

Clarion Magazine

Clarion News

- » RPM 7.0.5349 Available For Download
- » ClarionLive Weekly Webinar: Bob Foreman and Bob Zaunere from SoftVelocity
- » NikaSoft Becomes UA Developer
- » Icetips Utilities 1.1.2352
- » Tracelt Template Updated
- » Build Automator 1.60 Beta 2
- » Free Wallpaper & Icons
- » Clarion ProCodeBlock
- » Icon Lifetime Subscription
- » Free DMC Viewer License
- » CFC Library 2.4
- » FreeImage 3.12
- » Icetips C7 Compatible
- » FinalStep 2.21
- » Posview Becomes Presidio
- » Weekly Webinar #4 Welcomes Dave Harms of Clarion Magazine
- » Noyantis Vacation
- » Product Scope 7.8 (Pre-Release)
- » ClarionQuickBooksConnection 0.98
- » DMC 1.6.0.2
- » SetupBuilder 6.9 Build 2558
- » IP Data Server and Database Driver For C7
- » EZChangeLog 1.7.0
- » Quick PDF Library Support
- » Stimulsoft 20% Discount
- » Xpression Icons
- » CPCS PDF/Emailer Enhanced

[More news]

- » Clarion.NET FAQ
- » Clarion# Language Comparison

[More Clarion & .NET]

- » Clarion 101: Understanding The C7 IDE
- » Clarion 101: Understanding The C7 IDE (Tools | Options)
- » Clarion 101: Importing Apps Into Clarion 7
- » Clarion 101: Creating C7 Dictionaries

[More Clarion 101]

Latest Free Content

- » Clarion 7 Release Candidate 2
- » Newsgroups Slow? Use a Hamster.
- » Call for Articles
- » Source Code Library 2009.03.31 Available
- » C7 RC3 Released, Gold on April 13
- » A Brief History of Clarion (Updated)

[More free articles]

Clarion Sites

Save up to **50% off ebooks.**
Subscription has its rewards.



Latest Subscriber Content

Clarion 7 Release Candidate 2

SoftVelocity has announced that RC2 will be released today. This release includes three new features: the restoration of report page layout view, a Run Startup toolbar button and the ability to generate and build solutions from the Application Pad. Review to follow. The gold release is scheduled for April 10.

Posted Friday, April 03, 2009

Newsgroups Slow? Use a Hamster.

I've been hearing lately about the SV news server running slowly. Maybe it's just my connection, but I've always found that to be the case, which is why a couple of years ago I followed CapeSoft's lead and set up Hamster as an intermediary. If you want to speed up your newsgroup access check out this article from 2007.

Posted Friday, April 03, 2009

Call for Articles

If you have written some code of interest to Clarion developers or have experience or expertise in a Clarion-related area, consider writing an article. You don't need prior writing experience, just a willingness to learn and share your knowledge with others. With a gold release scheduled for this week C7 is obviously a hot topic, but we're also interested in submissions for C6 and Clarion#. Check out the link for topic suggestions.

Posted Monday, April 06, 2009

Source Code Library 2009.03.31 Available

The Clarion Magazine Source Code Library has been updated to include the latest source. Source code subscribers can download the March 2009 update from the My ClarionMag page. If you're on Vista please run Lindersoft's Clarion detection patch first.

Posted Tuesday, April 07, 2009

C7 RC3 Released, Gold on April 13

SV has issued a third release candidate as of April 8. The gold release has been pushed back from April 10 to April 13. SV will also release an "update to Clarion 6.3.9059".

Posted Wednesday, April 08, 2009

First Look: C7 Gold Shows Promise

SoftVelocity released C7 Gold on April 13, 2009. Last-minute changes/fixes include a resolution to many UHEs and the addition of page view in the report designer. Dave Harms takes a look at the gold release.

Posted Thursday, April 16, 2009

Clarion 101: Understanding The C7 IDE

The Clarion 7 IDE is a far more complex application than the C6 IDE and offers many configuration options. Dave Harms shows how to arrange your workspace and explores some of the included tools. Part 1 of 2.

Posted Wednesday, April 22, 2009

Clarion 101: Understanding The C7 IDE (Tools | Options)

Continuing on with the core C7 IDE features, Dave Harms covers the configuration options found under Tools | Options. Part 2 of 2.

Posted Wednesday, April 22, 2009

Clarion 101: Importing Apps Into Clarion 7

When you import an application into Clarion 7 a few things happen. The application's file format is converted, but perhaps more importantly the way Clarion figures out how to compile your application changes. Take a trip into the Solution Explorer and learn how C7 structures solutions and separates code generation from compiling.

Posted Wednesday, April 29, 2009

A Brief History of Clarion (Updated)

A recent discussion of DevCons past prompted Dave Harms to compile an incomplete history of Clarion. Updated April 29, 2009 with more conference info. To leave a comment log in (subscription *not* required).

Posted Thursday, April 30, 2009

Clarion 101: Creating C7 Dictionaries

Almost all Clarion applications begin with a data dictionary. Dave Harms continues the C7 101 series with a tour of table creation in the new dictionary editor.

Posted Thursday, April 30, 2009

Template Development And Testing In C7

Although Clarion 7 offers some significant improvements over Clarion 6 when it comes to writing templates, a lot of template writers have been sticking with C6 when it comes to testing templates and generating code. But with the right settings, template testing can go just as fast, if not faster, in C7.

Posted Thursday, April 30, 2009

[Last 10 articles] [Last 25 articles] [All content]

Source Code

Clarion Blogs

[The ClarionMag Source Code Library](#)

Clarion Magazine is more than just a great place to learn about Clarion development techniques, it's also home to a massive collection of Clarion source code. Clarion subscribers already know this, but now we've made it easier for subscribers and non-subscribers alike to find the code they need.

The Clarion Magazine Source Library is a single point download of all article source code, complete with an article cross-reference.

[More info](#) • [Subscribe now](#)

Printed Books & E-Books

E-Books

E-books are another great way to get the information you want from Clarion Magazine. Your time is valuable; with our [e-books](#), you spend less time hunting down the information you need. We're constantly collecting the best Clarion Magazine articles by top developers into themed PDFs, so you'll always have a ready reference for your favorite Clarion development topics.

Printed Books

As handy as the Clarion Magazine web site is, sometimes you just want to read articles in print. We've collected some of the best ClarionMag articles into the following print books:



- » [Clarion Tips & Techniques Volume 5](#) - ISBN 978-0-9784034-1-6
- » [Clarion Tips & Techniques Volume 4](#) - ISBN 978-0-9784034-0-9
- » [Clarion Tips & Techniques Volume 3](#) - ISBN: 0-9689553-9-8
- » [Clarion 6 Tips & Techniques Volume 1](#) - ISBN: 0-9689553-8-X
- » [Clarion 5.x Tips and Techniques, Volume 1](#) - ISBN: 0-9689553-5-5
- » [Clarion 5.x Tips and Techniques, Volume 2](#) - ISBN: 0-9689553-6-3
- » [Clarion Databases & SQL](#) - ISBN: 0-9689553-3-9

We also publish Russ Eggen's widely-acclaimed [Programming Objects in Clarion](#), an introduction to OOP and ABC.

From The Publisher

About Clarion Magazine

Clarion Magazine is your premier source for news about, and in-depth articles on Clarion software development. We publish articles by many of the leading developers in the Clarion community, covering subjects from everyday programming tasks to specialized techniques you won't learn anywhere else. Whether you're just getting started with Clarion, or are a seasoned veteran, Clarion Magazine has the information *you* need.

Subscriptions

While we do publish some free content, most Clarion Magazine articles are for subscribers only. Your [subscription](#) not only gets you premium content in the form of new articles, it also includes all the back issues. Our [search engine](#) lets you do simple or complex searches on both articles and news items. Subscribers can also post questions and comments directly to articles.

Satisfaction Guaranteed

For just pennies per day you can have this wealth of Clarion development information at your fingertips. Your Clarion magazine subscription will more than [pay for itself](#) - you have my personal guarantee.

Dave Harms

ISSN

Clarion Magazine's ISSN

Clarion Magazine's [International Standard Serial Number \(ISSN\)](#) is 1718-9942.

About ISSN

The ISSN is the standardized international code which allows the identification of any serial publication, including electronic serials, independently of its country of publication, of its language or alphabet, of its frequency, medium, etc.

Copyright © 1999-2009 by CoveComm Inc. All Rights Reserved. Reproduction in any form without the express written consent of CoveComm Inc., except as described in the [subscription agreement](#), is prohibited.

Clarion Magazine

Clarion News

[Search the news archive](#)

Noyantis Software Bundles

The Noyantis SuitePro Wrapper Templates bundles includes: Noyantis ShortcutBar Wrapper Template ver.1.18; Noyantis CommandBars Wrapper Template ver.1.18; Noyantis CalendarPro Wrapper Template ver.1.19; Noyantis PropertyGrid Wrapper Template ver.1.07; Noyantis TaskPanel Wrapper Template ver.1.09; Noyantis DockingPane Wrapper Template ver.1.03; Noyantis ReportControl Wrapper Template ver.1.04. Also there is a 40% discount available for Clarion developers who want to buy SuitePro 2009 13.x.x.

Posted Thursday, May 07, 2009

iQ-XML 2.50 Nearing C7 Compatibility

The iQ-XML source has been updated, removing all external templates so everything for iQ-XML is 100% pure Clarion source. This will make it simple now to migrate it over to Clarion 7. The layout of DebugMyQueue and DebugQueue functions has also been changed. The C7-compatible release is expected as soon as the next C7 release goes out.

Posted Thursday, May 07, 2009

Noyantis ReportControl 1.05

Version 1.05 of the Noyantis ReportControl wrapper template has been released. Changes include: Row editing facilities added; Individual columns can now be set to editable. The new version can be downloaded from the Members area using the original download and registration details contained in your sales emails.

Posted Thursday, May 07, 2009

Build Automator 2.0.342

Build Automator 2.0.342 is now available for download. You must be logged in to your account in order to be able to download the new build. This new build only includes some minor fixes to the Legacy version of the Magic Buttons template. It also includes a fix to the "Icetips Support" button on both the ABC and Legacy template which did not work in Clarion 7.

Posted Thursday, May 07, 2009

MetaDraw Control Wrapper

KlariSoft has released a Clarion wrapper for the Bennet-Tec MetaDraw ActiveX component. Features include: Image display with zoom and scroll; Image creation; Labeling; Annotation; Diagramming; Multimedia; Signature capture; Images with hotspots; Touch screen interactive interfaces. The Clarion class wrapper is ABC/Legacy compatible and works with Clarion 5.5, 6.3 and 7. Demo is available. A template/control bundle is available from Klarisoft.

Posted Thursday, May 07, 2009

Codejock ReportControl Wrapper Template

Noyantis Software has released the Codejock ReportControl ActiveX wrapper template. A demo program of the template in action can be downloaded. Features include: Multiple Report Controls (Browses) containing various types of content.; Automatic Clarion BrowseBox Enhancer (all settings automatically read from a standard Clarion browse); Integrated Field Picker; Integrated Preview Mode; Tree View Mode; Report (Browse) Printing Support; Multiple color themes; Multiple languages; Multiple Selection; Resize, Remove, and Reorder Columns; Hide and Show Column Headers; Sort Data Across Multiple Columns; Auto Column Sizing; Hierarchically Group by Column; Column Header Alignment; In-Place Cell Editing (to be added later today); Individual Cell Attributes (inc. Text Color, Background Color, Custom Font, Cell Alignment, Text Formatting); and more. The ReportControl template is \$85 and is ABC and Legacy, c55, c6 and C7 compatible. Other templates currently available cover the Shortcut Bar, Command Bars (inc Ribbon Bars), CalendarPro, Property Grid, Task Panel and Docking Panes controls.

Posted Thursday, May 07, 2009

ClarionLive Webinar

The next ClarionLive webinar is scheduled for Friday, May 8th at 9am PDT (GMT -8). This week Paul MacFarlane from American Riviera Software will be presenting "Clarion and Quickbooks"! Topics include: Methods of interfacing Clarion & QuickBooks; Why QuickBooks? Selling QuickBooks related Applications; The QB-SDK; Clarion Tools for QuickBooks; Clarion QuickBooks Connect; What's possible, what's not.

Posted Thursday, May 07, 2009

SetupBuilder 6.9 Build 2587 Release Announcement

Lindersoft has released a new SetupBuilder 6.9 build to improve compatibility with the latest Windows 7 Release Candidate. To get the latest product version, select "Check for Updates" from within the SetupBuilder 6 IDE. You can also download the full install image to bring your current version to the latest build.

Posted Thursday, May 07, 2009

AmazingGUI 1.1.2

AmazingGUI version 1.1.2 has been released. Changes include: Runtime enabling: Installer for Clarion 7; Updated documentation. AmazingGUI is available on Clarion Shop for \$ 119.

Posted Thursday, May 07, 2009

CPCS 7.00 Gold

CPCS v7.00 Gold for the current Clarion 7 build is now available from the CPCS website. This build is free of charge to all users who previously purchased CPCS v7.0. Also, all CPCS Addon products for the current build of C7.0 are now available for download from the CPCS website. Each of the addon product upgrades is free of charge to all existing registered users of any prior version of the same addon product. However, you will need to request new install codes. You will also need to have CPCS v7.00 installed as well.

Posted Thursday, May 07, 2009

PrintWindow 1.23

PrintWindow 1.23 is available. Changes include: Fix for windows with multiple sheets were printing properly when "Current page" option was selected; Fix for printing and drop controls; Fix for mixed controls on sheets; Support for C7 in the install. PrintWindow is US\$89.

Posted Friday, May 01, 2009

Thin@ 1.11

Thin@ 1.1 fixes a problem with the installation process if the target system contains both Clarion 6 and Clarion 7. Before installing it's advisable to uninstall Thin@ completely. In addition, if anything goes wrong after installation of Thin@ you can restore the state of your Clarion system before Thin@ installation by launching the uninstall wizard.

Posted Friday, May 01, 2009

ProCodeBlock Demo

LANSRAD has released a downloadable demo and updated information for its Clarion ProCodeBlock class/template set. This new demo lets you see what sort of feature blocking actions you can take in a real world setting. The demo app is a standard Clarion generated app on two files (one CodeBlocked and the other is not). All we did was add ProCodeBlock to the app and selectively block certain forms, reports and even EIP browses. You can also try to run two copies of the app and see the multi-user blocking in effect. The demo was created by SetupBuilder and installs to UAC safe locations. Data is also automatically placed in a UAC safe location. When you uninstall the demo, everything is removed (including demo data files). ProCodeBlock is \$29.95 USD.

Posted Friday, May 01, 2009

Thin@ Demo Server

The Thin@ Demo server is now online.

Posted Friday, May 01, 2009

Thin@ License Price Values Rebalanced

Thin@ pricing has been adjusted: The three server licenses bundle is now 1150\$; Single server license is now 600\$. This new price has been optimized for 1000 user server grid that usually requires six servers and six server licenses (2300\$).

Posted Friday, May 01, 2009

Thin@ Client for Clarion 7.0

The Thin@ client for Clarion 7 lets you provide a Clarion 7 user interface to Clarion 6 server side applications. Changes to this release include: Use any combination of C6 and C7 server and client versions; Time usage fee support (Saas model) & User activity log; Faster installation & implementation procedure; PROP:Touched support implemented; PROP: Timer function supported; Splash screen support implemented.

Posted Friday, May 01, 2009

Thin@ Client 1.1

Thin@ 1.1 is now available. All changes to the Clarion library files are now redesigned to be template class derivation changes - the only remaining file change (abwindow.tpw) is optional in the installation process.

Posted Friday, May 01, 2009

SetupBuilder 6.9 Build 2581

Lindersoft has released SetupBuilder 6.9 Build 2581. SetupBuilder is an Installation Authoring and Configuration Management environment for developers and organizations deploying applications to the Microsoft Windows Platform, including Windows 7, Windows Vista, Windows Server 2008 and Windows x64. This release is available, free of charge, to all SetupBuilder customers who have an active SetupBuilder maintenance subscription plan.

Posted Friday, May 01, 2009

WindowID 2.02

Changes in WindowID 2.02 include: The installer now supports the new folder structure of Clarion 7; Examples updated to Clarion 7; Embeds point right before and after call to WindowID's Message(). WindowID is US\$35.

Posted Friday, May 01, 2009

NeatMessage 2.17

Changes in NeatMessage 2.17 include minor adjustments for C7 and a new installer for C7. NeatMessage is a Message Box replacement from Huenuleufu Development.

Posted Friday, May 01, 2009

Xpression Business Icons

1stLogoDesign has announced the Xpress Business Icon Collection. The release date is scheduled for May 1, 2009. Purchase options include: 1) Get the Xpression Business Icon Collection with a \$100 savings, your price before May 1st: \$149 and get the Web 2.0 collection free. 2) Get the Xpression Combo and save more. Your price before May 1st: \$429 and get the Web 2.0 collection for free. Current promo is a custom designed logo for \$99.

Posted Friday, May 01, 2009

Free Stuff at 1stLogoDesign

Free graphics at 1stLogoDesign include: 36 wallpapers; Mallorca Lite Icon Collection; Eight guarantee and secure shopping icons; Free samples from all collections available at present; Two misc icons; Seven screen savers; Twelve Twitter icons in various sizes.

Posted Friday, May 01, 2009

iQ-Notes Beta

The next major version of iQ-Notes is available as beta. iQ-Notes is a free Sticky Note program written in Clarion. Changes in this release include: New clipboard manager: Added "Delete Note" to Manage Notes; Note Icons show in Manage Notes screen and are sortable by flag colors; Manage Notes screen now allows right-click popup menu access; Added ability for user to set their own note colors; Added ability to disable Hot Keys (iQ-Notes restart required); Default note backgrounds to be more pastel/Vista looking; Moved "Created" date/time string on Note Properties off the Windows title bar so it was easier to be seen; Added default note flag descriptions for first time use; Manage Notes screen now looks like new Clipboard Manager window; Moved Address Book to User Options/Notes tab as a button rather than from main menu; Changed "Add Bullet" so it will now automatically add the new bullet when enter is pressed. Pressing enter twice will stop auto-bulleted; Address Book connection setting changes were not taking affect until you closed down and reopened iQ-Notes; Windows Close Down event may be stopped when having connection manager opened monitoring for incoming notes; Better resizing of Manage Notes screen; Corrected language translations for Network send setup options.

Posted Friday, May 01, 2009

Build Automator 1.60 Beta 3

Build Automator version 1.60 Beta 3 available for general download. Build Automator is included in the Icetips Gold subscription but is also sold separately. This build converts the project files so make sure that you make backups of your projects before you open them with the new version. In order to install this build you need to have a valid Maintenance Plan. It is only available as a full install and not through the web update - i.e. "Check for updates" Once the build is released out of Beta testing you will be able to run the web update.

Posted Friday, May 01, 2009

DynaLib 4.1.6.0.2

All customers that purchased DynaLib are requested to download the new version 4.1.6.02.

Posted Friday, May 01, 2009

UADeveloper Temporary Site

Nikasoft has a temporary web site while the new site is being prepared.

Posted Friday, May 01, 2009

CoolButtons 1.07 Beta

CoolButtons 1.07 beta is now available. Please note that the install file requires an unlocking code which is supplied when you purchase CoolButtons. This release includes a Clarion 7 build 5349 version.

Posted Friday, May 01, 2009

CoolFrames 1.20 Beta

CoolFrames 1.20 Beta is now available. Please note that the install file requires an unlocking code which is supplied when you purchase CoolFrames. Changes include: Reworked the window size calculations, modified to work with `ds_VisibleOnDesktop()`; Added support for MDI Child menu's and sizing buttons; Added support for modified menu items (user drawn menu items); Added a clarion 7 build 5349 version to the install file.

Posted Friday, May 01, 2009

Clarion QuickBooks Connect

Clarion QuickBooks Connect is a template and set of classes for interfacing Clarion and Intuits QuickBooks Accounting Software. ABC and Legacy Support. Support for Clarion6 and Clarion7. Currently support Accounts, Classes, Customers, Jobs, Vendors, Items, Journal Entries, Invoices, Sales Receipts, Cash Receipts and much more. Version 1 price will be \$149 with free updates to v1.5 and v 2.0. Version 1.5 price will also be \$149 but will not include free update to v2.0 (v 2 update will be \$50). Version 2.0 will be \$199.

Posted Friday, May 01, 2009

RPM 7.0.5349 Available For Download

RPM7, with drill down and extended target support, is available for download. Just log in to the members area and click on the link. If you downloaded earlier consider downloading the updated install. There were a few bits missing in the earlier install as well as the fact it failed to register the templates - these oversights have been corrected. Please uninstall before running the newer build. The first AFE7 install should be ready next week and updated installs for Clarion 6.3 should be ready shortly thereafter.

Posted Monday, April 27, 2009

Clarion Magazine

Clarion 101: Understanding The C7 IDE

by Dave Harms

Published 2009-04-22

The Clarion 7 (C7) IDE is a radical departure from the somewhat antiquated Clarion 6 (C6) IDE. C6's IDE is specialized to the kinds of things Clarion does; C7 grafts Clarion into the more typical modern IDE.

The C7 IDE isn't entirely home grown; it's a combination of SoftVelocity's Clarion-specific code and the Visual Studio-like [SharpDevelop IDE](#), which is an actively developed open source project for .NET development in VB.NET, C# and other .NET languages. SoftVelocity negotiated a commercial license to the SharpDevelop source code.

NOTE: Although the C7 IDE at present only lets you work with Clarion applications, SoftVelocity uses the same IDE for its Clarion.NET product. With Clarion.NET you can create Clarion#, C#, VB.NET and .NET assembler applications.

In this article I'll take a high level view of the new IDE, focusing on managing the layout of the IDE and on some of the configuration options including the Tools menu.

Pads, layouts and views

Figure 1 shows the C7 IDE after I've opened the SCHOOL application, purely for context. I'll discuss APP files and projects/solutions in a subsequent article - right now I want to focus on where traditional (e.g. C6) functionality fits in the context of the new IDE.

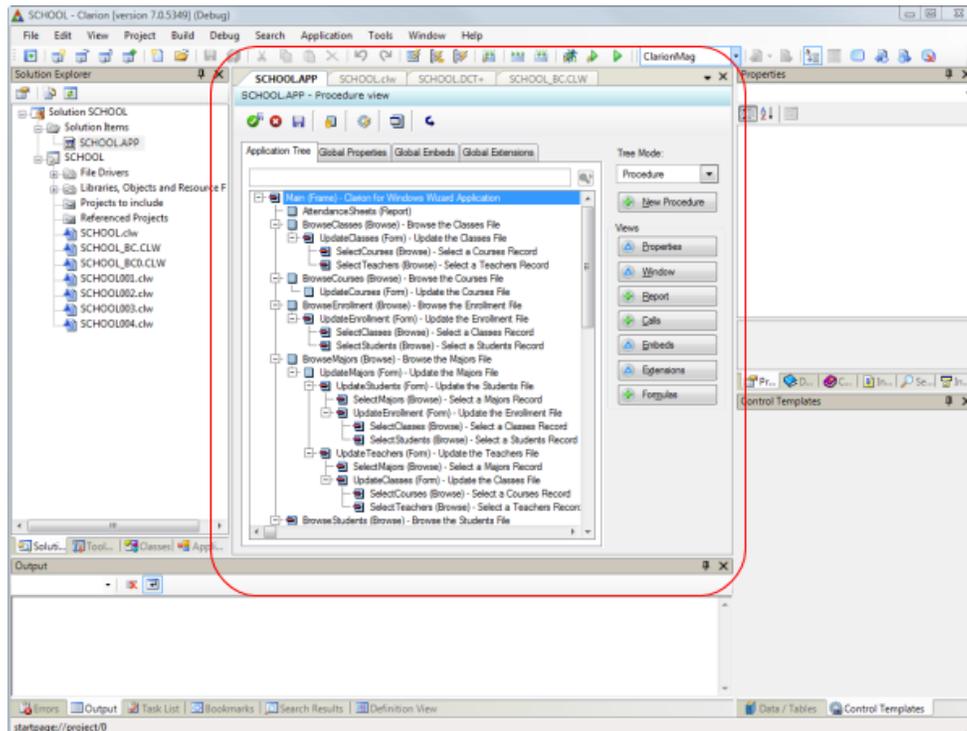


Figure 1. The new IDE with an application open (view full size image)

The area in Figure 1 marked by the red boundary is typically occupied by whatever it is you're working on. You could be working on a source code file, a dictionary, an application (APP file), or whatever. And you can open multiple items at the same time and tab between them. In Figure 1 I have an APP file, a dictionary and two source files open, with the APP currently selected.

