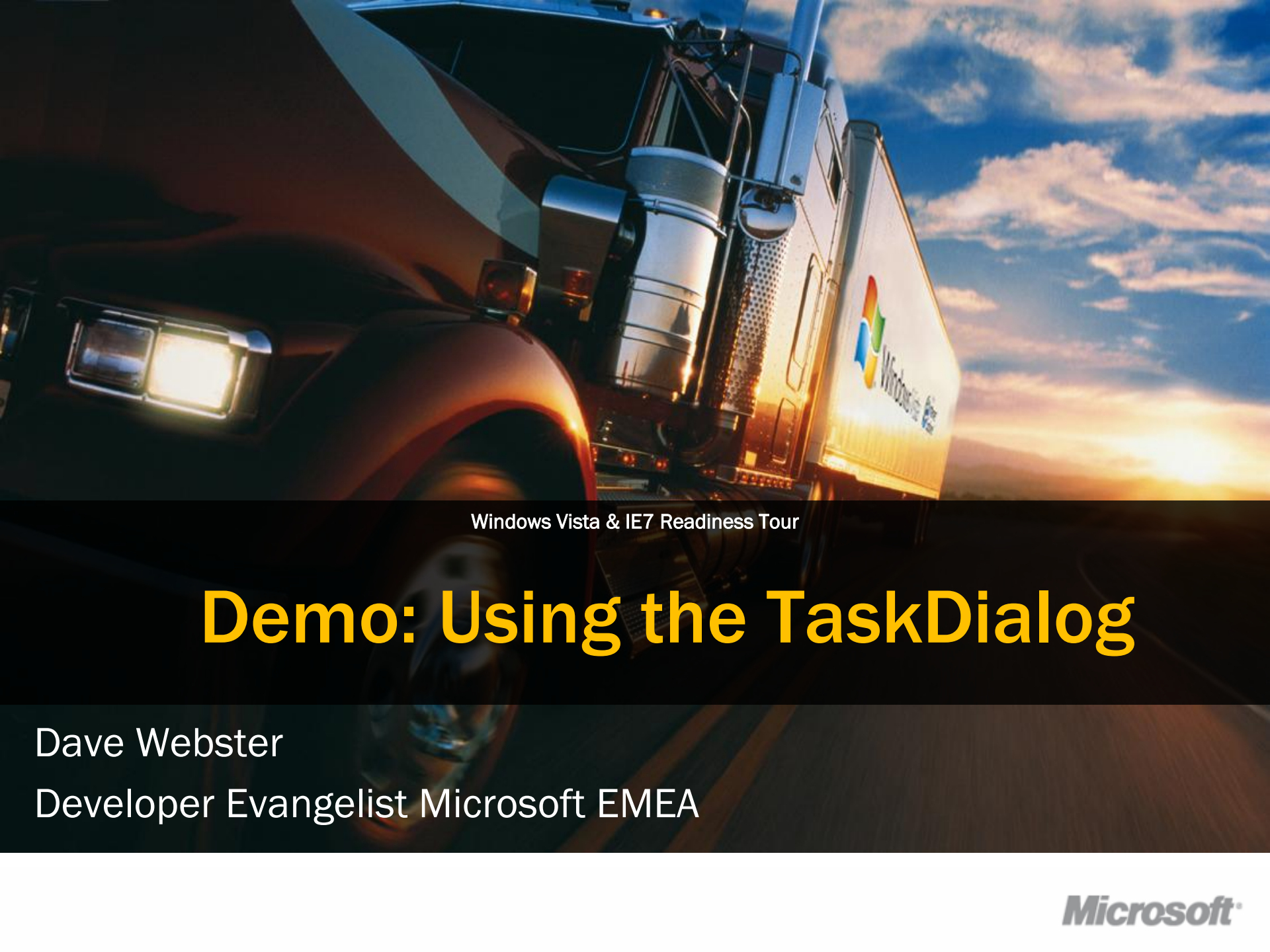


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Demo: Using the New Common File Dialogs

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Demo: Using the TaskDialog

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Summary

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- Many valuable Windows Vista features are currently exposed only through native APIs
 - These features *can* be used from managed code
- Existing tools can be used today
 - Better tool support will be available in future releases of Visual Studio
- New Win32 UI elements can be used to make your apps look more like a Windows Vista app
- Interop with some of the new COM APIs can be challenging
 - The Windows “Vista Bridge” SDK Samples demonstrate many interop techniques in detail



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