This central working area is surrounded by a number of smaller windows. These are called *pads*, and there are quite a few of them. Since you'd need an enormous screen (or very tiny type) to display all of these pads at once, they too are (or can be) grouped by tabs. If you're looking for a particular pad and you don't see it, try the View menu. Pads listed under the view menu include:

- Solution Explorer - lists project information
- Classes - a class browser
- Toolbox - several helpful lists such as a clipboard ring and an ASCII table, but most importantly the source of available window/report controls, only displayed when editing a window/report
- Errors - errors and warnings produced by the compiler and other tools
- Output - status messages/console output
- Properties - for window/report controls, but also project elements such as source and resource files
- Control templates - the available templates for the open window/report
- Data / Tables - the equivalent of the file/data list in C6
- Applications - list of APPs in a multi-project solution (more on that later)
- Tab order assistant - to help with reordering controls on windows
- Tools/Files - a file explorer
- Search results - you do a "find all" and see results here
- Bookmarks - these only work in source files, not in the APP; press Ctrl-F2 to toggle bookmarks
- Definition view - shows the code definition for the item under the cursor
- XPath query - execute XPath queries on XML documents (but it appears the file has to have the .XML extension, at least in my tests)
- Debugger view
- Dictionary changes - things that get modified when you import a dictionary into C7

That's a lot of pads. You probably won't use all of them, but you probably will use at least half of them.

Organizing your pads

As with other modern IDEs, the C7 IDE lets you organize the pads the way you want. There are two aspects to organizing pads: positioning and pinning. Positioning is determining where your pads will be located; pinning is determining whether those pads will be visible all the time or just when you need them.

You position a pad by dragging it to a new location. But how you do that determines whether you end up dragging a single pad or an entire set of pads.

To drag a group of pads grab the title bar, as indicated at the top of Figure 2. To drag just one pad, grab it by its tab as shown at the bottom of Figure 2.

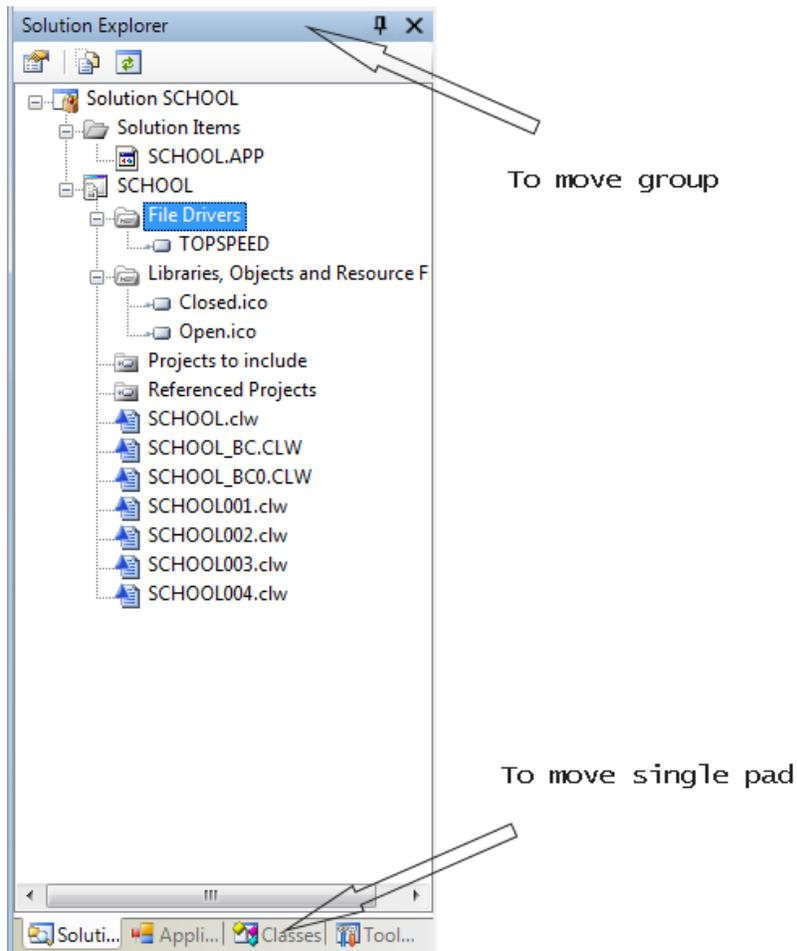


Figure 2. Moving single pads and groups

Dragging single pads

Pads are really just dockable windows, and the C7 IDE manages dockable windows with Weifen Luo's [DockPanel Suite](#) which you can use in your own .NET applications.

Once you start dragging a single pad (or for that matter a group of pads) you'll most likely see the DockPanel drop target indicator as shown in Figure 3.

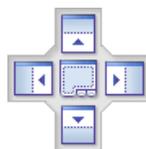


Figure 3. The drop target indicator

The drop target indicator lets you specify where in the target window you want your pad to appear. Move the mouse cursor over the center icon and release and the pad will occupy the full space available in the target window. In Figure 2 above, all of the pads in the group (after the first one) were dropped onto the center indicator.

In Figure 4 I've dragged the Solution Explorer pad over the left side drop indicator for the pad group. The shading tells me where the pad will appear.

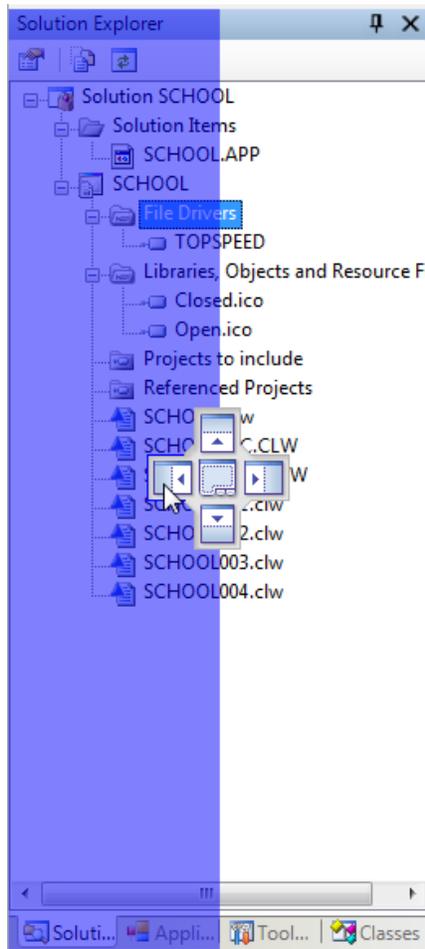


Figure 4. Dragging to the left side

Figure 5 shows the result.

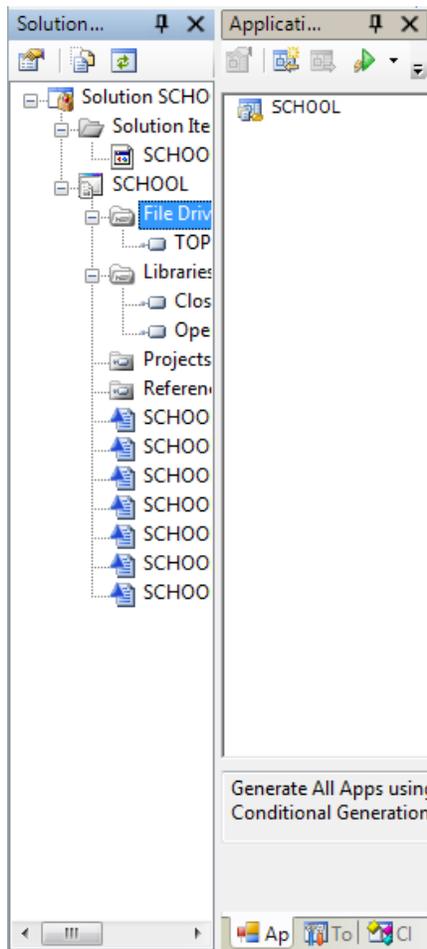


Figure 5. Dropping the Solution Explorer pad on the left side

Now the Solution Explorer is on the left side of the pad area and the other three pads are on the right side.

You can also make everything visible at once, although that can get a bit cramped. Figures 6 and 7 show a couple of variations on the theme, both achieved by dragging to various drop targets.

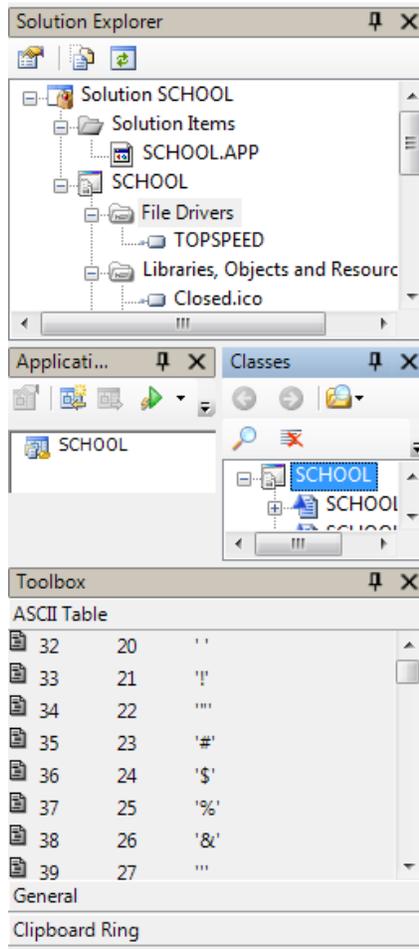
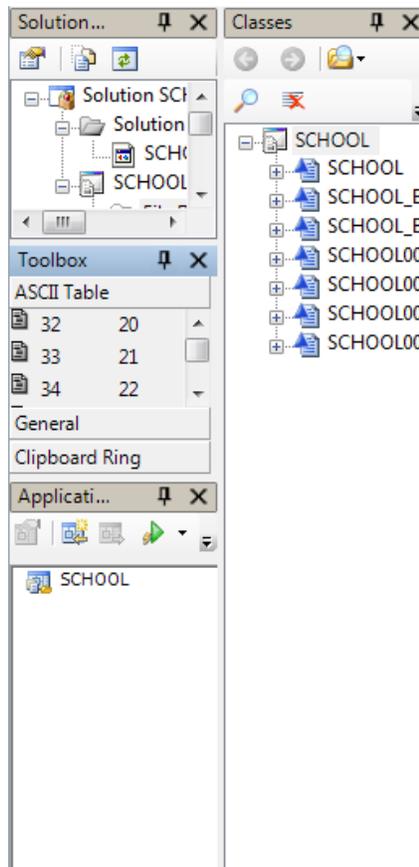


Figure 6. Making all pads visible



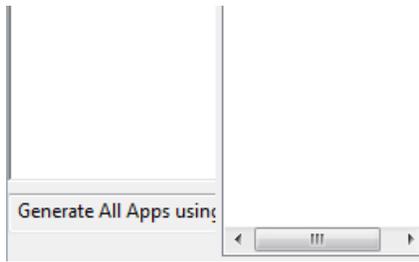


Figure 7. Another way of making all pads visible

To get everything back to where it was just drag one pad to another pad's center drop target, and repeat until everything's back as it was in Figure 4.

If you don't drag onto a drop target the pad becomes a floating window which you can position as you like, over or completely outside of the IDE.

I've demonstrated dragging within a pad group, but you can also drag between pad groups. In fact, the whole IDE is a set of dockable windows, so you can do all kinds of interesting things. Figure 8 shows a before and after view of the same window. On the left side is the AppGen version; on the right side is the generated source code version; I simply invoked the Window Designer (Ctrl-D) on the generated window layout. In the AppGen version I've moved the Phone Type to its own line and I've used the built-in snapping tool to align the controls. Seeing the windows side by side lets me easily compare my original layout with the new layout. I can also use this technique to work with procedures from different APPs side by side, or one above the other, or whatever other configuration my screen space permits.

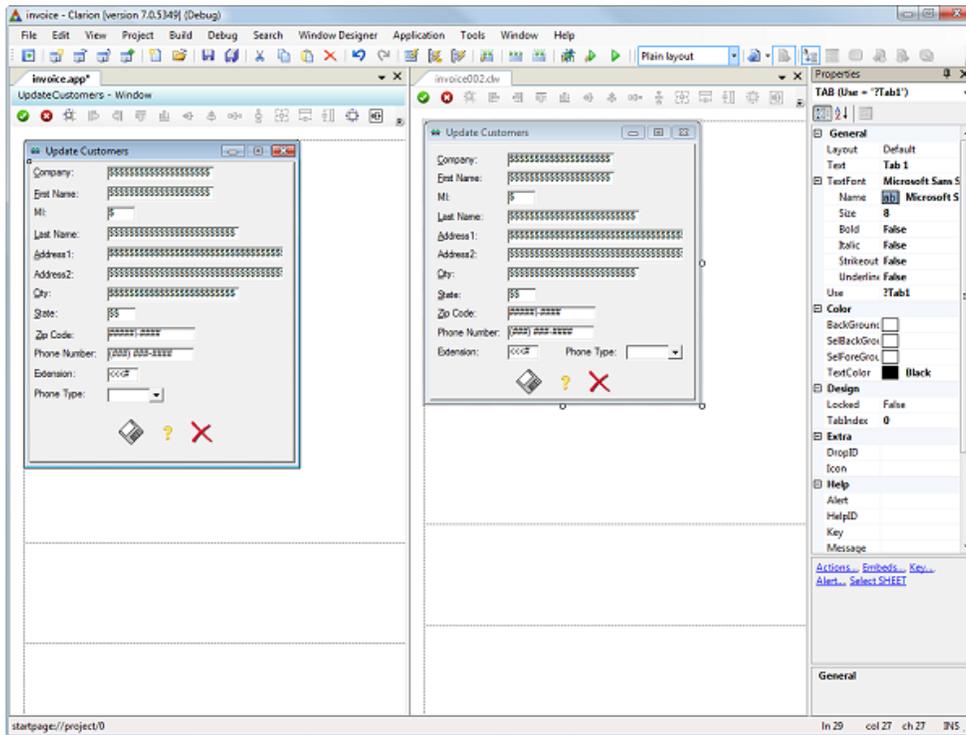


Figure 8. Viewing two versions of the same window (view full size image)

Changing layouts

You've probably noticed that the layout in Figure 10 is dramatically different from the earlier layouts I've shown. All that's visible is the editor area and the property pad. This is because I've switched to the Plain Layout. Figure 9 shows the layout dropbox.

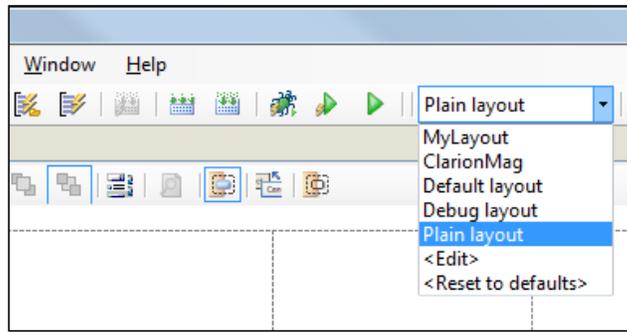


Figure 9. Choosing a layout

Of the layouts shown in Figure 9 the first two are my own additions; the standard layouts are Default, Debug and Plain. A layout is a way of remembering a particular combination of pads layed out in a specific way. You create your own layouts by choosing <Edit>, which brings up the Edit Layouts window (Figure 10).

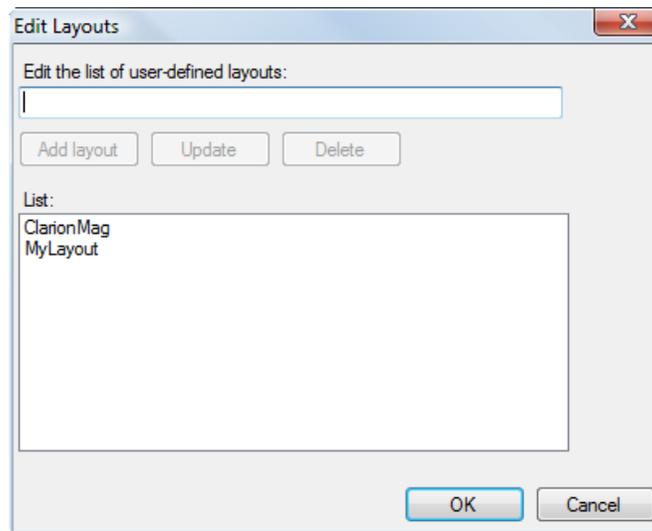


Figure 10. The Edit Layouts window

Keep in mind that when you make changes to appearance of the IDE those changes are associated with the currently selected layout. You can chose the <Reset to defaults> option, but that will not reset your own custom layouts. So if you find a layout you really like, and you're worried about potentially losing those settings, save it as something like My Default Layout and then save it again as My Layout and use the latter for day to day work. That way you can always get back to your starting point.

Pinning/unpinning

There's still one more important aspect to managing the IDE, and that's pinning and unpinning pads. Figure 11 shows a typical layout, but I've circled the pushbutton icons on each of the pads. With the pushpin vertical the pad is "pinned" and remains in the same location.

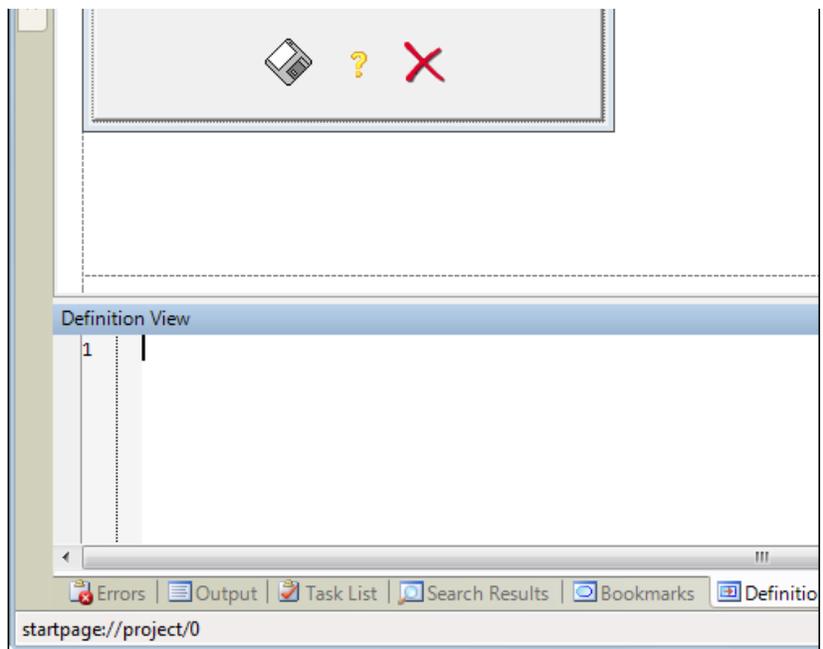
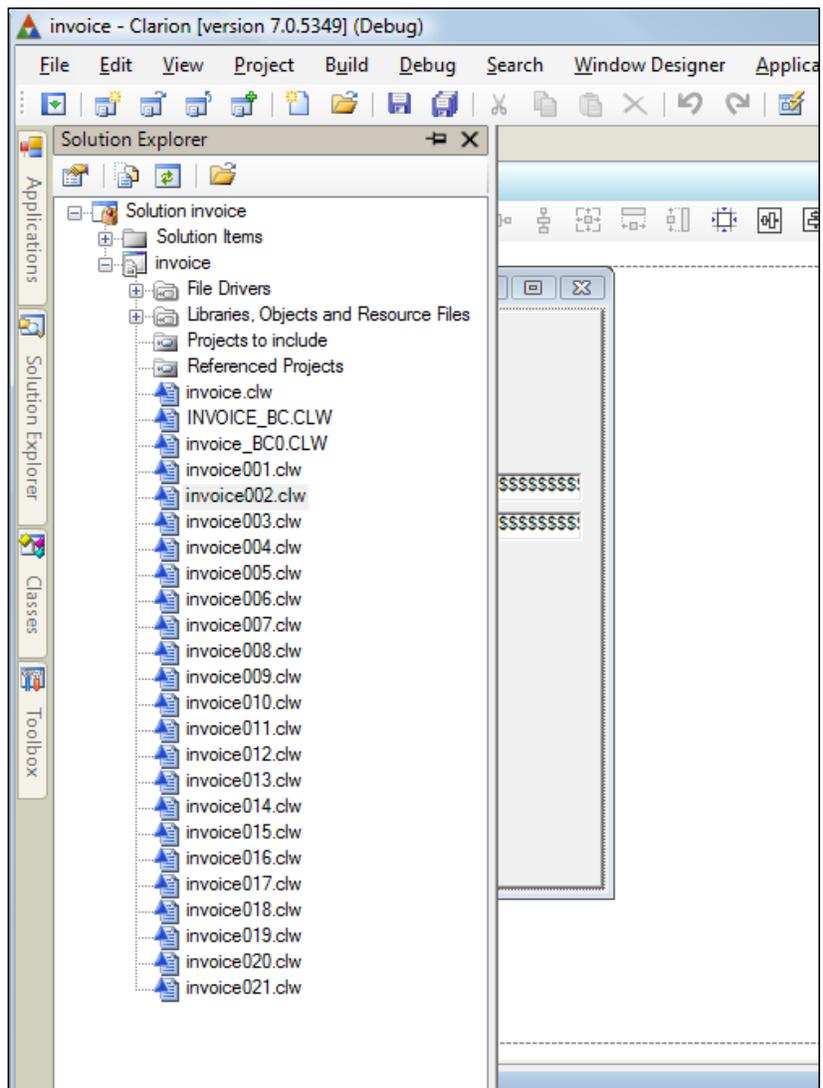


Figure 12. An unpinned pad group

Figure 13 shows the same view of the IDE, but in this case I moved my mouse over the left-hand pad tabs which caused the pad to "fly out", temporarily hiding the underlying window. Note that the pin icon is now horizontal. If I click on it I'll again pin the pad in place, but I can also just make my selections and then click elsewhere (or wait a bit) and the pad will collapse.



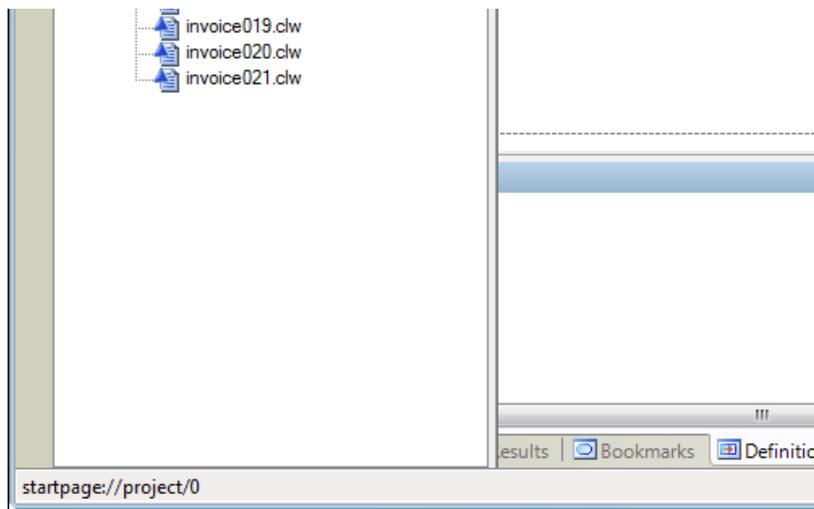


Figure 13. The unpinned pad flying out

The Tools menu

Besides getting comfortable with the IDE's many layout options, you should also familiarize yourself with the Tools menu which provides a number of configuration settings. Figure 14 shows the Tools menu.

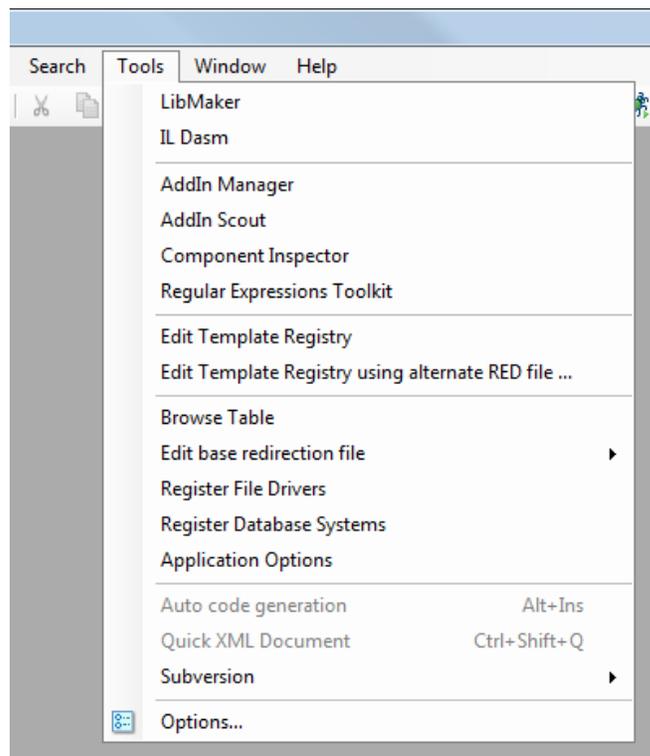


Figure 14. The Tools menu

The first two items on the Tools list are default items available through the Options submenu, where you can add your own tools menu. See [Adding Tools to the C7/Clarion# IDE](#) for more information.

The AddIn Manager and the Addin Scout are tools to assist with the integration of addin products. As I mentioned earlier C7 is a combination of SoftVelocity's Clarion technology and the SharpDevelop IDE. The SharpDevelop addin architecture provides a way for third parties to add value to the IDE. When you first bring up the AddIn Manager window it will be blank; click on Show preinstalled Addins to get the list in Figure 15.

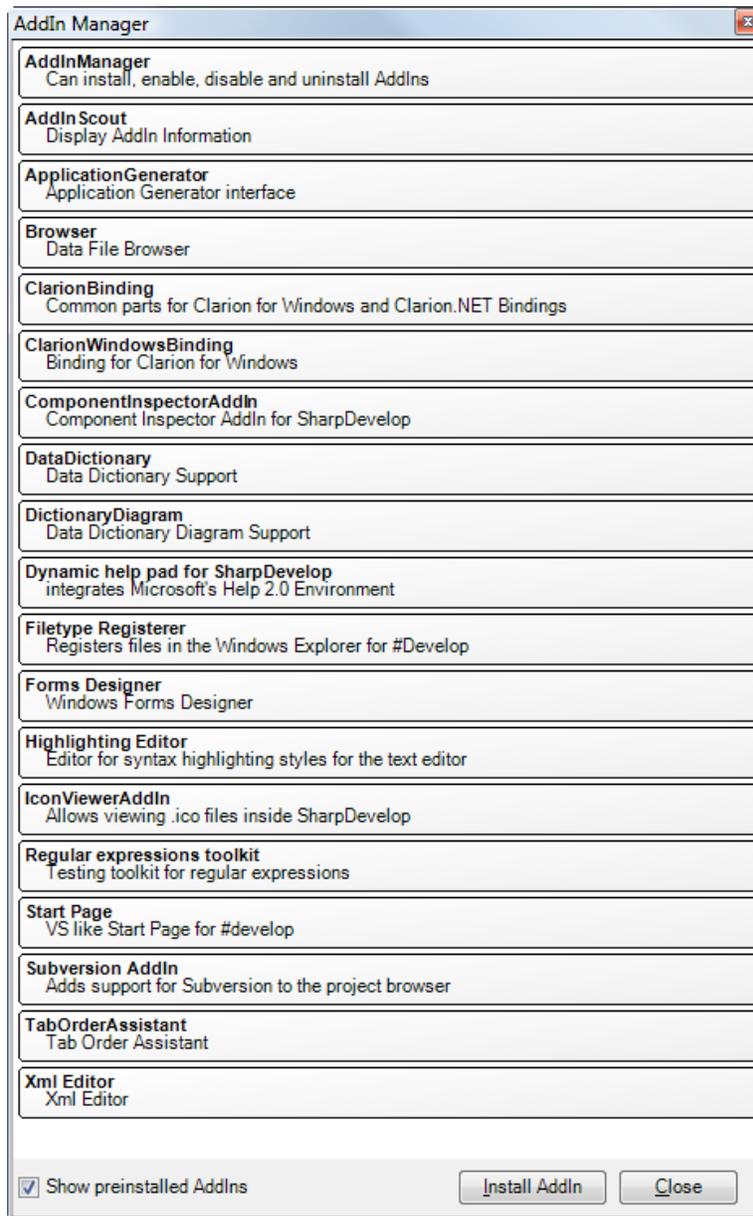


Figure 15. The AddIn Manager

As Figure 15 shows, a number of the addins are Clarion-specific, but others add support for XML editing, Subversion version control, MS Help and more.

The AddIn Scout provides a more detailed view of the addin bindings (Figure 16). This information will likely only be of interest to you if you write your own addins for the IDE. For more help on that subject see the [SharpDevelop Wiki](#).

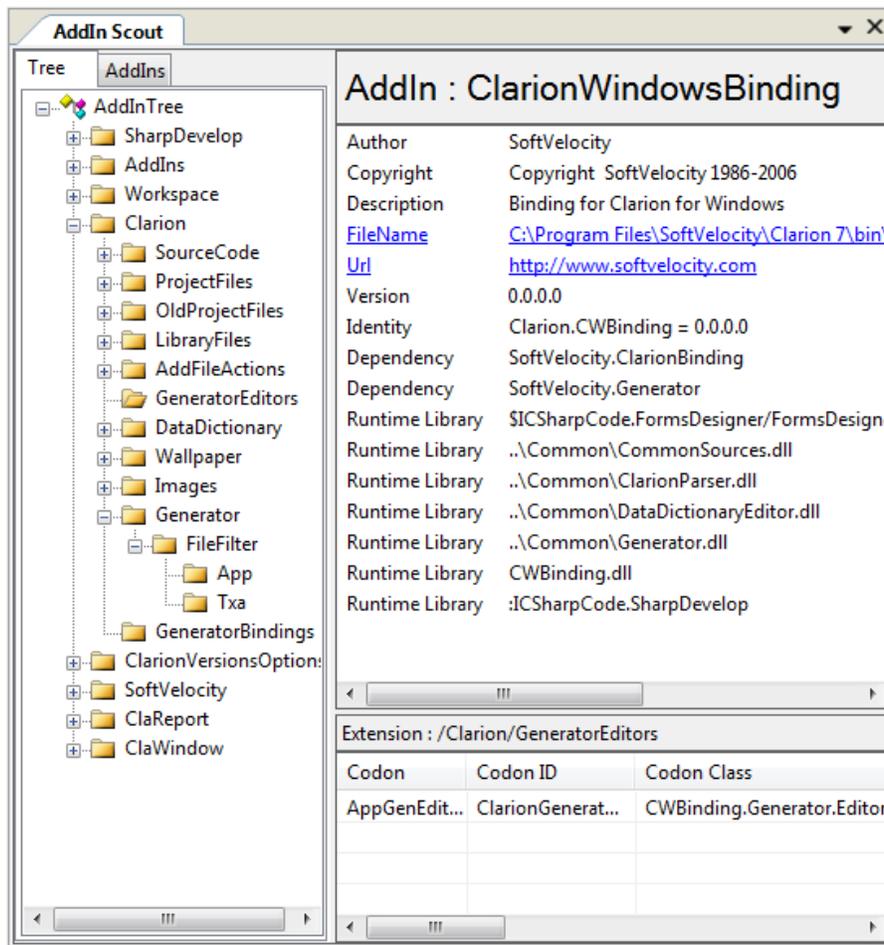


Figure 16. The AddIn Scout

The Component Inspector is the next item on the Tools menu. It's primarily a .NET tool, and is actually a combination of Oakland Software's ActiveX/COM and .NET inspectors. Check out Oakland's site for more information.

The Regular Expressions Toolkit (Figure 17) provides a way to write and test regular expressions (regex). This can be a handy feature particularly in combination with the IDE's ability to do regex searching, but the UI is a bit buggy in the gold release. The ability to compile regular expressions isn't immediately useful in C7 coding since the resulting DLL is a .NET assembly.

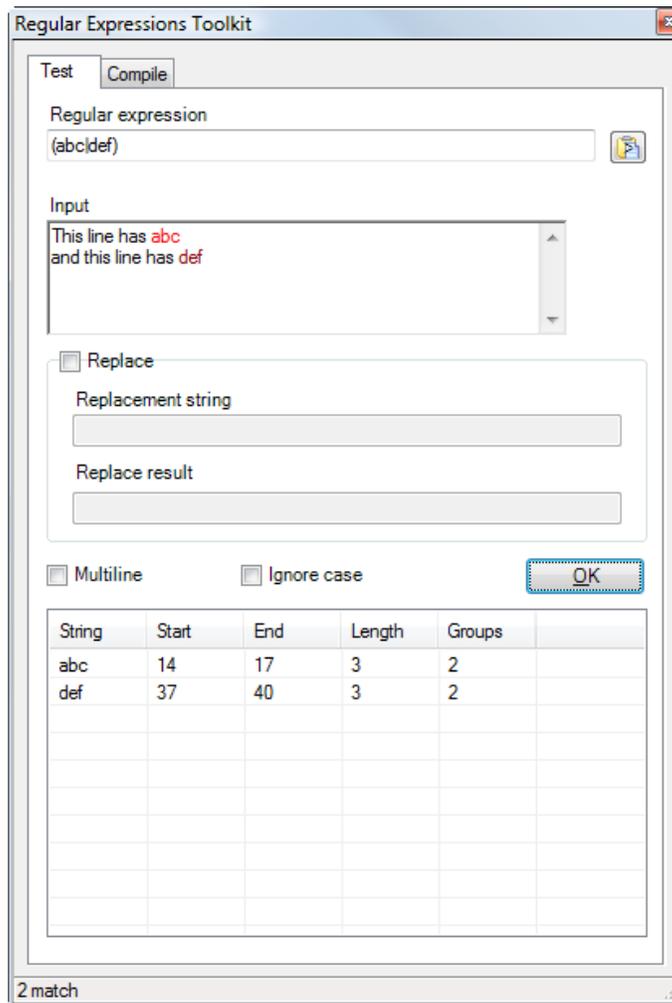
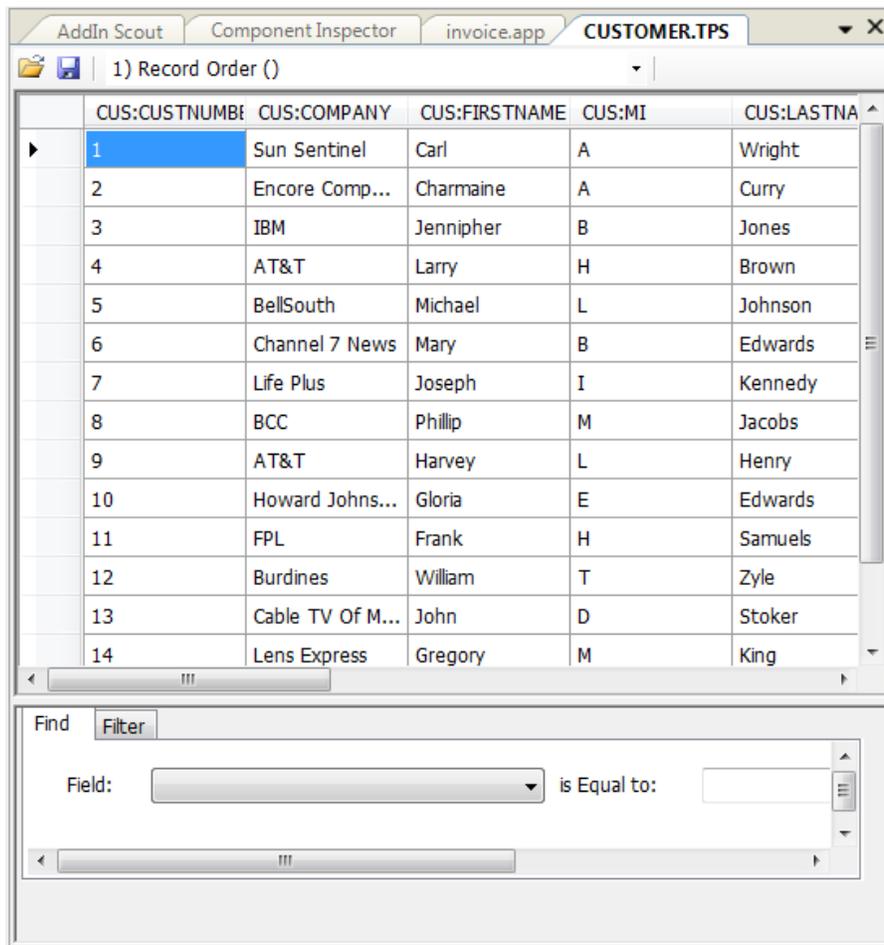


Figure 17. The Regular Expressions Toolkit.

The Tools menu is where you edit the template registry. Keep in mind that the default template registry is entirely dependent on which version of Clarion you've selected (C7 supports generating and compiling for versions of Clarion all the way back to CW 2.0). I'll have more on that in a future article as well.

Also on the Tools menu, the table browser. In Figure 18 I've opened a TPS file; all the file drivers are supported.



	CUS:CUSTNUMB	CUS:COMPANY	CUS:FIRSTNAME	CUS:MI	CUS:LASTNAME
▶	1	Sun Sentinel	Carl	A	Wright
	2	Encore Comp...	Charmaine	A	Curry
	3	IBM	Jennifer	B	Jones
	4	AT&T	Larry	H	Brown
	5	BellSouth	Michael	L	Johnson
	6	Channel 7 News	Mary	B	Edwards
	7	Life Plus	Joseph	I	Kennedy
	8	BCC	Phillip	M	Jacobs
	9	AT&T	Harvey	L	Henry
	10	Howard Johns...	Gloria	E	Edwards
	11	FPL	Frank	H	Samuels
	12	Burdines	William	T	Zyle
	13	Cable TV Of M...	John	D	Stoker
	14	Lens Express	Gregory	M	King

Find Filter

Field: [dropdown] is Equal to: [text box]

Figure 18. Browsing a TPS table

As with the template registry, you can edit base redirection files for each installed version of Clarion.

The Register File Drivers and Register Database Systems options seem redundant, but I suspect the second one is actually the drivers used for database synchronization. In C6 there is a separate setup section for the synchronizer.

The Application Options window is like the one in C6 (see Figure 19).

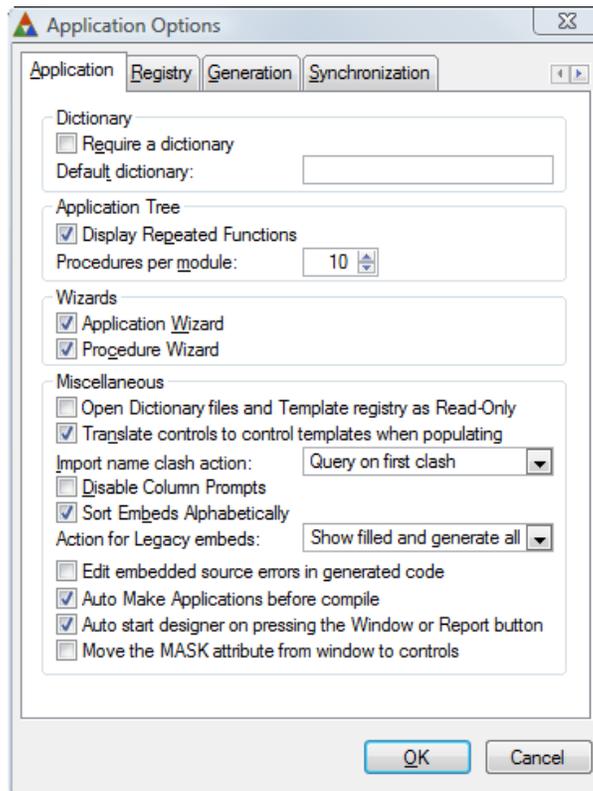


Figure 19. The Application Options window.

There is a Subversion menu under Tools, but this doesn't seem to be integrated into the AppGen system. I believe it's simply related to the standard Subversion functionality built into SharpDevelop, and some of this functionality seems to have been lost in C7.

In an early release of Clarion.NET I discovered that if I had source code under version control, the IDE would show me tabs at the bottom of any source file where I could view the commit history and also see revisions to the source. In the gold release of C7, with Subversion 1.4.5 installed, I still saw the tabs but couldn't find any way to view a difference file. I discovered that SharpDevelop had changed some of the Subversion integration code, necessitating a later release of Subversion. SoftVelocity indicated some time ago that they continued to get updates from the SharpDevelop folks, so thinking that might be the issue I upgraded to Subversion 1.6.1 only to find that I don't even get the editor tabs anymore.

The Options submenu

There's still one more item on the Tools menu, and that's the Options submenu. This menu item leads to a large number of IDE configuration options, which I'll cover in Part 2.

David Harms is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors (ASJA).

Reader Comments

Posted on Wednesday, April 22, 2009 by Russell Eggen

In the dct viewer, I've never found a way to adjust the column picture. Is that hidden in plain sight somewhere?

[Add a comment](#)

Clarion Magazine

Clarion 101: Understanding The C7 IDE (Tools | Options)

by Dave Harms

Published 2009-04-22

In my [Part 1](#) I explored the many configuration and layout options available in the new Clarion 7 IDE, including the Tools menu. Now it's time to take a closer look at the last item on the Tools menu: Options.

General options

The general options include basic IDE settings such as the language used for all text. The languages listed are the translations included with the SharpDevelop IDE; the Clarion IDE adds a lot of text and as near as I can tell most or all of it remains untranslated. If you change the language you'll quickly see which bits are Clarion and which bits are SharpDevelop (at least until the translations get added).

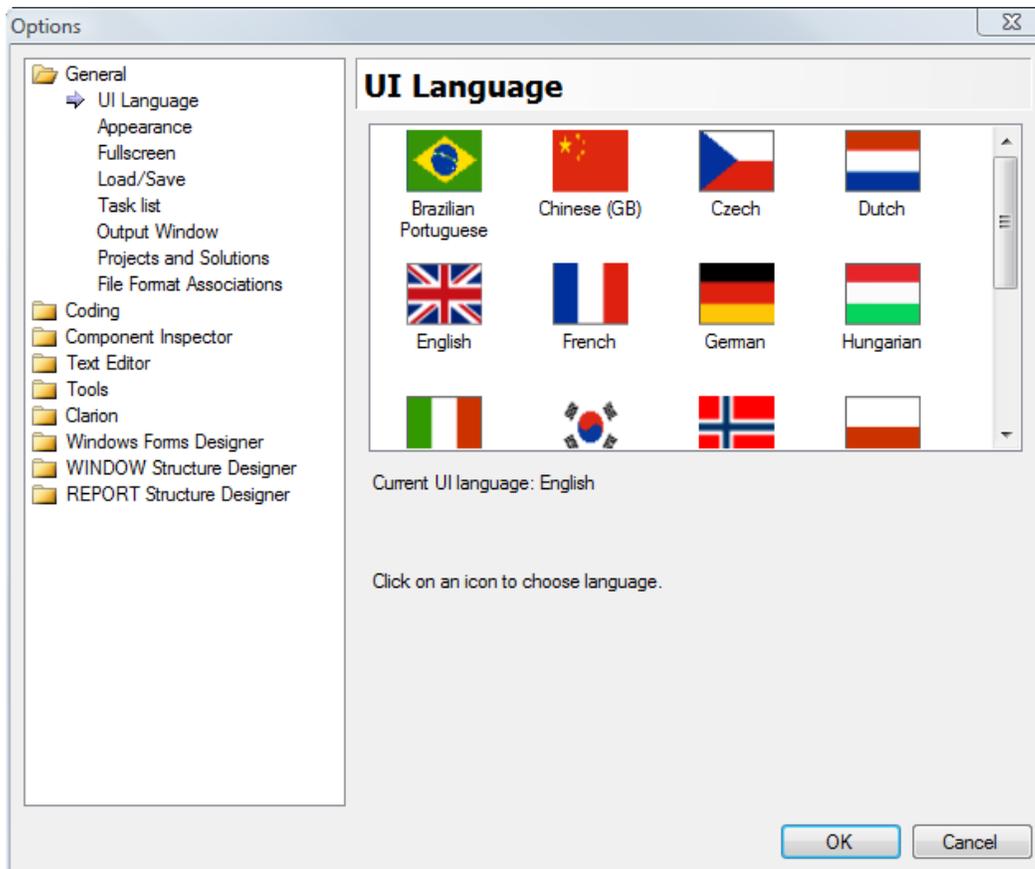


Figure 1. Choosing a language for the IDE

The Appearance options include a "preferred ambience" setting, which can be Clarion or .NET, but presumably the .NET setting is meaningless in C7. The build of Clarion.NET I have lists four options: .NET, Clarion.NET, VB.NET and C#, and once the two IDEs are combined I imagine at least five settings will be available. Among other things the

ambience setting is used to determine the appropriate kind of code completion.

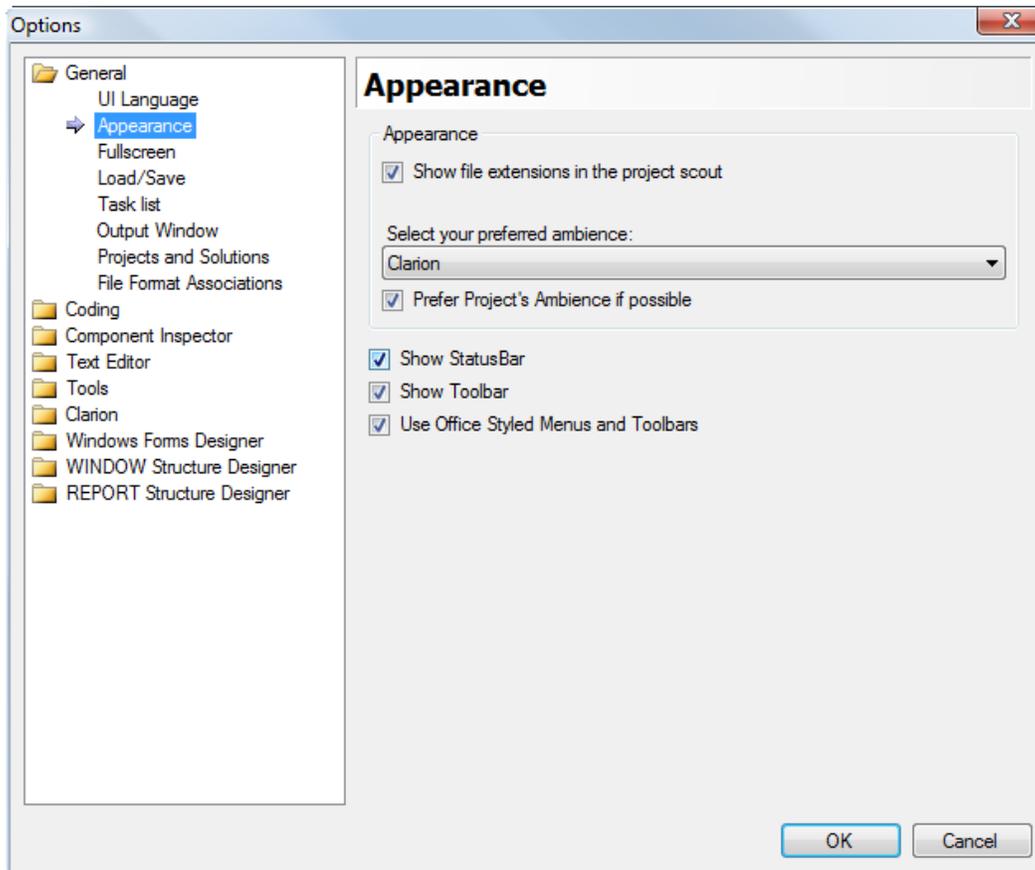


Figure 2. Choosing a preferred ambience.

Figure 3 shows the task list options, and allows you to add your own items.

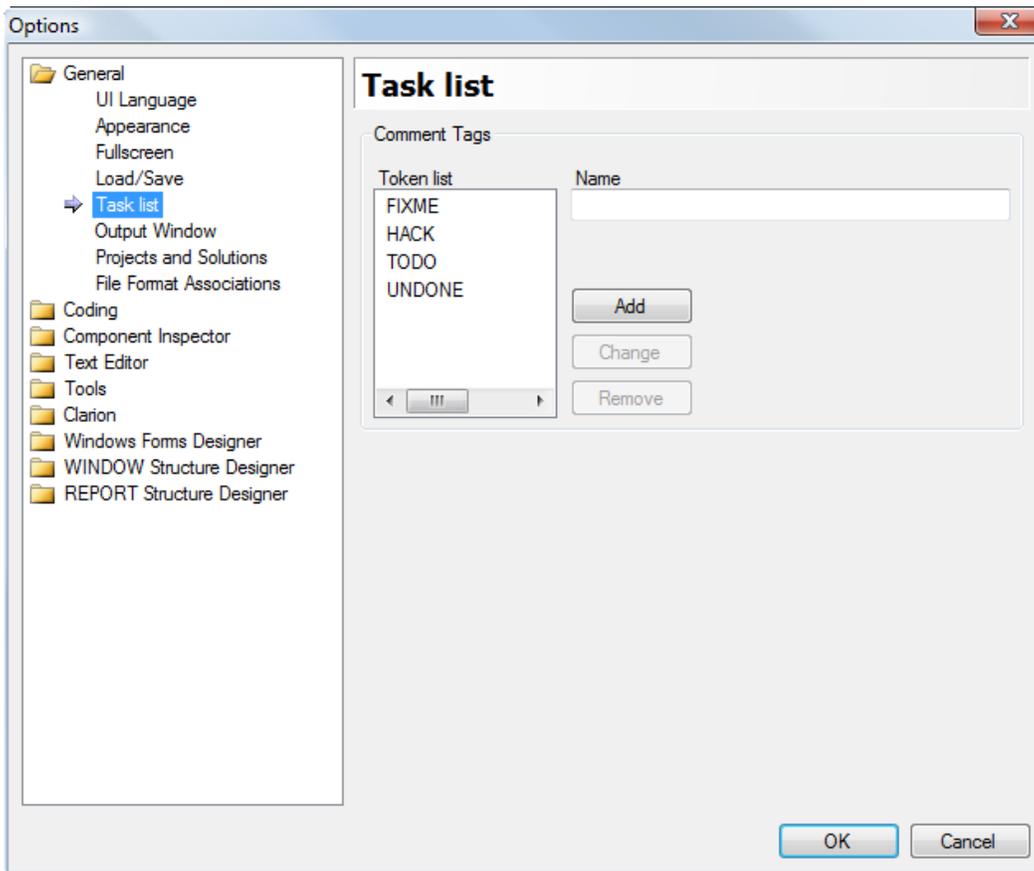
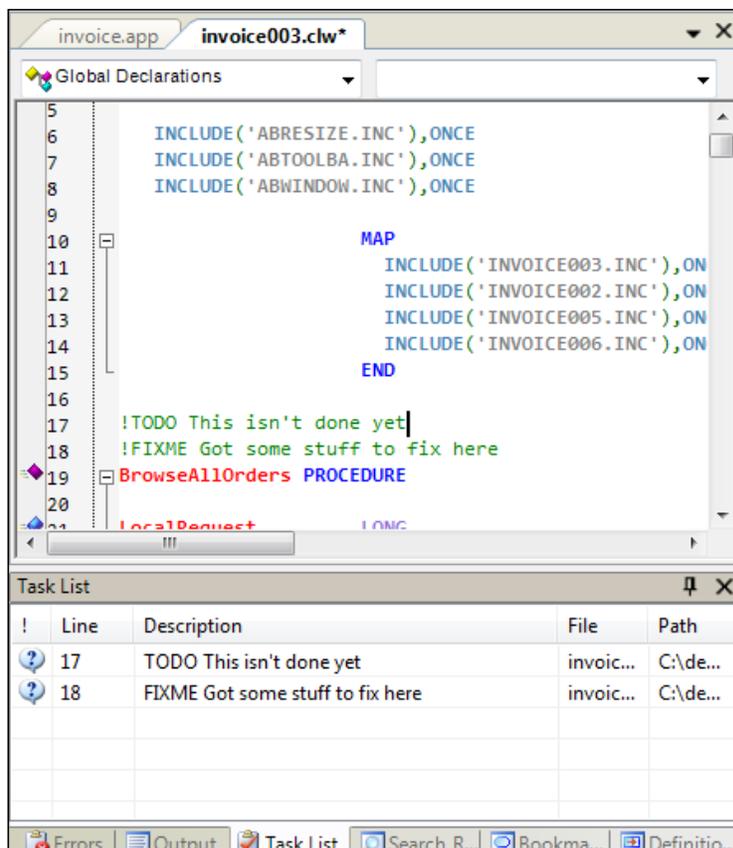


Figure 3. Task list items

In Figure 4 I've opened a source file and have typed in a couple of task list comments. They appear in the Task List pad after a brief delay.



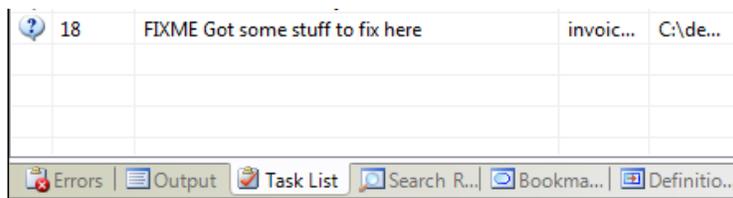


Figure 4. Adding task list items

Unfortunately I've typed these comments into a generated source file so they'll be lost on the next generation cycle. You can add your task comments to AppGen embed points; they just won't appear in the task list until after you generate, and when you double-click on a task item you'll be taken to the generated source rather than the embed point. But the task list is a handy way of tracking incomplete or problematic code.

The Projects and Solutions settings include the default project location. You can use the last-opened solution as the default, or you can specify a fixed default, among other options.

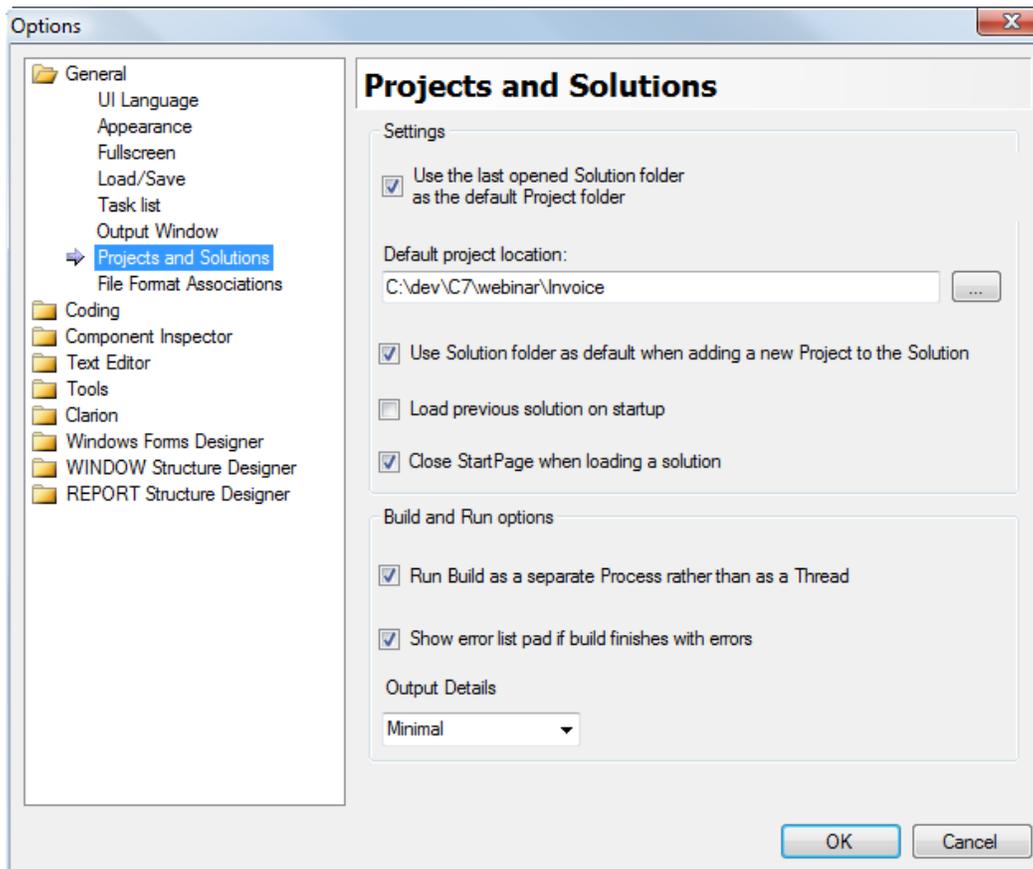


Figure 5. Projects and Solutions settings

Oddly, the IDE doesn't (at least on my machine) have any file format associations set. That isn't a big problem for me since I normally open Clarion-related files from within the IDE. I suppose I could set some associations here, but if you have Visual Studio you may want to be careful about solution files since the .sln extension is normally associated with that product.

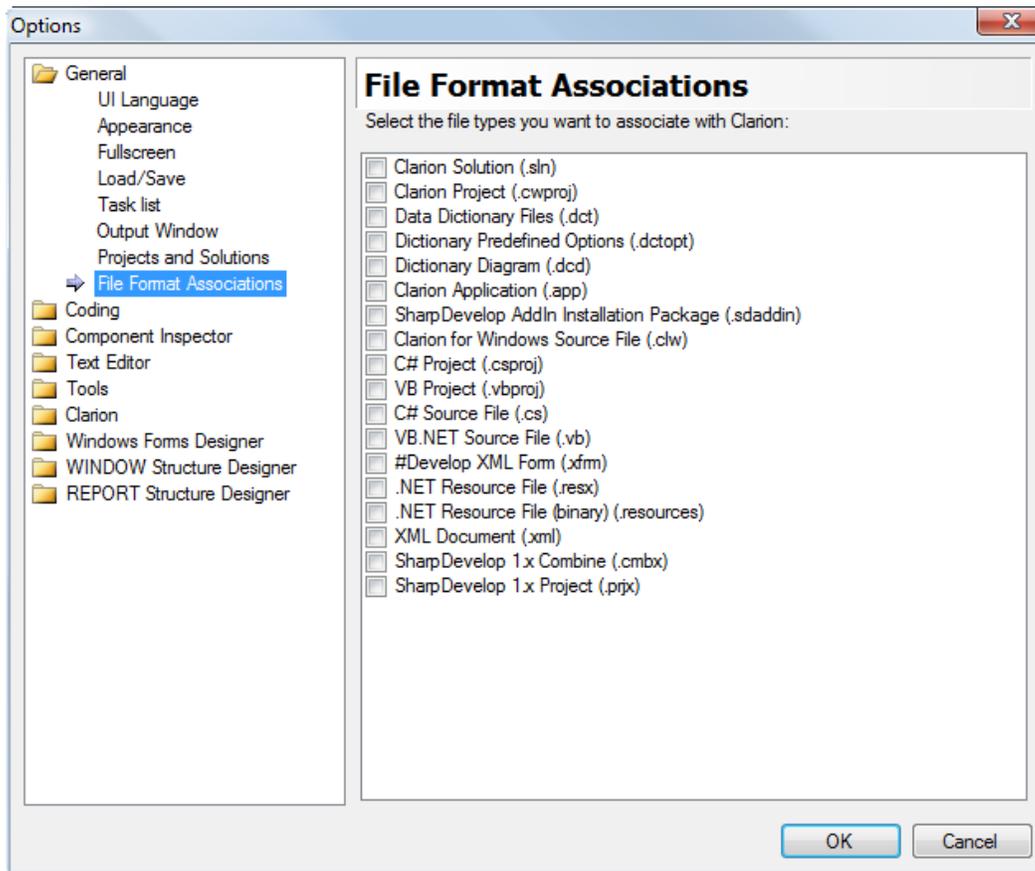
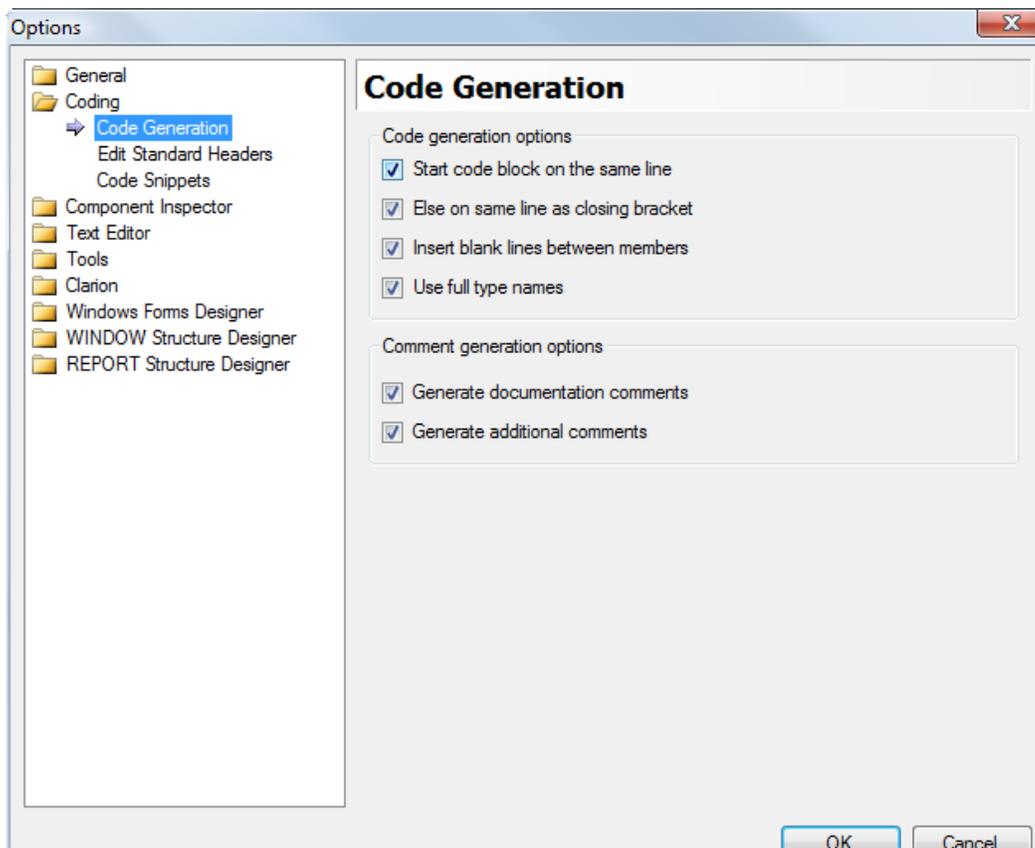


Figure 6. File associations

Don't be confused by the Code Generation settings in Figure 7. This has nothing to do with Clarion (at least I don't think so); it's a feature of SharpDevelop IDE for fleshing out object-oriented code.



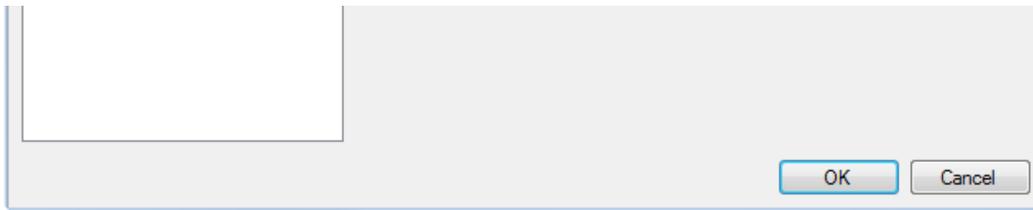


Figure 7. The non-Clarion code generation settings

The Edit Standard Headers option is relevant to Clarion development. Here you can change the text that's automatically inserted whenever you create a new Clarion source file. You might want to modify this to insert a copyright notice, for instance.

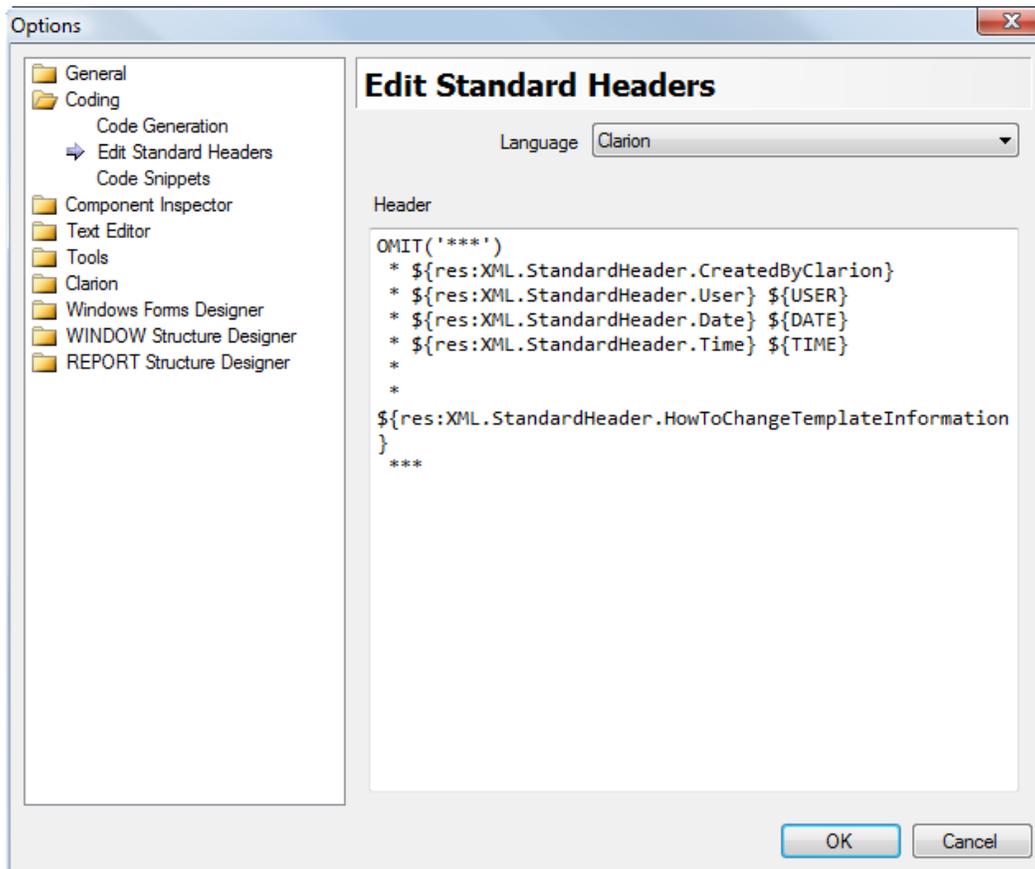


Figure 8. Setting the Clarion text file header

Code snippets are little blocks of code to help automate tedious work. You access them in a source file by pressing Ctrl-J, which pops up a list of available snippets. When editing the snippets make sure you're working with the right extensions, as several are available.

Figure 9 shows the classdcl (class declaration) snippet.

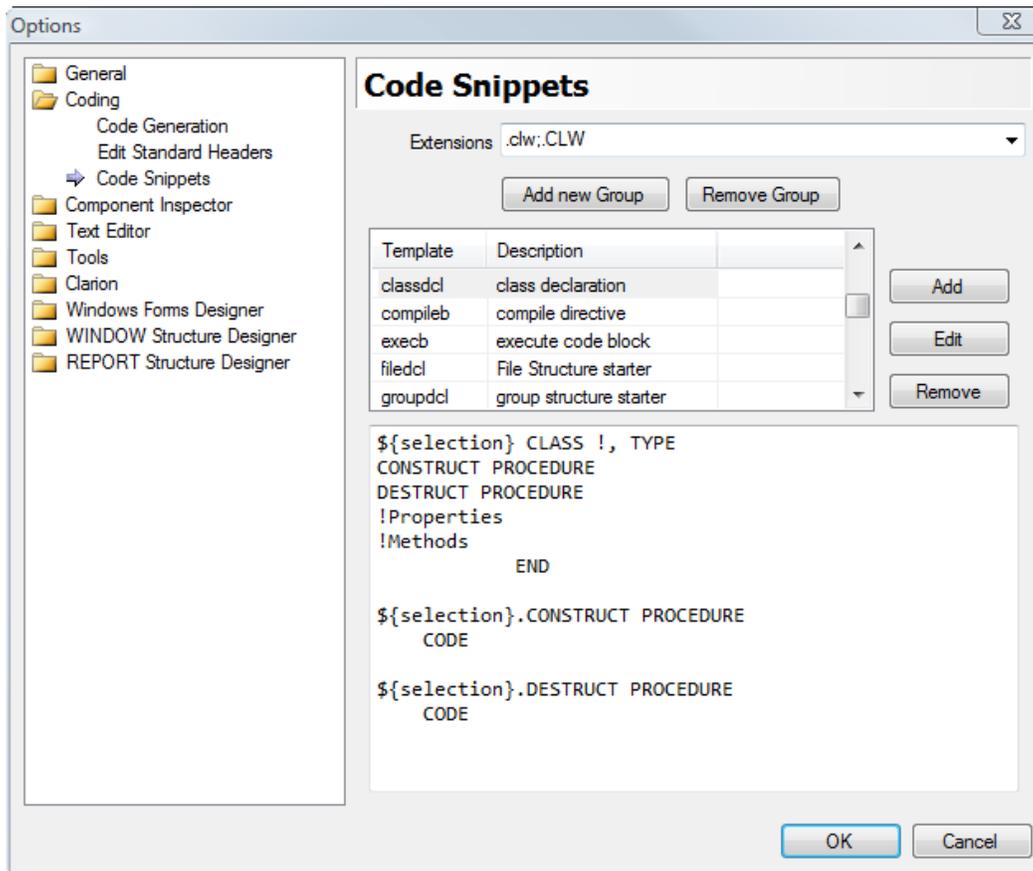


Figure 9. Code snippets

If I type

MyClass

then highlight that text and press Ctrl-J, then select classdcl from the list and press enter, the following text appears:

```

MyClass CLASS !, TYPE
CONSTRUCT PROCEDURE
DESTRUCT PROCEDURE
!Properties
!Methods
        END

```

```

MyClass.CONSTRUCT PROCEDURE
        CODE

```

```

MyClass.DESTRUCT PROCEDURE
        CODE

```

To my knowledge the only input variable available to snippets is `${selection}` for the currently selected text. Still, code snippets can be handy.

There are a number of Text Editor options, many of which are inherited from the SharpDevelop IDE. For instance, you can set the font, and if you wish you can disable mouse wheel font size scrolling.

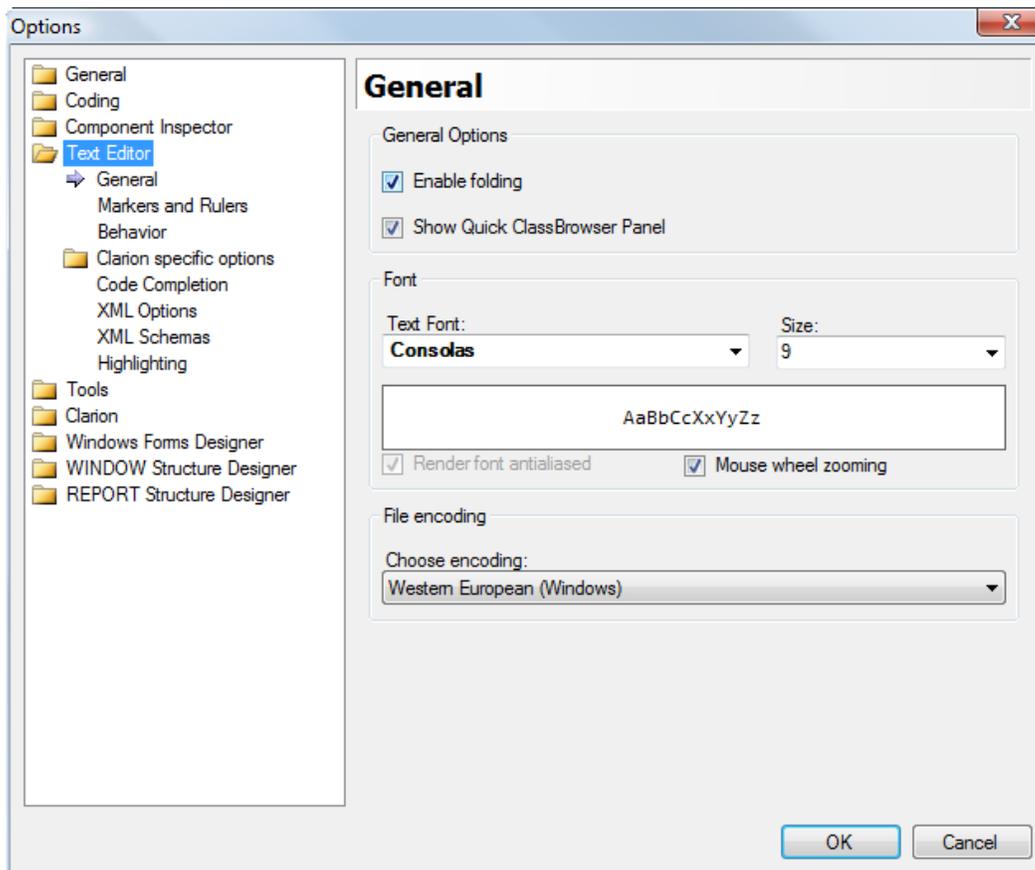


Figure 10. Editor settings

The Clarion-specific settings include the preferred column for smart indentation. Smart indentation happens while you type, and tries to line up your code in a consistent way. To see this in action highlight some badly formatted code and press Ctrl-I.

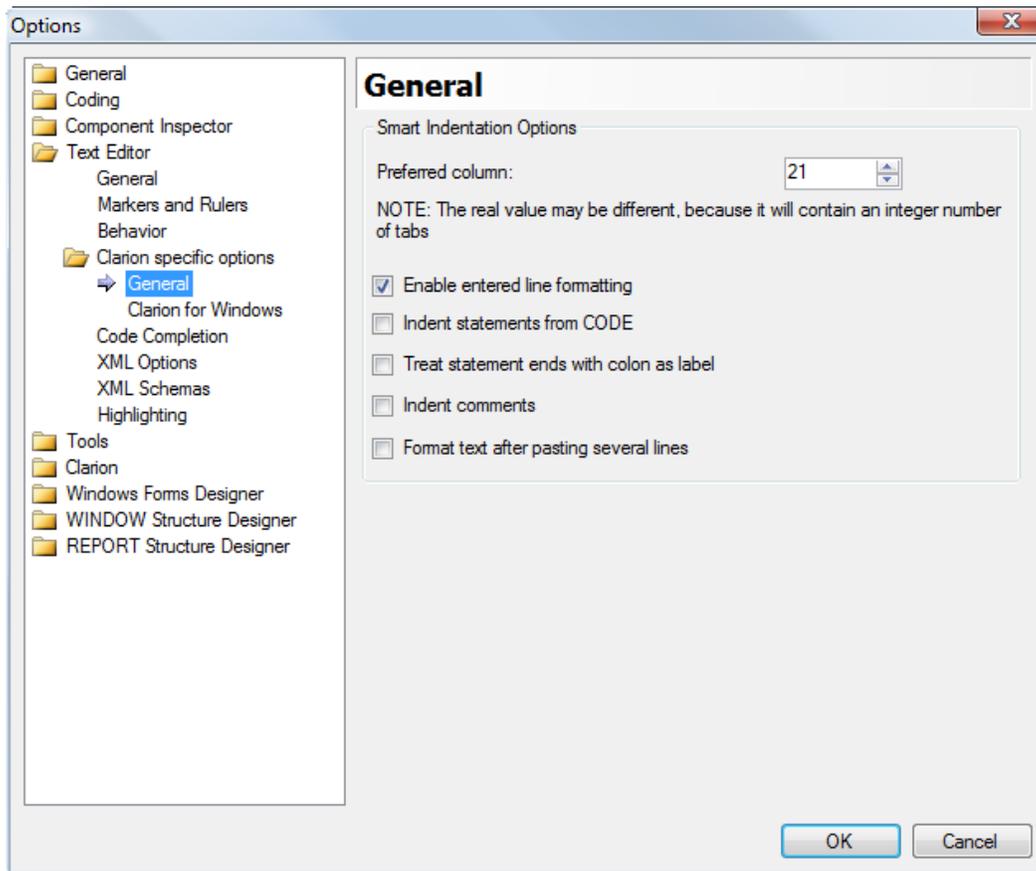


Figure 11. Clarion editor options.

There are also Clarion-specific code completion options. A few builds back code completion began auto-completing Clarion keywords in all caps; you can now choose all upper case or all lower case. Automatic line continuation character insertion is another nice feature.

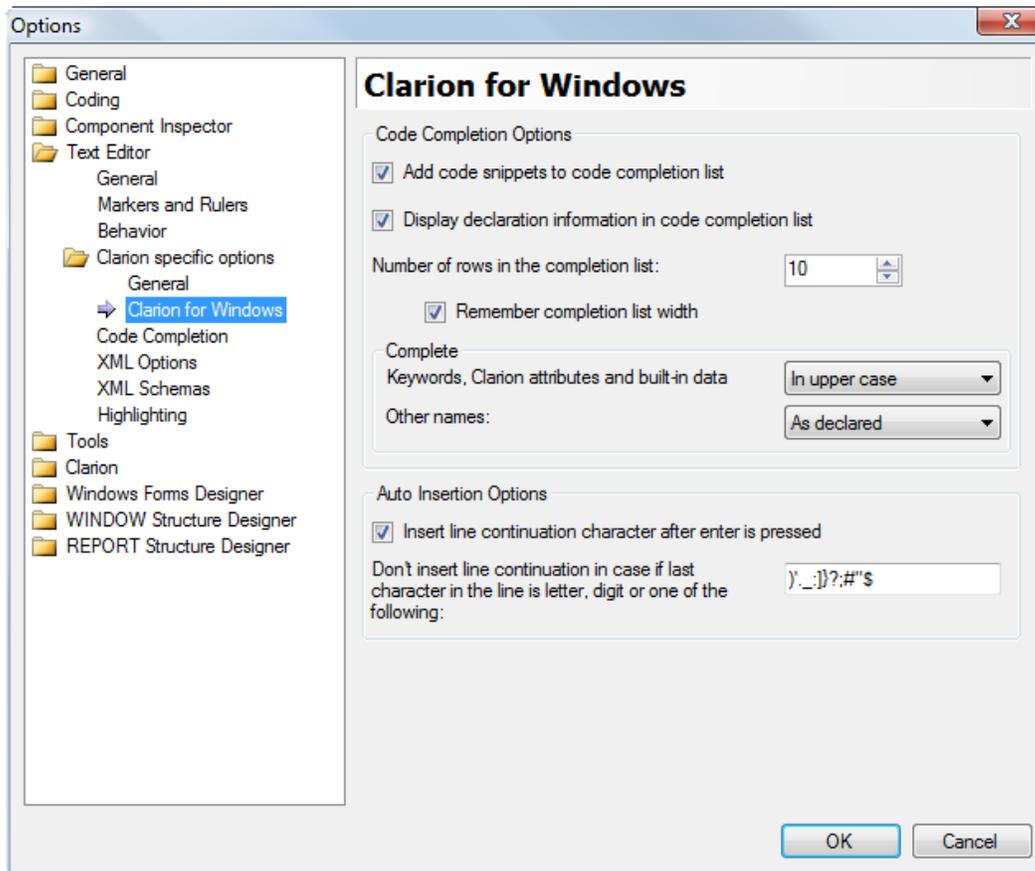


Figure 12. Clarion code completion settings

Confusingly, there are two different code completion options pages. The second page (Figure 13) is not specific to Clarion, but covers general settings such as enabling/disabling, adjusting the size of the cache, and generally modifying the behavior of code completion.

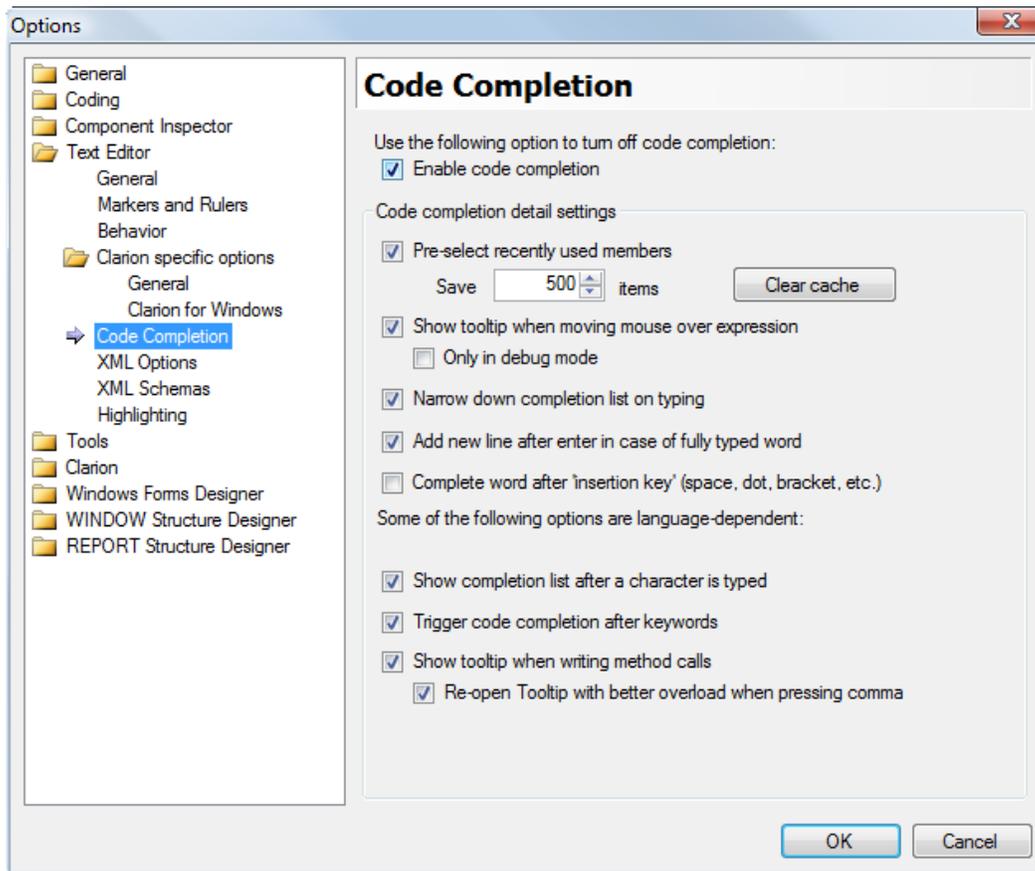


Figure 13. General code completion settings

Text highlighting is highly customizable in the new IDE. You'll probably find the included highlighting schemes sufficient, as they cover everything from batch files to Clarion files to Javascript and XML. But if you need something special it's not hard to create your own coloring rules. Before SV shipped a template scheme I created my own - you can read more in [Coloring Template Source In C7/Clarion#](#).

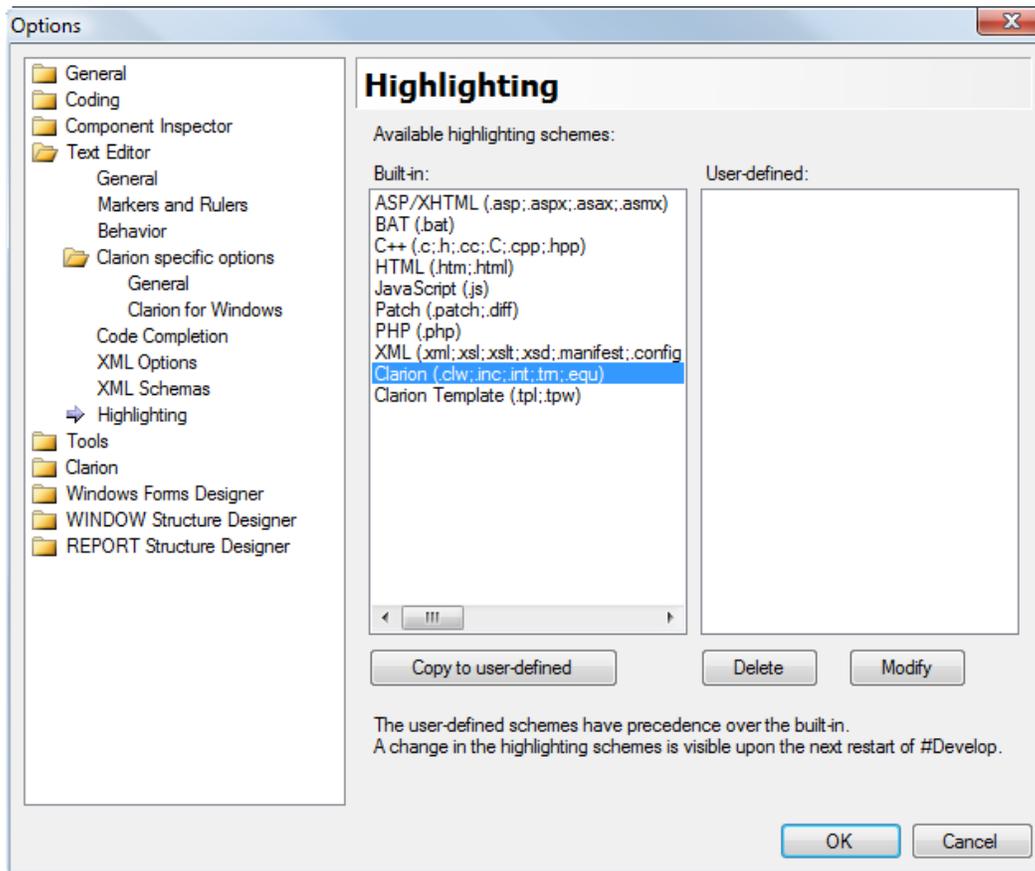


Figure 14. Color schemes

You can extend the IDE with your own external tools. In Figure 15 I've added a custom MSBuild 3.5 task to use multiple cores when compiling. (But don't get too excited - multi-core compiles only work in under very constrained circumstances. And yes, I know, I need to finish the followup to the [MSBuild article](#).)

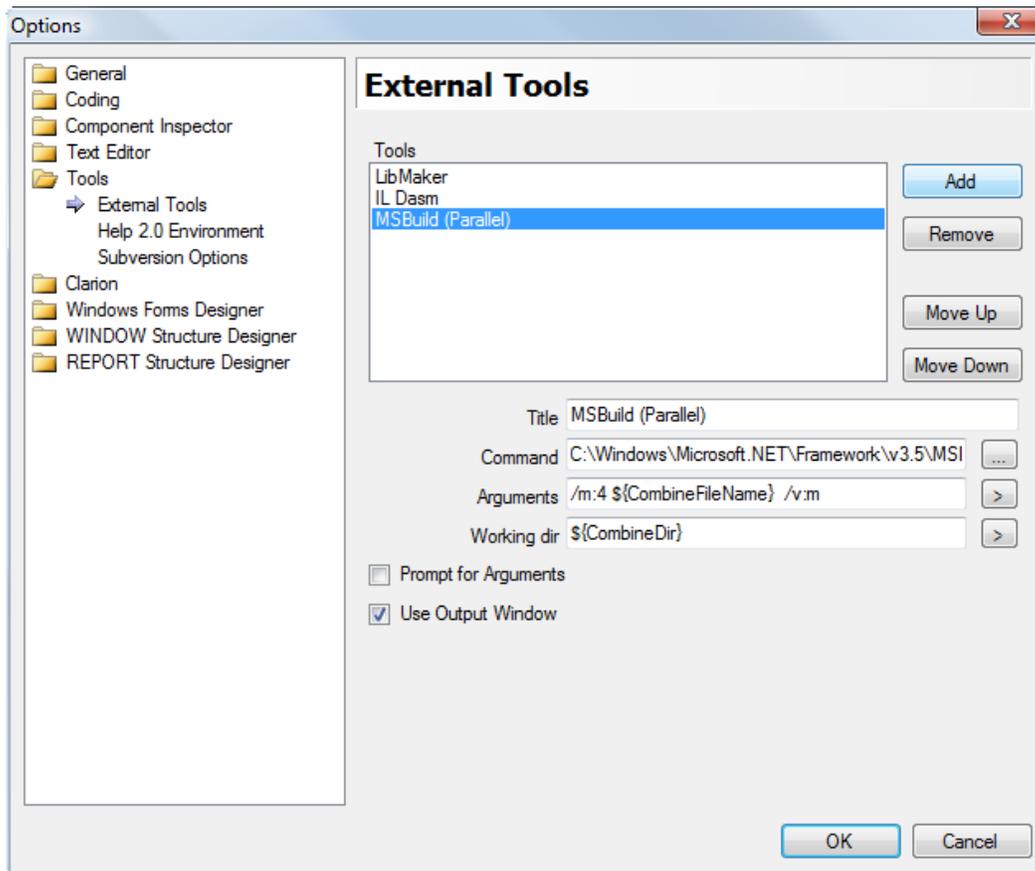


Figure 15. External tools

You've probably heard about C7's support for previous versions of Clarion. You may want to have a read through Steve Parker's [Using Multiple Clarion Versions In C7](#) and [Using Multiple Clarion Versions In C7: Latest Developments](#). If the C7 install didn't pick up on a previous version of Clarion you can always add it manually here.

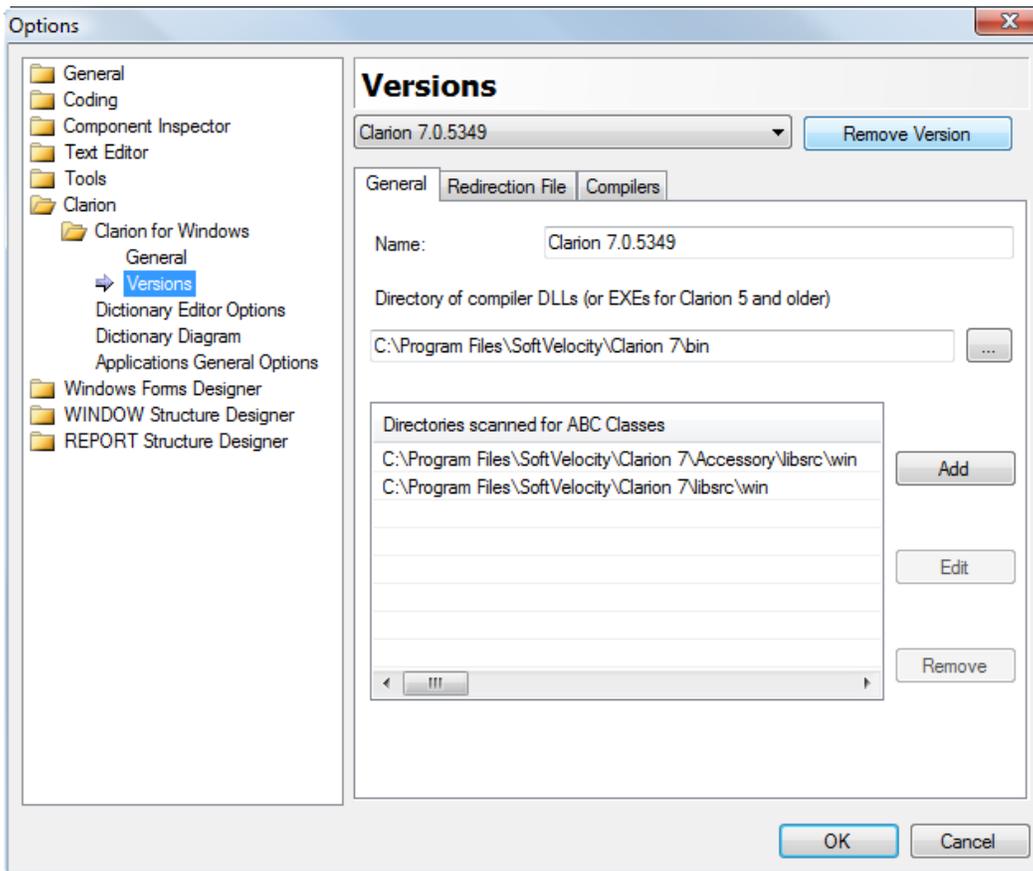


Figure 16. Multiple versions of Clarion

There are a number of dictionary editor options, similar to those you find in C6. The first tab is mostly new stuff, however. In particular note the last checkbox: Enforce Clarion# name restrictions. In earlier builds this defaulted to true, but I believe has been set back to false, which is a much better idea for C7 applications and avoids a lot of grief.

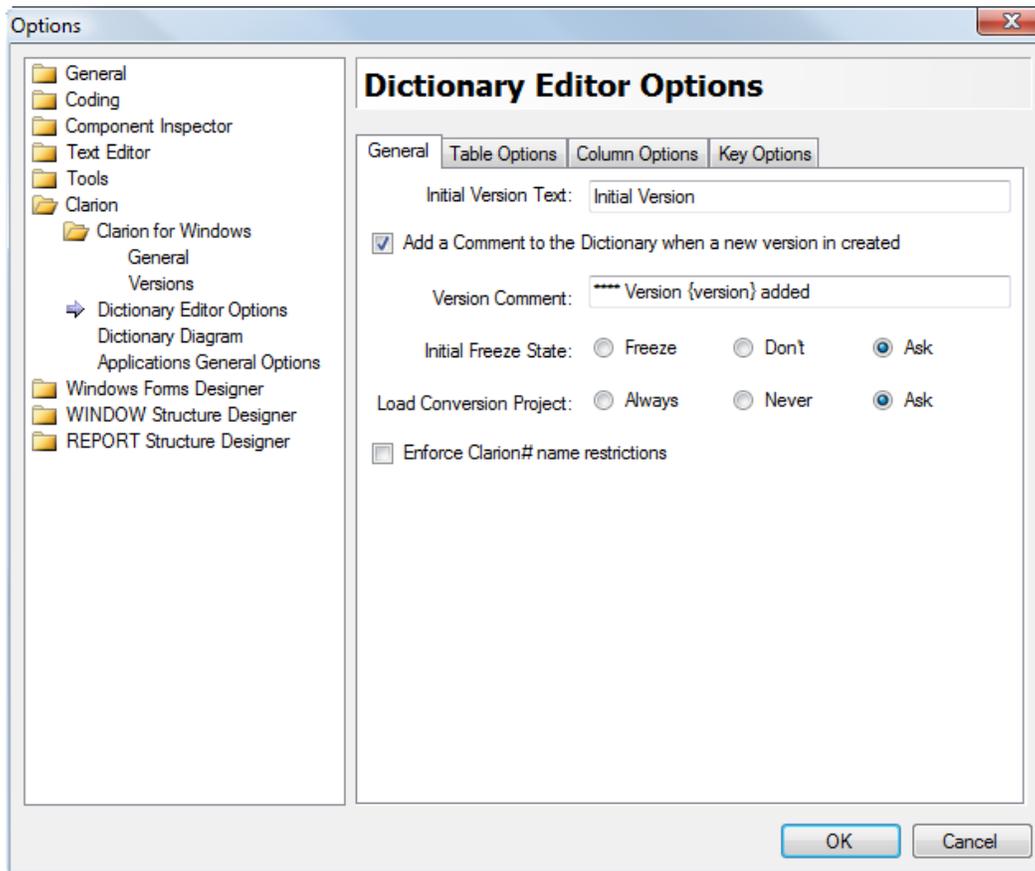


Figure 17. Dictionary options

From the help:

When checked, the dictionary editor will not allow you to create labels that are not valid in Clarion#. For example, AS is an illegal label, but legal in Clarion for Windows. If you do not want to worry about Clarion# restrictions you can uncheck this box.

If Clarion# restrictions are enabled and you load a dictionary into the editor that has a label that violates the Clarion# naming restrictions the editor will automatically rename the object to ObjectType_OldLabel, where ObjectType is a Table, Alias, Global, Pool, Key or Column. If the object is a Key or a Column with no external name, the external name is set to the old label.

For example, "AS STRING(10)" will be converted to "Column_AS STRING(10),NAME('AS')"

Any such change will appear in the Dictionary Changes pad.

The Dictionary Diagrammer is a new feature in C7, and as such has its own options.

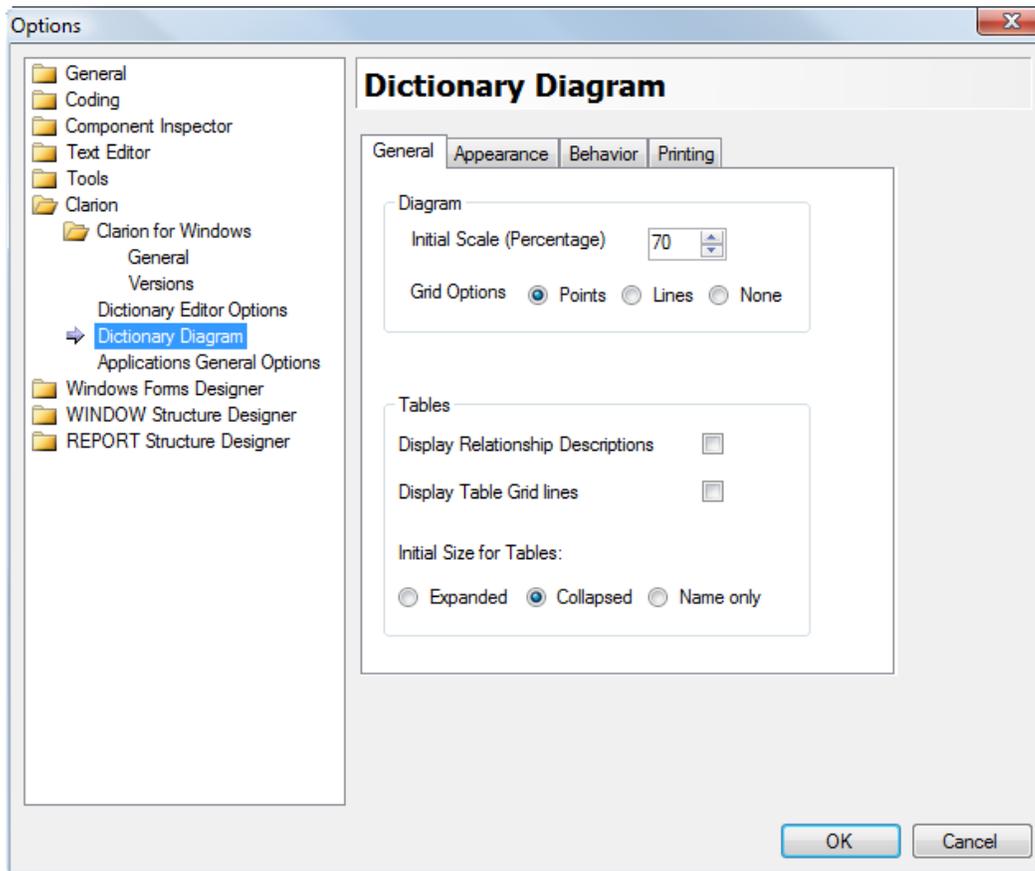


Figure 18. Dictionary Diagram options

The Applications General Options window contains a couple of fairly important checkboxes. If you check the Automatically add referenced APPs entry then whenever you open a multi-DLL application to C7 it will bring all referenced applications into the newly created solution without asking for confirmation.

The last option, Cache Applications In-Memory after Editing, defaults to true. That is, when you open an APP, then close it, then open it, the APP is already in memory. This works fine for smaller sets of APP files, but if you have a really huge solution with many APPs you will want to uncheck this, unless you also have gobs of memory available.

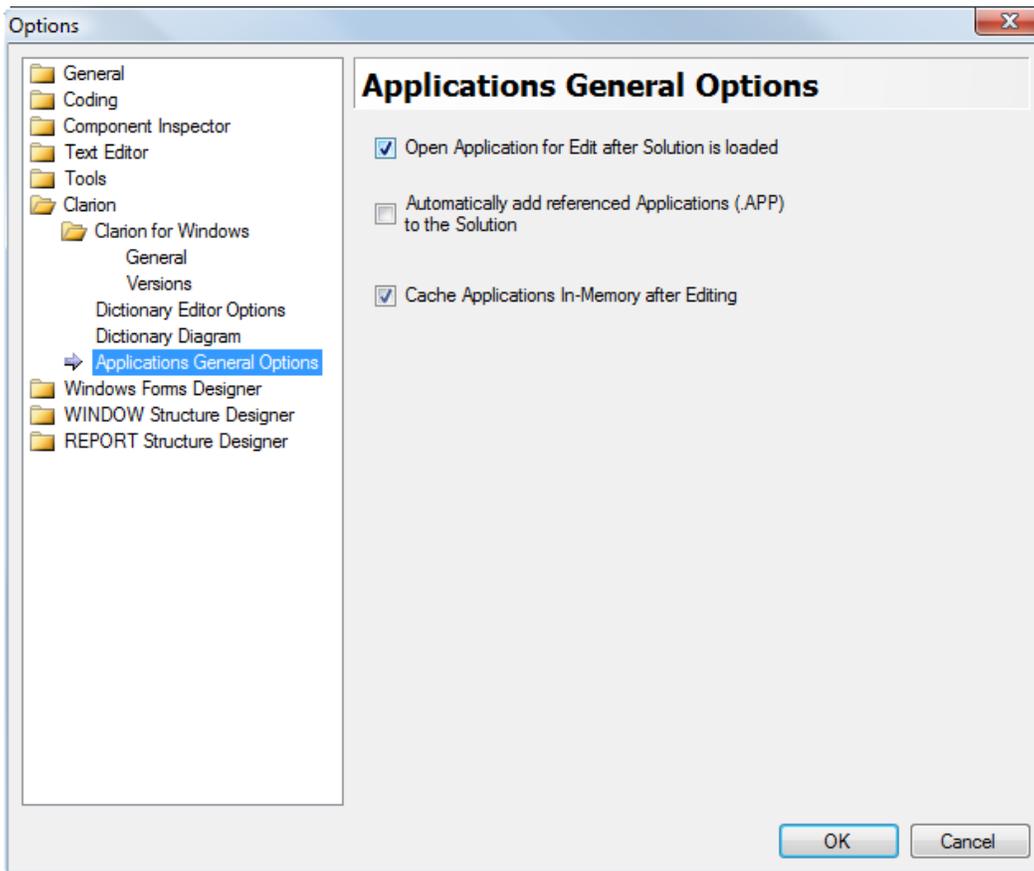
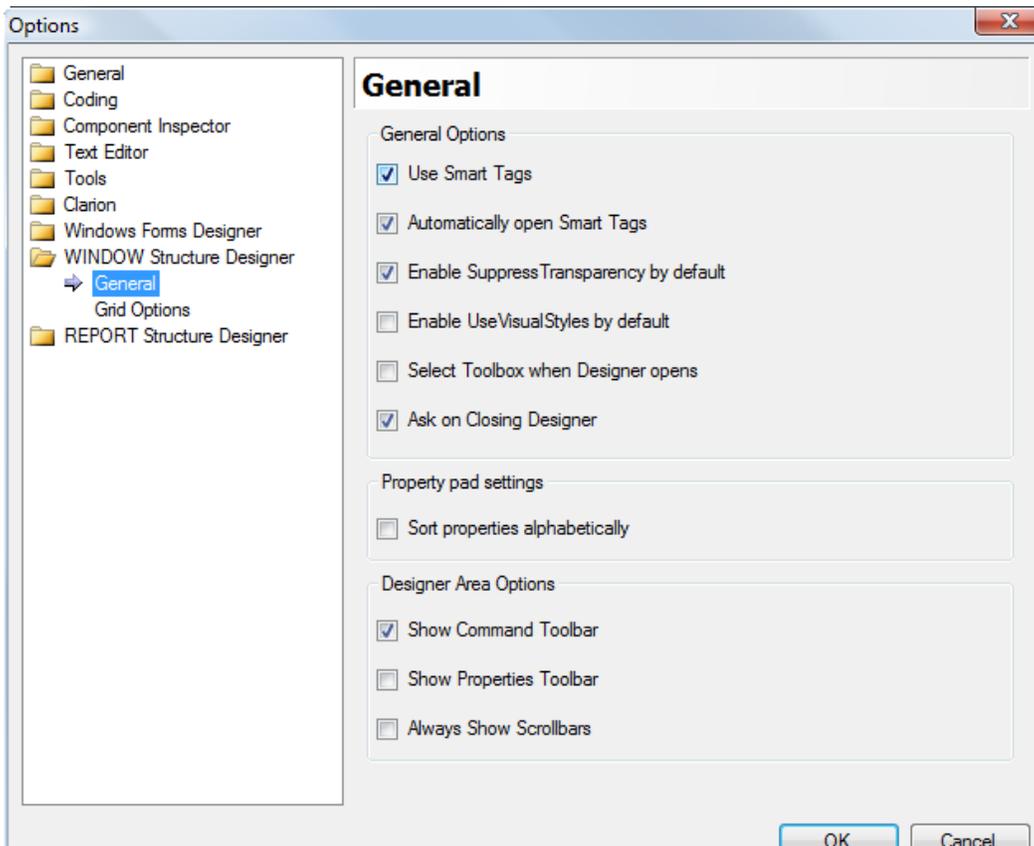


Figure 19. Applications General Options

The Windows Forms Designer, the WINDOW Structure Designer and the REPORT Structure Designer all have similar settings, but the first of these is for WinForms (.NET) applications, while the last two are specific to Clarion 7.



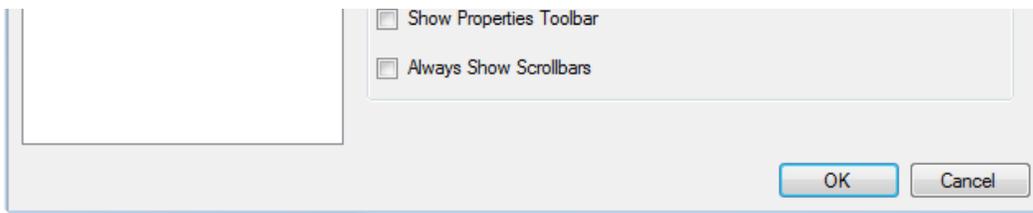


Figure 20. WINDOW Structure Designer options

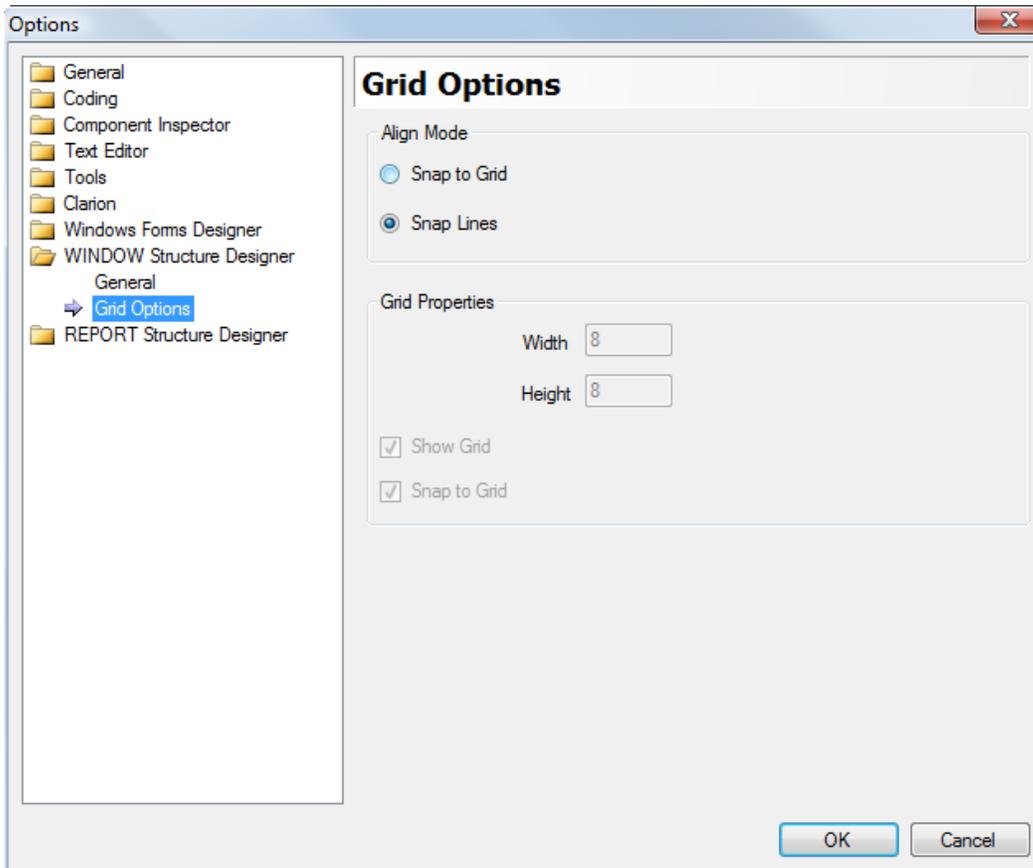


Figure 21. REPORT Structure Designer options

Summary

In [Part 1](#) I looked at the different ways to manage the layout of the new IDE and I discussed the first part of the Tools menu. This time around I've covered most of the relevant bits in the Options section of the Tools menu. By now you should have a good idea of what the various bits are that make up the new IDE.

In the following articles I'll dive into the uniquely Clarion aspects of this IDE, including the Dictionary Editor and the Application Generator.

[David Harms](#) is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors ([ASJA](#)).

Reader Comments

Posted on Tuesday, April 28, 2009 by douglas johnson

The task list feature would sure be a lot more useful if it was fully supported in an App file. After all, being "Appcentric" is what sets Clarion apart.

[Add a comment](#)

Clarion Magazine

Clarion 101: Importing Apps Into Clarion 7

by Dave Harms

Published 2009-04-29

In Parts 1 and 2 of this Clarion 7 101 series I covered the basics of getting around the C7 IDE. Now it's time to start working with applications. I'll talk about creating applications from scratch in future articles, but if you're like most C7 users your first step will be importing an application into the new IDE.

In C7 the internal format of .app and .dct files has changed. There's also some new information created, largely in support of the ability to combine multiple .apps (and PRJs, for that matter) into a single *solution*. In this article I'll explore projects and solutions, and illustrate the key differences between C7 and previous versions of Clarion in the area of project management.

Opening an .app in C7

To open a C6 (or earlier) .app in C7 choose File | Open Project or Application (Figure 1). Locate and open the .app file.

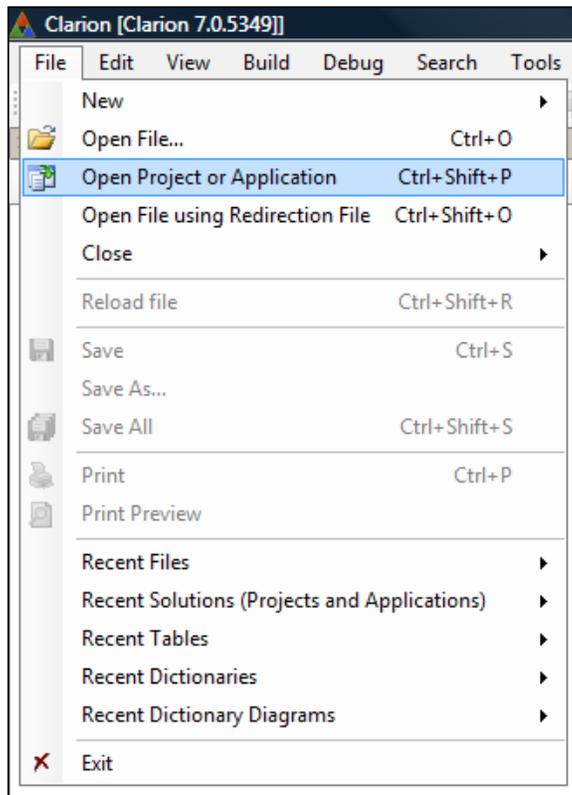


Figure 1. Opening an .app in C7

After you open the .app file you'll see a conversion warning message (Figure 2).

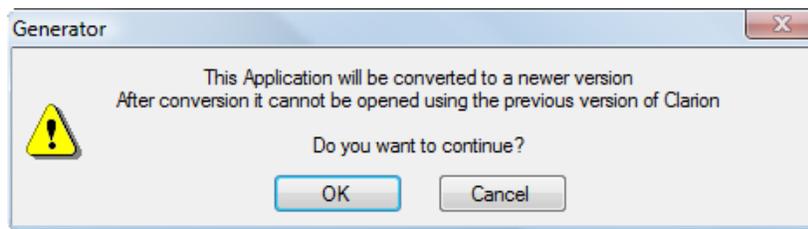


Figure 2. Converting the .app

This message specifically means that the .app file will be converted to the new *file format*. You can, if you wish, still compile the application with any previous versions of Clarion you have installed on your machine (see the [multi-version support topic](#) for more).

If the application uses a dictionary, the IDE will also ask you if you want to convert the dictionary to the new format (Figure 3).

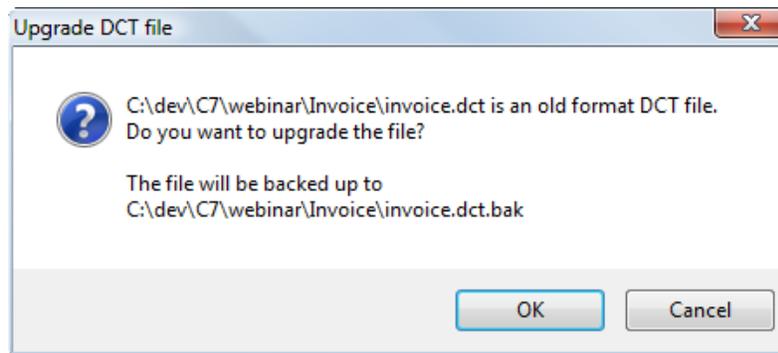


Figure 3. Converting the .dct

It's not just the .app and .dct format that has changed, however; C7 also converts the application's *project data*.

Project data

Writing Clarion applications is essentially a two-step (or maybe three) step process. First, you create the source code. You may do this by writing some or all of the code by hand, or more likely you'll let the Application Generator write some or all of the code for you. And then you compile that code into an EXE or a DLL.

Project data is information Clarion relies on to turn your source code into executable code. In C6 you locate the project data for an application by choosing Project | Edit. Figure 4 shows the project data for the Invoice application in C6.

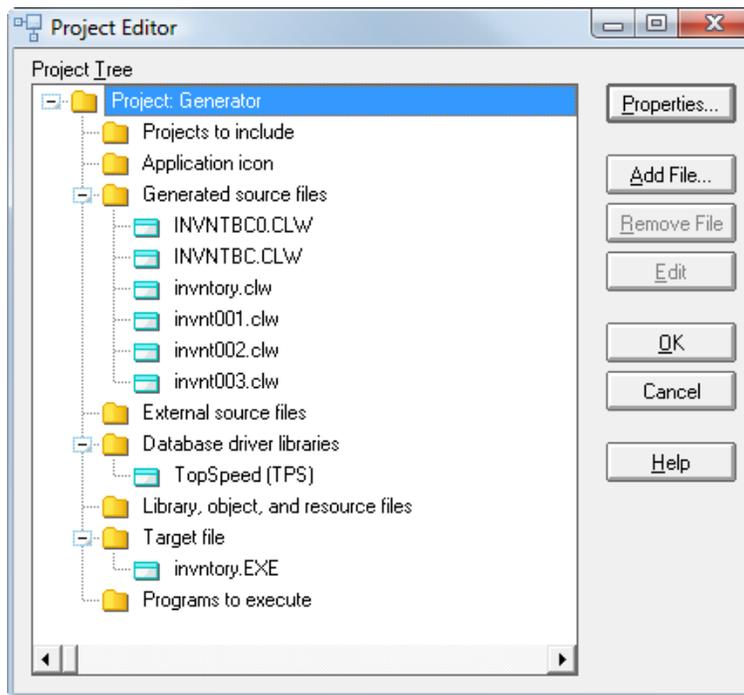


Figure 4. C6 project information.

In C7 you can see the same kind of information in the Solution Explorer pad (Figure 5). I'll come back to why it's called the *Solution Explorer* in a moment.

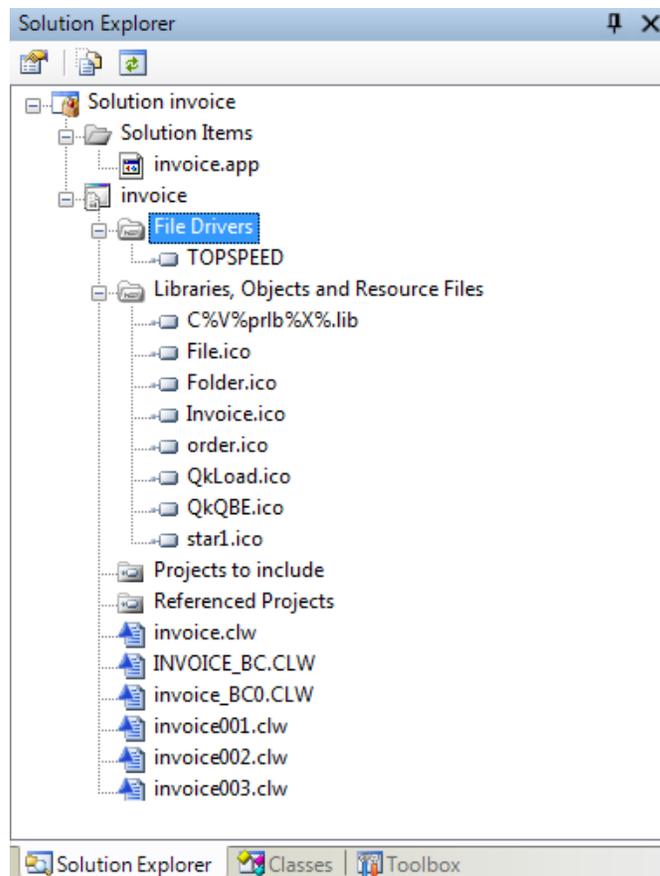


Figure 5. C7 Project information

There are similarities between Figures 4 and 5. Both list the source files and the TopSpeed driver. But there are some important differences as well. For once thing the C7 project information includes a LIB file and icons that aren't specified in the C6 project. For another, the C7 information includes the .app file. In C6 the .app contains the project information. What's going on here?

To explain this very important change in how C7 handles project information, I'm going to backtrack a little and look at how C6 figures out how to compile your code.

Terminology

One of the difficulties in discussing the C7 compile/link process has to do with terminology, specifically with the use of the term "project", which has a slightly different meaning in C7. Most C6 developers, if they think of projects at all, think of hand coded applications. The simplest hand coded Clarion program (think "Hello World") consists of a single source file (ending in .CLW) and a single project file (ending in .PRJ or .PR). The PRJ (or PR) file is what the Clarion build system uses to determine what steps it needs to take to turn your source code into an EXE (or DLL or LIB).

Here's a Hello World program (hello.clw):

```

program

map
end

code
message('Hello world')
```

And here's a C6 PRJ (hello.prj) to go with it:

```
--
#noedit
#system win32
#model clarion dll
#pragma debug(vid=>full)
#compile "hello.clw"
#link "hello.exe"
```

The PRJ file tells Clarion (through version 6) build system some information about the kind of application it's to create, then specifies that hello.clw is to be compiled, and finally that the resulting binary code should be linked into an executable. The details of the process aren't important here - what matters is that there's some project (build) data present.

Although you may not realize it, app files also contain project data. Open an app and choose File | Export Project File. (In earlier versions of Clarion you had to either export a TXA to get that information or, if you were brave, open up the app in a text editor, being careful to save the file.) Here's the project data for SCHOOL.app:

```
-- Generator
#noedit
#system win32
```

```

#model clarion dll
#set RELEASE = on
#pragma debug(vid=>off)
#pragma optimize(cpu=>386)
#pragma define(_ABCDllMode_=>0)
#pragma define(_ABCLinkMode_=>1)
#pragma link_option(icon=>"_SoftVUn.ico")
#compile "SCHOOL_BC0.CLW" -- GENERATED
#compile "SCHOOL_BC.CLW" -- GENERATED
#compile "School.clw" -- GENERATED
#compile "SCHOOL001.clw" -- GENERATED
#compile "SCHOOL002.clw" -- GENERATED
#compile "SCHOOL003.clw" -- GENERATED
#compile "SCHOOL004.clw" -- GENERATED
#pragma link("C%V%TPS%X%L%.LIB") -- GENERATED
#pragma link("Open.ico") -- GENERATED
#pragma link("Closed.ico") -- GENERATED
#link "school.EXE"

```

There's a little more information here, including some pragma statements telling the linker to include several icons in the EXE.

All of the build information in C6 (and prior versions) is centered on the concept of building a single file. That is, you can make a LIB, or a DLL, or an EXE, but really there's no built-in way to create a bunch of EXEs or DLLs or LIBs or any combination thereof, all in one go. If you want to do something like build a multi-DLL application in a single step prior to C7 you need a third party batch compiler.

Enter C7.

Build information in C7

Although PRJ type data still exists inside C7 .app files, the IDE no longer uses that information directly to manage the compile process. Instead C7 hands off compiling/linking duties to Microsoft's own build tool, [MSBuild](#).

MSBuild is a powerful tool with build management capabilities well beyond those you find in pre-7 versions of Clarion. It also uses two particular kinds of files to manage the build process.

Any time you import an .app file into C7, the IDE will create an *appname.cwproj* file. For Invoice.app the file is called invoice.cwproj. It's an XML file and it looks like this:

```

<Project DefaultTargets="Build" xmlns="http://schemas.microsoft.com/developer/msbuild/2003">
  <PropertyGroup>
    <ProjectGuid>{06B6348F-53CB-4F73-8B24-19ABB8DC9F11}</ProjectGuid>
    <Configuration Condition="'$(Configuration)' == ''">Debug</Configuration>
    <Platform Condition="'$(Platform)' == ''">Win32</Platform>
    <OutputType>Exe</OutputType>
    <AssemblyName>invoice</AssemblyName>
    <OutputName>invoice</OutputName>

```

```

<ApplicationIcon>order.ico</ApplicationIcon>
<DefineConstants>_ABCDIIMode_=>0%3b_ABCLinkMode_=>1</DefineConstants>
<Model>DII</Model>
</PropertyGroup>
<PropertyGroup Condition=" $(Configuration)' == 'Debug' ">
  <DebugSymbols>True</DebugSymbols>
  <DebugType>Full</DebugType>
  <vid>full</vid>
  <check_stack>True</check_stack>
  <check_index>True</check_index>
</PropertyGroup>
<PropertyGroup Condition=" $(Configuration)' == 'Release' ">
  <DebugSymbols>False</DebugSymbols>
  <DebugType>None</DebugType>
  <vid>off</vid>
  <check_stack>False</check_stack>
  <check_index>False</check_index>
</PropertyGroup>
<ItemGroup>
  <Library Include="C%25V%25prlb%25X%25.lib" />
  <Library Include="File.ico" />
  <Library Include="Folder.ico" />
  <Library Include="Invoice.ico" />
  <Library Include="order.ico" />
  <Library Include="QkLoad.ico" />
  <Library Include="QkQBE.ico" />
  <Library Include="star1.ico" />
  <FileDriver Include="TOPSPEED" />
  <Compile Include="invoice.clw">
    <Generated>true</Generated>
  </Compile>
  <Compile Include="invoice001.clw">
    <Generated>true</Generated>
  </Compile>
  <Compile Include="invoice002.clw">
    <Generated>true</Generated>
  </Compile>
  <Compile Include="invoice003.clw">
    <Generated>true</Generated>
  </Compile>
  <Compile Include="INVOICE_BC.CLW">
    <Generated>true</Generated>
  </Compile>

```

```

<Compile Include="invoice_BC0.CLW">
  <Generated>true</Generated>
</Compile>
</ItemGroup>
<Import Project="$(ClarionBinPath)\SoftVelocity.Build.Clarion.targets" />
</Project>

```

As you can see, this is pretty much an XML version of the PRJ data. But it's more than that, thanks to that last Import entry in the file. The import statement points to a file called SoftVelocity.Build.Clarion.targets, which is also an XML file. Here's what it looks like:

```

<Project xmlns="http://schemas.microsoft.com/developer/msbuild/2003">

  <UsingTask TaskName="Microsoft.Build.Tasks.CW"
    AssemblyFile="SoftVelocity.CW.Build.Tasks.dll"/>
  <UsingTask TaskName="Microsoft.Build.Tasks.CWClean"
    AssemblyFile="SoftVelocity.CW.Build.Tasks.dll"/>

  <Target Name="Build"
    Outputs="$(OutputFile);$(LibFile);@(RequiredDlls)"
    DependsOnTargets="$(CoreCompileDependsOn)"
  >

    <CW
      Version="$(clarion_version)"
      Model="$(Model)"
      Vid="$(vid)"
      CPU="$(cpu)"
      LineNumbers="$(line_numbers)"
      MapFile="$(GenerateMap)"
      CheckStack="$(check_stack)"
      CheckIndex="$(check_index)"
      StackSize="$(stack_size)"
      Defines="$(DefineConstants)"
      Includes="@ (Include)"
      References="@ (Reference);@ (ProjectReference)"
      Sections="$(Configuration)"
      Sources="@ (Compile)"
      Libraries="@ (Library)"
      FileDrivers="@ (FileDriver)"
      Icon="$(ApplicationIcon)"
      TargetName="$(OutputName)"
      TargetDir="$(OutputPath)"

```

```

    TargetType="$(OutputType)"
    RedirectionFile="$(RedFile)"
    CopyCoreFiles="$(CopyCore)"
    CopyableFiles="@None"
    ProjectName="$(MSBuildProjectFile)"
  >
  <Output TaskParameter="RequiredDlls"
    ItemName="RequiredDlls" />
  <Output TaskParameter="LibFile"
    PropertyName="LibFile" />
  <Output TaskParameter="OutputFile"
    PropertyName="OutputFile" />
</CW>
</Target>
<Target Name="Clean" >
  <CWClean
    ProjectName="$(MSBuildProjectFile)"
    Sections="$(Configuration)"
    Version="$(clarion_version)"
  />
</Target>
<Target Name="Rebuild" DependsOnTargets="Clean;Build" />
</Project>

```

You really don't need to worry about `SoftVelocity.Build.Clarion.targets` - I've just included it here so you can see how the build task actually works. In essence this file tells MSBuild to look in a particular DLL (`SoftVelocity.CW.Build.Tasks.dll`) and execute certain tasks in that DLL in order to actually compile the code. It's the code in that DLL that invokes the Clarion compiler.

Take a look at the Solution Explorer pad in Figure 6. The area marked with red corresponds to the information in the `Invoice.cwproj` file.

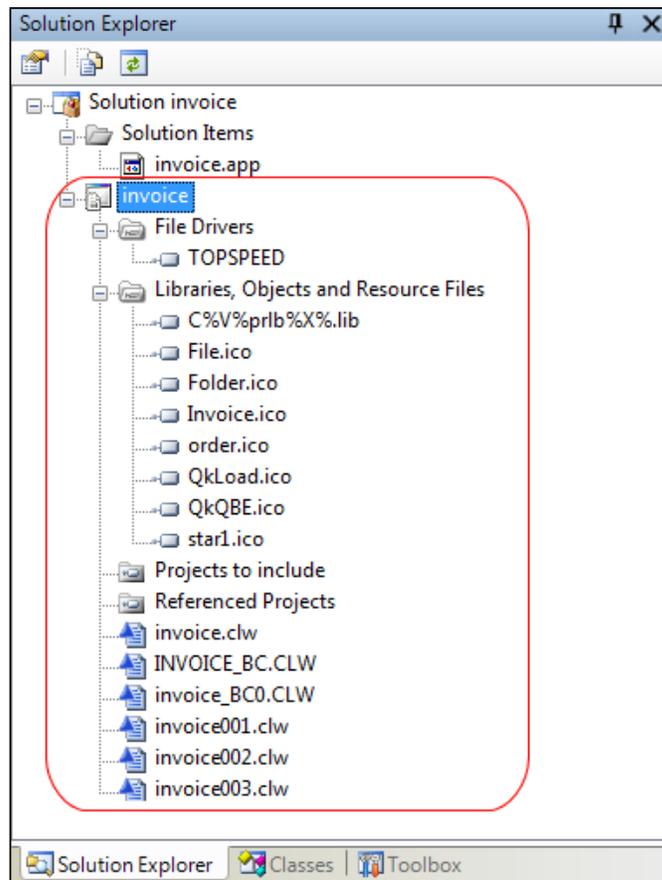


Figure 6. The project data

It appears that the .cwproj file contains everything that MSBuild needs to create the EXE or DLL. And in fact you can call MSBuild from the command line, pass it the .cwproj, and build the application normally (see [Building C7 Apps With MSBuild](#) for more on this technique).

So why isn't the cwproj file sufficient? If you take another look at Figure 6 you'll see that the project data doesn't include the .app file. Arguably, the .app doesn't belong in the project data anyway, since the project data actually comes from the .app file, not the other way around.

Luckily there's another place the .app can fit, and that's in the solution file.

Solution files

Solution files are sort of like containers for project files. A solution file can contain any number of project files, and passing a solution file to MSBuild is roughly like passing each of its project files separately.

Although it's possible to call MSBuild by passing the project file, C7 compiles are normally "solution" compiles - that is, the IDE calls MSBuild and passes it the .sln file.

In C7, solution files are created automatically whenever you create a new project, application or solution, and whenever you import an application from an earlier version of Clarion.

Here's the Invoice.sln file. Unlike Invoice.cwproj this is a text file, not an XML file:

```
Microsoft Visual Studio Solution File, Format Version 9.00
# Visual Studio 2005
```

```

# Clarion 2.1.0.2447
Project("{12B76EC0-1D7B-4FA7-A7D0-C524288B48A1}") = "invoice", ↵
    "invoice.cwproj", "{06B6348F-53CB-4F73-8B24-19ABB8DC9F11}"
EndProject
Project("{2150E333-8FDC-42A3-9474-1A3956D46DE8}") = ↵
    "Solution Items", "Solution Items", ↵
    "{{2150E333-8FDC-42A3-9474-1A3956D46DE8}}"
    ProjectSection(SolutionItems) = postProject
        invoice.app = invoice.app
    EndProjectSection
EndProject
Global
    GlobalSection(SolutionConfigurationPlatforms) = preSolution
        Debug|Win32 = Debug|Win32
        Release|Win32 = Release|Win32
    EndGlobalSection
    GlobalSection(ProjectConfigurationPlatforms) = postSolution
        {06B6348F-53CB-4F73-8B24-19ABB8DC9F11}.Debug|Win32.Build.0 ↵
        = Debug|Win32
        {06B6348F-53CB-4F73-8B24-19ABB8DC9F11}.Debug|Win32.ActiveCfg ↵
        = Debug|Win32
        {06B6348F-53CB-4F73-8B24-19ABB8DC9F11}.Release|Win32.Build.0 ↵
        = Release|Win32
        {06B6348F-53CB-4F73-8B24-19ABB8DC9F11}.Release|Win32.ActiveCfg ↵
        = Release|Win32
    EndGlobalSection
EndGlobal

```

Note that the solution file contains two Project statements. One of these corresponds to the Invoice.cwproj file, and the other simply causes the Invoice.app file to be displayed in the Solution Explorer. Figure 7 shows the part of the Solution Explorer which corresponds to the Solution file.

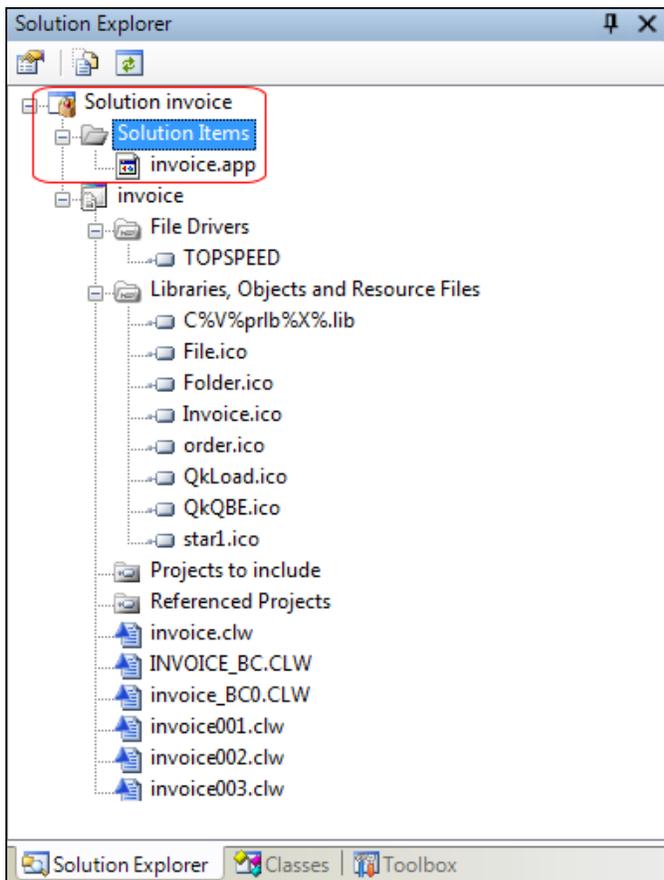


Figure 7. The .app entry

To open an .app in the AppGen you either double-click on the .app in the Solution explorer or select it, right-click and choose Open.

If, however, you double-click or open the source files under the project section, you'll find that you're editing generated source and your changes will be overwritten on the next generation cycle.

The Solution Explorer is actually displaying the contents of the .sln file as well as the contents of any projects included in that solution. You won't normally need (or want) to edit either the .sln or the .cwproj files directly. Instead you'll work directly in the Solution Explorer and/or the Application Generator and let the IDE write out whatever changes are needed. For instance, you can right-click on the Solution line in the Solution Explorer and choose Add to add a new or existing .app or project, as well as individual files.

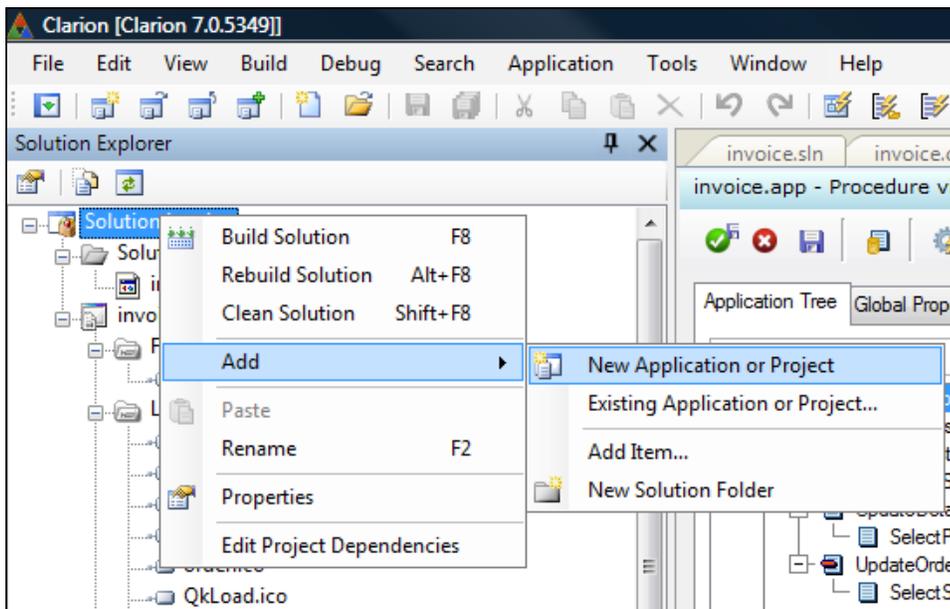


Figure 8. Adding items to the solution

For instance, you could use this menu option to add another .app file to a multi-DLL solution.

Which file do I open?

If you've converted (or created) an .app file you'll have a .sln file, a .cwproj file, and a .app file. You can open any one of them and you'll get the same result: the solution will be loaded in the Solution Explorer.

If you delete the .sln file and open the .cwproj file, the .app will not be loaded since there's no information linking the .app to the project. And the IDE will create a new .sln file to replace the missing one. If this should happen to you just close the solution and then open the .app file. The .app will be added to the solution file.

Solutions, projects, and generating code

In previous versions of Clarion, building the application always means generating and compiling. In the first release of C7 with AppGen you can, if you want, build without generating the app. Simply press F8 to compile whatever source is there, or right-click on the Solution entry (the first item) in the Solution Explorer and choose Build. You can also right-click on any line corresponding to a .cwproj item (the SCHOOL line in Figure 1) and choose Build to just build that one application (only an advantage if you have more than one app in the solution, obviously).

There are also toolbar buttons, as shown in Figure 9.



Figure 9. Toolbar buttons

From left to right, the buttons perform the following actions:

- Generate the currently selected application
- Generate open applications
- Generate all

- Generate and make current application
- Build project (saves all changes)
- Rebuild project (does a clean)
- Generate code, build and start debugging
- Generate code, build, and run the program without the debugger
- Run the program without invoking a build first

The separation of the build system from the code generation system means that you have to take a bit more care when testing changes. If you're making changes in the .app and those changes aren't showing up in your code, chances are you're doing a build action rather than a generate and build action.

The ability to compile without generating is also useful for debugging. On more than one occasion I've found it helpful to hack away at generated code, compiling and testing until I've found the solution to some tricky problem. In the past I've done this by exporting the PRJ from the app, then using the PRJ. With C7 this step is no longer necessary; I simply do builds without generating.

Summary

When you open an .app in C7 the new IDE not only changes the internal format of the .app (and .dct) but it also creates two very important files, the solution (.sln) and project (.cwproj) files. The project file contains all the information needed to build the application (as an MSBuild task, calling the Clarion compiler); the solution file contains a reference to the project as well as to the .app file. And solutions can contain multiple applications, among other things providing a convenient way to manage multi-DLL projects.

[David Harms](#) is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors ([ASJA](#)).

Reader Comments

Posted on Tuesday, May 05, 2009 by Rhys Daniell

This may be a dumb question, but can you use your C6 templates in C7? I'd like to minimise upgrade pain by running the C6 templates in the C7 IDE for a while before going to the C7 template set.

TIA
Rhys

Posted on Tuesday, May 05, 2009 by Dave Harms

Rhys,

Yes, you can. The C7 template parser is more strict than the C6 parser so you may encounter some issues registering your C6 templates in C7. But those are usually easily resolved.

Dave

[Add a comment](#)

Clarion Magazine

Clarion 101: Creating C7 Dictionaries

by Dave Harms

Published 2009-04-30

The average Clarion application is a database-oriented business application. That's always been Clarion's strength, and probably always will be. And if you're going to generate database applications it will help to have a repository of information about the database. In other words, what you want is database *metadata*, or data *about* the data.

If you have an existing SQL database then a lot of the metadata you want may already exist, particularly if someone's gone to the trouble of normalizing the database and defining all the relationships and constraints. But not all databases are so neatly organized, if they exist at all. And even the perfect SQL database may not provide sufficient metadata to optimize the code generation part of your application development process. For instance, you may want a certain column (that is, a field) to always be displayed as a drop list, or as a set of radio buttons with text values that are more verbose than the value stored in the table. It's unlikely that information is going to exist in the database.

Clarion's solution to the problem of inconsistent, incomplete or downright missing metadata is to use a *data dictionary* as a repository for the database structures (tables/files, keys, relationships) and their metadata. Data dictionaries are stored in files with a .dct extension.

The ability to decorate tables, columns and other structures with metadata is one main benefit of Clarion dictionaries; another is that you can include tables/files from all the supported file drivers in a single dictionary, and you can even define relationships between tables from different data sources.

In this article I'll step through the process of creating a couple of tables in the Clarion 7 dictionary editor. But first, a quick word about terminology.

When files become tables

Traditionally, Clarion developers have talked about database storage in terms of files and fields. And back when Clarion was first born it worked with "flat file" databases where that terminology was appropriate. The term "flat file" covers everything from a simple, comma delimited text file to massive collections of indexed text and binary information such as TPS files. The key to the meaning of the term "flat file" is the lack of any intelligence associated with the storage mechanism itself. A flat file database doesn't tell you what you can and can't do with the data; it's simply a repository.

But more and more Clarion developers are working with SQL databases, where the database isn't just a repository, it's also a program (the database server) that manages the creation, retrieval, update and deletion of data. In SQL terms what used to be a physical file is now a logical *table*, and fields have become *columns*. C7's terminology reflects this shift; instead of adding files with fields to a dictionary, you now have tables of columns.

Creating the dictionary

The first step in creating a database dictionary is to create the dictionary file itself. The way you do this isn't immediately obvious in Clarion 7, since there's no menu option (at least in the Gold release) that says "Create Dictionary." Instead, you use File | New | File, as in Figure 1.

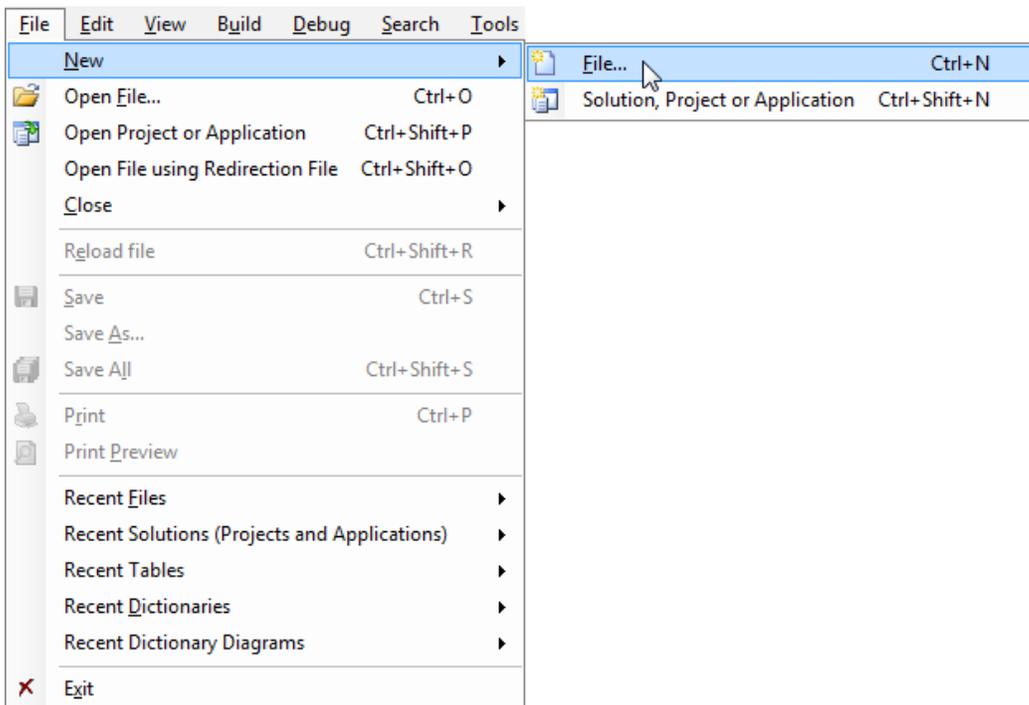


Figure 1. Creating a new dictionary

Next the New File dialog appears, which lets you choose the kind of file you want to create. Select Clarion Data Dictionary from the Categories pane. There is only one Quick Start for this category - select it and click on Create.

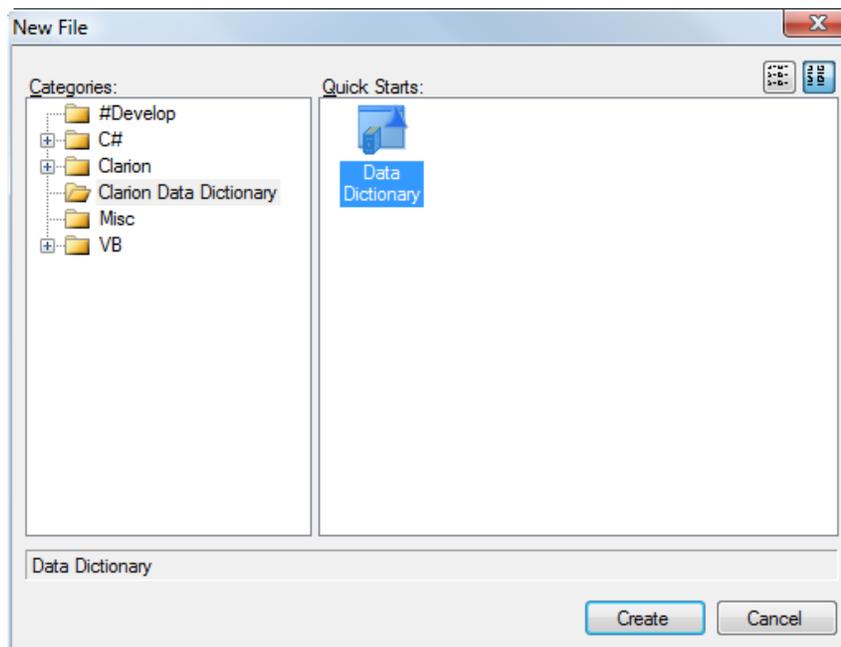


Figure 2. Choosing the Data Dictionary Quick Start

After you click Create you'll see the dictionary editor (Figure 3). At this point you should choose File | Save As, navigate to a suitable directory and give the dictionary a name.

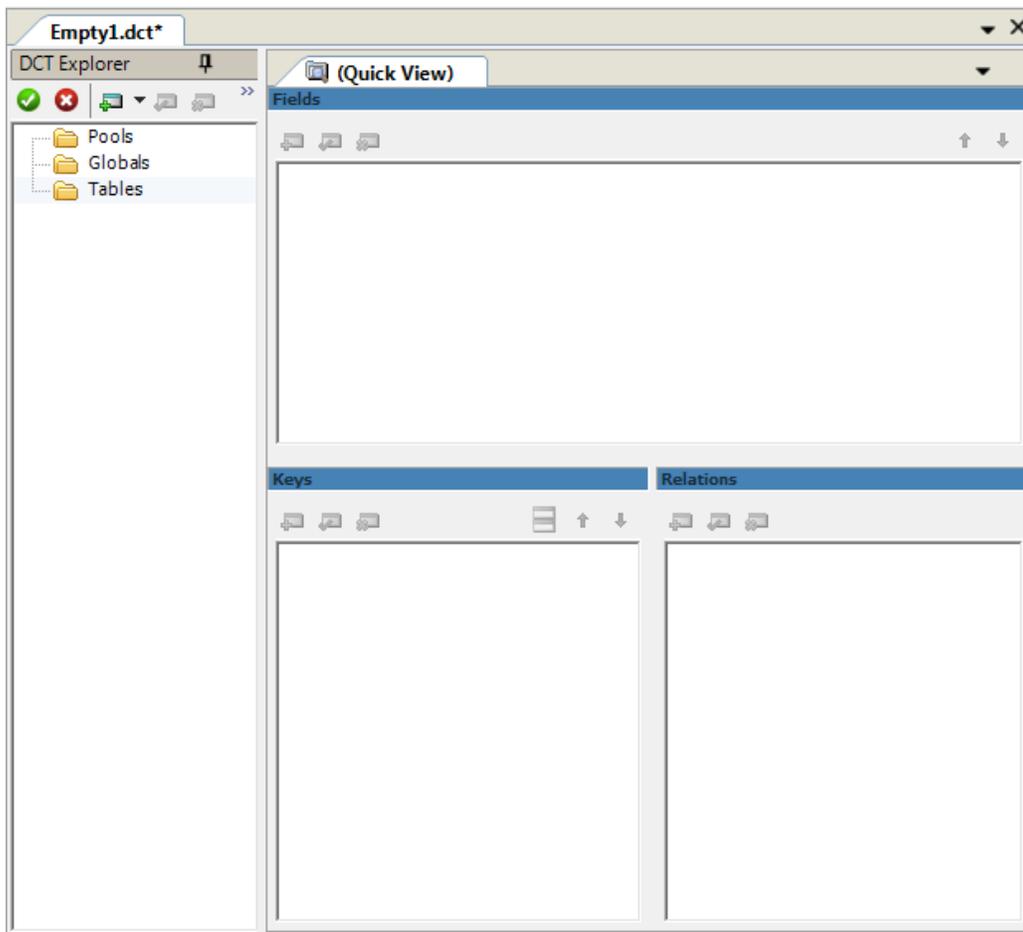


Figure 3. The newly created dictionary

The toolbar

The gold release of Clarion 7 is somewhat lacking in keyboard shortcuts; you'll find yourself relying on the mouse for many tasks. I've gotten in the habit of right-clicking on likely suspects, hoping for a context menu. Where there's no context menu I look for a toolbar. Figure 4 shows the Dictionary Editor toolbar; I've moved the panes around a little to better show the toolbar buttons.



Figure 4. The Dictionary Editor toolbar buttons

From left to right, the toolbar button commands are:

- Save and Close
- Close
- Add table (also Import Table and Add Alias on the dropdown)
- Change (the currently selected item)
- Delete (the currently selected item)
- Browse Table

- Dictionary Properties
- Users
- Open Diagram
- Synchronize Dictionary
- Import/Export Dictionary

I'll begin by adding a table to the dictionary. In Figure 5 I've clicked on the Dictionary Explorer toolbar's Add/Import button and I've selected Add Table.

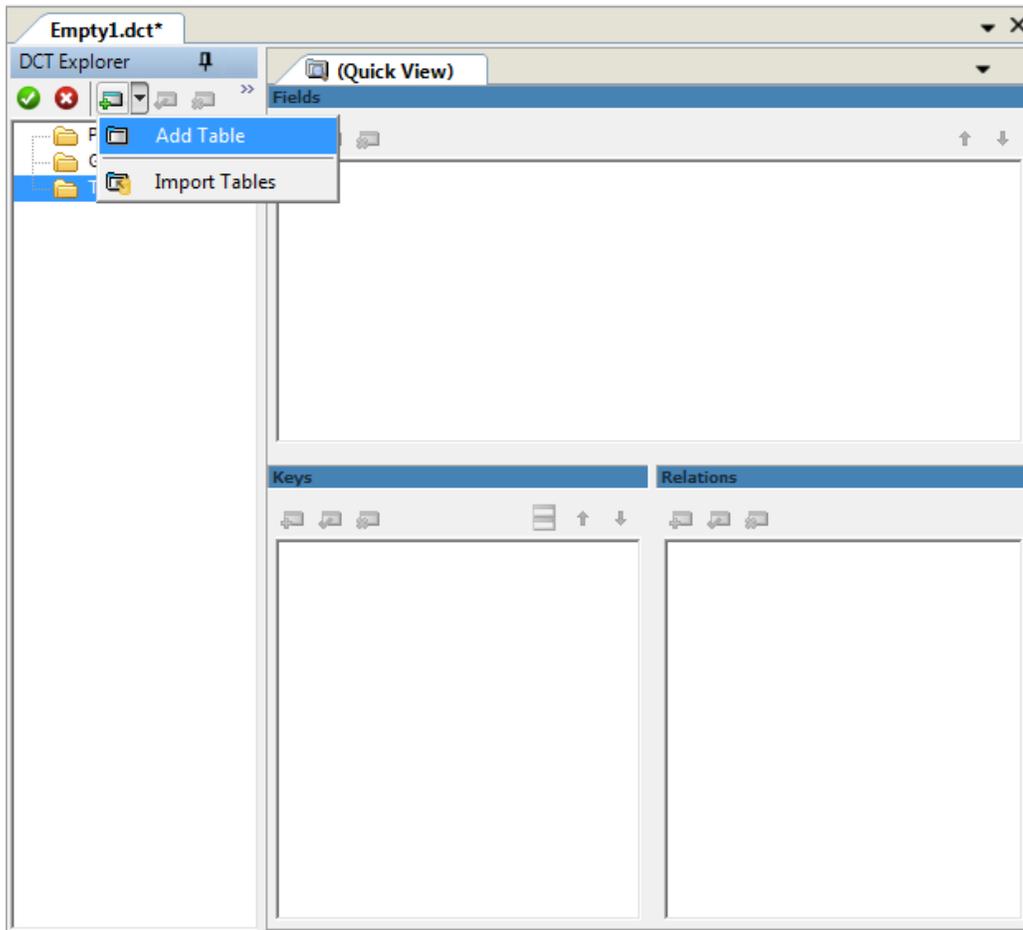


Figure 5. Adding a table via the toolbar

Figure 6 shows an alternate command path; I've right-clicked on the Tables folder to get an Add Table menu option.

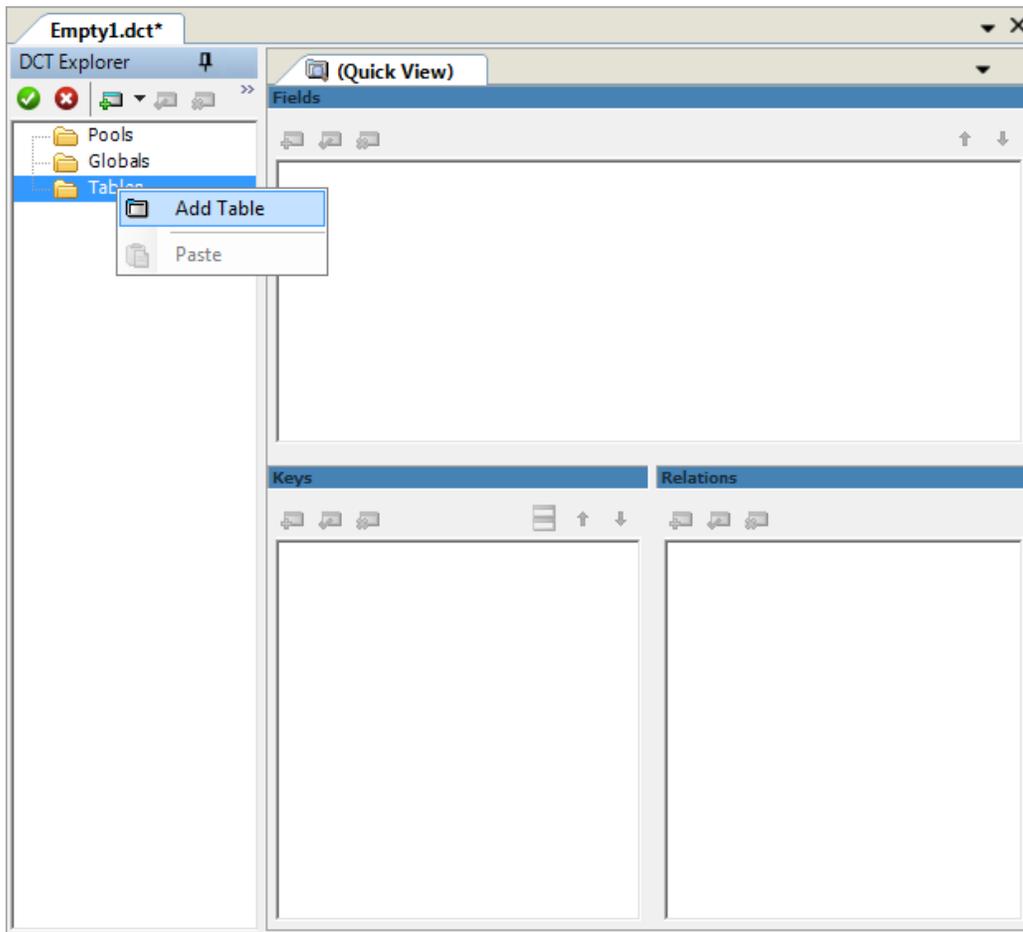


Figure 6. Adding a table via the context menu

Whichever of these ways you use to add a table you'll see the Add Table window in Figure 7. This is a modal window - you can't get to any other part of the IDE until you either complete or cancel the table creation.

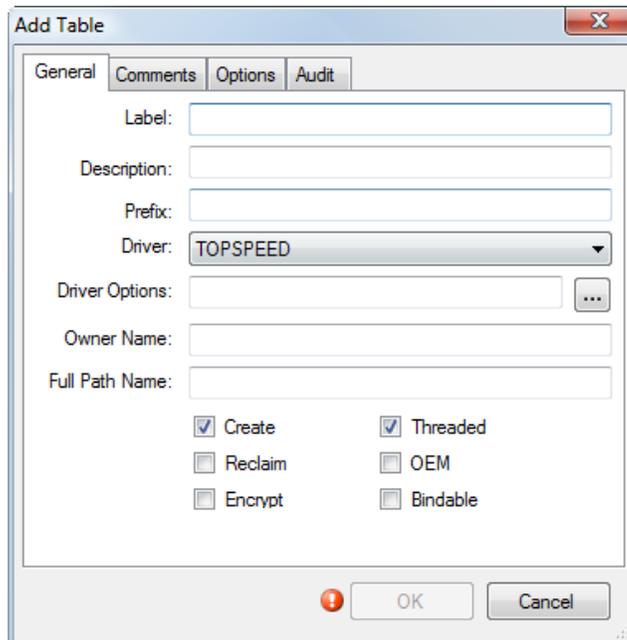


Figure 7. Adding a table

In Figure 7 there's a red exclamation icon beside the grayed-out OK button. This indicates that there's a problem on the form which must be rectified before I can continue. If you hover the mouse over the exclamation icon you'll get a tooltip that says "Label cannot be empty." You may also see the same icon beside the field in question.

Figure 8. General table options

The fields in the table options window are pretty much the same as in C6. The Label is the name given to the Clarion FILE structure (the name being a holdover from the file/field days) that models the table. The prefix is what you will use when referencing the individual columns. If the Blogs table has a prefix of BLG and a field called BlogID, then you reference BlogID in code as BLG:BlogID. You can, actually, also reference it as Blogs.BlogID but years ago that wasn't an option, and there was no such thing as code completion, so having a prefix saved a lot of typing.

Clarion Professional Edition includes file drivers for the following file types:

- ASCII
- BASIC
- Btrieve
- Clarion (DAT)
- Clipper
- dBaseIII
- dBaseIV
- DOS (binary)
- FoxPro
- ODBC
- TopSpeed (TPS)
- In-memory tables
- Dynamically defined
- IP protocol
- Pervasive

- MS SQL
- SQL Anywhere
- Oracle

Not all drivers are included with all versions of Clarion. In particular the Oracle driver is a separate purchase some of the SQL drivers are only included with Enterprise Edition (the ODBC driver is included with all versions of Clarion).

The Driver Options field lets you pass configuration options to the back end file driver. This information often looks a bit cryptic. For instance, if you're using the ODBC driver and SQLAnywhere, you can speed up table opens by issuing this command:

```
/VERIFYVIASELECT=TRUE
```

You don't have to know all the different driver strings - just click on the [...] button beside the entry field and you'll get a popup window with options appropriate to the currently selected file driver.

The Comments tab has changed slightly in C7. In C6 you just have one big text box for table comments; in C7 the comments tab is now a list box where each line corresponds to an entry from a text box.

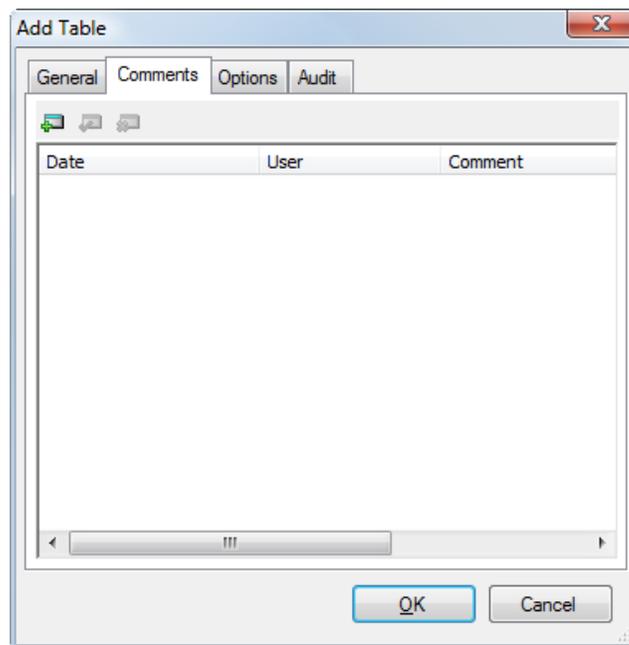


Figure 9. The Comments tab

Click on the + icon to add a record (Figure 10).

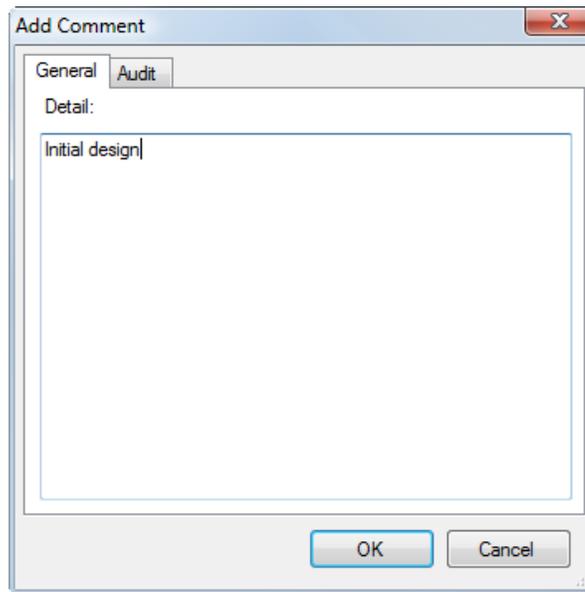


Figure 10. Adding a record to the table comments

Note that both the Add Comment window (Figure 10) and the Table properties window (Figure 9) have an Audit tab.

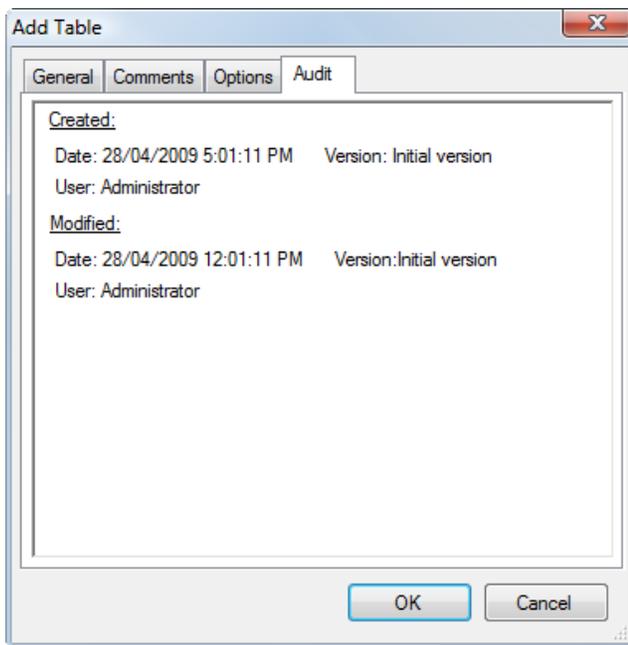


Figure 11. The Audit tab

The Help has this to say about the Audit tab:

The Audit tab contains read-only information about the selected dictionary element. It includes the date that it was created and last modified, version number, and user rights to the target element.

It's also a little goofed up in that on my machine the Created data for the initial version is later than the Modified date, on first creation. But what's all this about versions?

A digression: dictionary versions

C6 has a concept of dictionary versions. You can set a checkpoint on a dictionary, and you can also roll back to a checkpoint, and you do this via the main menu.

In C7 you can set versions as well, but you do so by bringing up the Dictionary Properties window (click on the blue book icon) and clicking on the Versions tab (Figure 12).

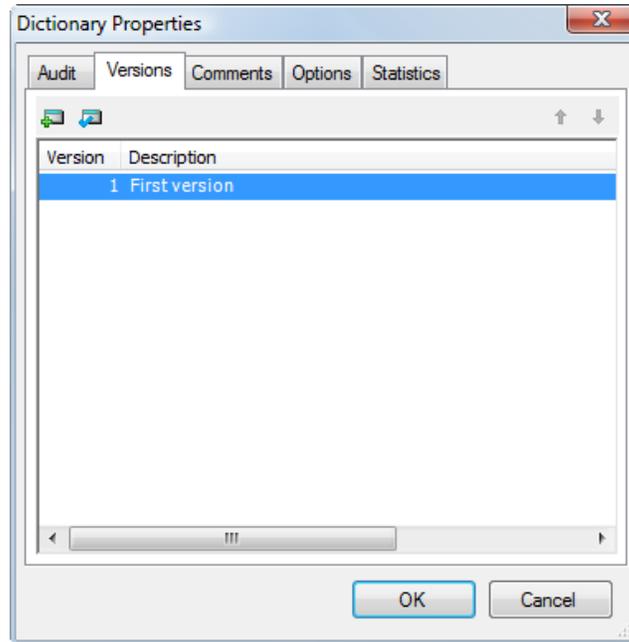


Figure 12. Dictionary properties

To increment the version number just click on the Add icon. Unfortunately in the gold release the Add feature is inoperative, but the dev team is aware of the problem and presumably it will be working again in the next release. Meanwhile you can update the description of any listed versions (at present limited to one) and that description will then appear in any subsequently viewed audit window.

From modal window to tabbed interface

Once you've satisfactorily completed all the New Table options you can click OK. Now you're ready to start adding columns to the table. But your working environment will change just a little. As I noted earlier, while adding a new table record you're in a modal window (meaning you can't go anywhere else in the IDE until that window closes); once you've added the table record you're back to a tabbed interface. And in fact you can update all the table properties via that interface - you won't go back to a modal window until you add another table.

Figure 13 shows the dictionary editor

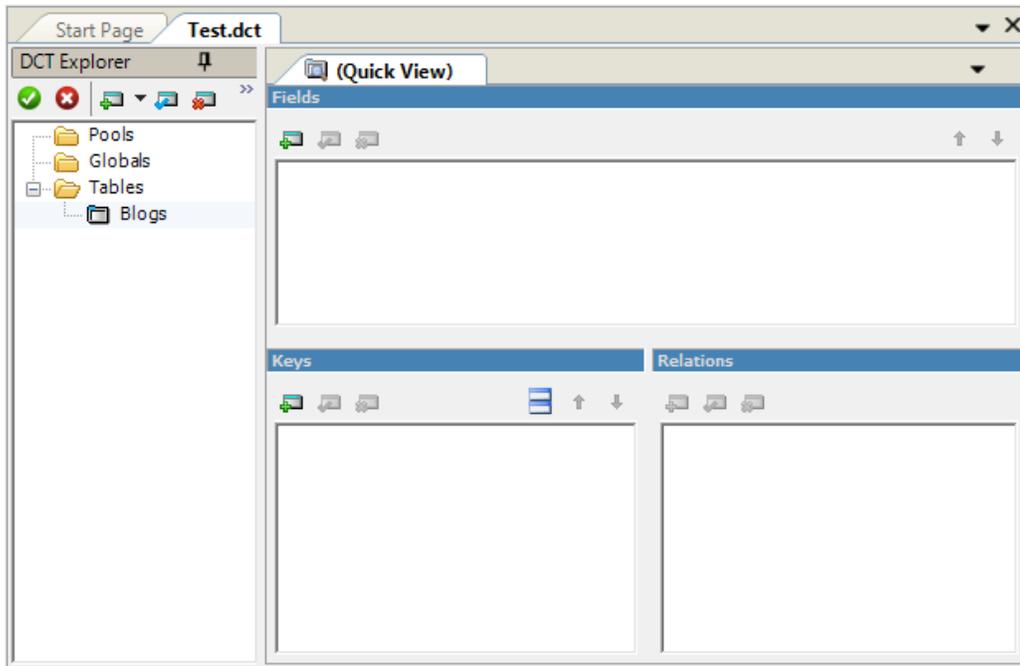


Figure 13. The tabbed Dictionary Editor

The default view in the Dictionary Editor is something called Quick View. In QuickView you can select any table in the dictionary and view/edit its fields, keys and relationships. But you can also have each table in its own tab. Just double-click on the table or right-click and choose Properties. You'll see a different (and more detailed) view of the table. You can open as many tabs as you have tables; this makes it easy to work on multiple tables at the same time, since you don't have to keep closing one table's properties to view another table's properties.

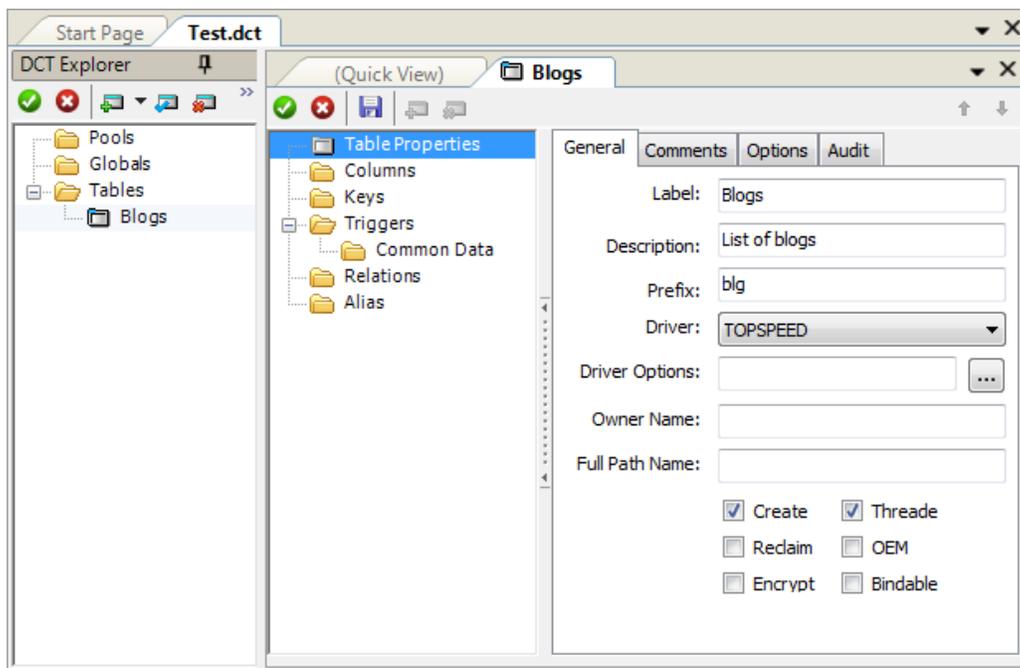


Figure 14. A table in its own tab

You can add columns to tables via the Quick View or the tab view. On the Quick View make sure you've selected the table in the DCT Explorer and click on the Add icon above the Fields list (which really should be called the Columns list). You'll

see the Column Properties window (Figure 15).

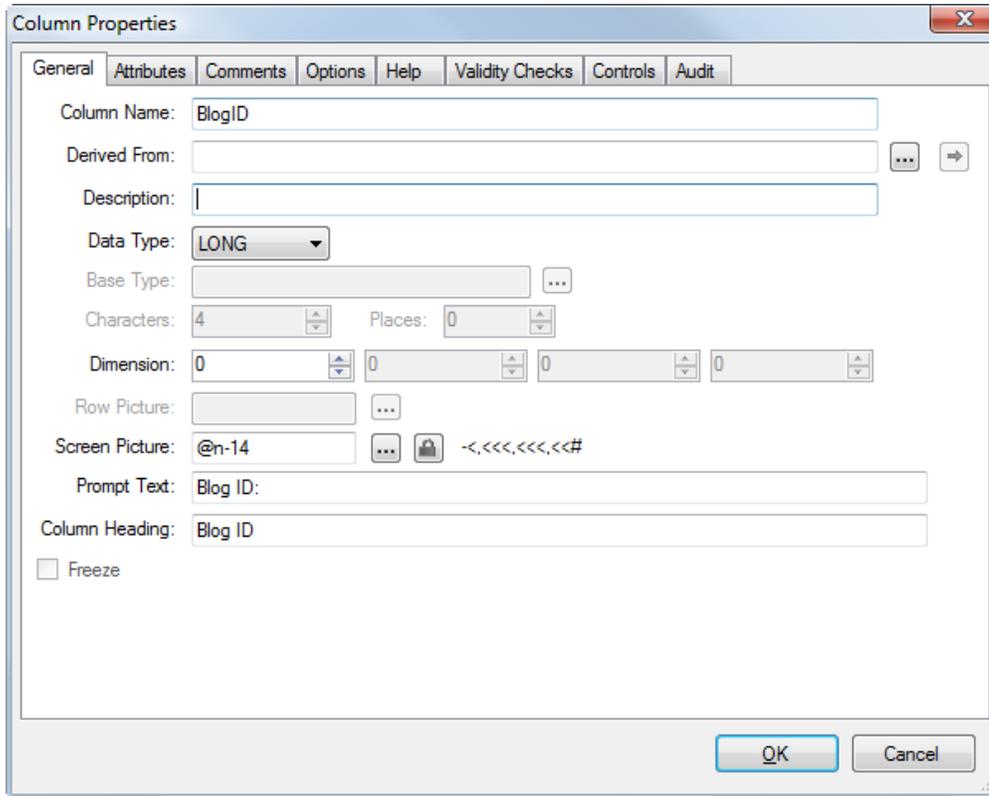


Figure 15. Adding a column

At a minimum you just need to supply a column name (a.k.a. a field label) and a data type. Figure 16 shows the drop list of available types.

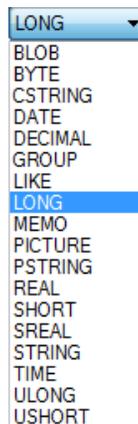


Figure 16. The data type droplist

Two of the most commonly-used types are Long (a 32 bit integer) and String (fixed length). I'll add three fields to my table:

- BlogID - a unique identifier (Long)
- Name - the blog's name, String(100)
- URL - the blog's address, String(200)
- Description - notes, String(1000)

There are a number of other configuration options for columns which I'll go into another time. For now, I have the bare minimum necessary to generate an application that will let me update my Blogs table. But it isn't an ideal minimum because I haven't defined any keys yet.

Defining keys

I'll save a detailed treatment of keys and indexes for another time; for now, the important thing to note is that it's almost always best to retrieve data from a table in some known order. And the most common way to define that order in C7 (and in previous versions of Clarion) is by specifying one or more keys in the dictionary.

To add a key from Quick View make sure you've selected the table in the DCT Explorer and click on the Add icon above the Keys list. From the table tab right-click on Keys and choose Add Key. You'll see the Key Properties window (Figure 17).

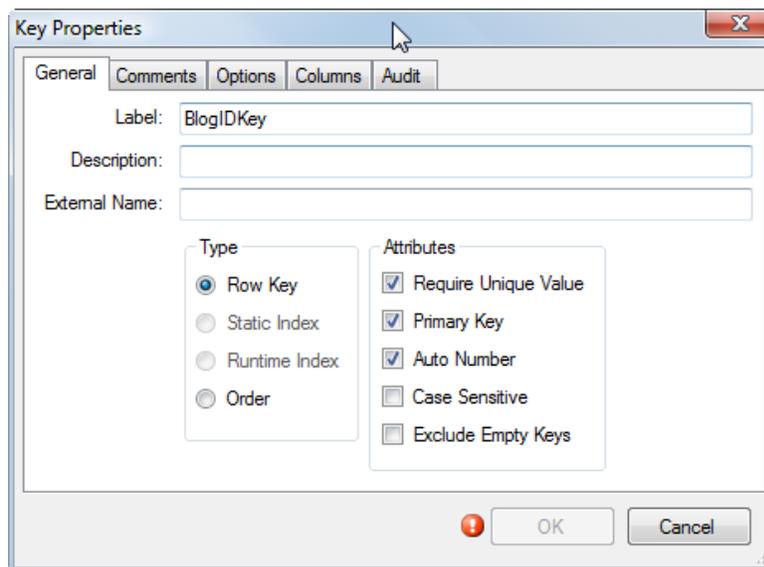


Figure 17. Key Properties

I've given the key a label (you'll find various naming conventions for keys; at a minimum I tend to go with the column name followed by 'Key') and the default type of Row Key.

I've also specified that the key is unique, a primary key, and will be auto-numbered (using Clarion's built-in auto-numbering capability).

The term "primary key" is common in the SQL world, and simply means a unique value that identifies a particular row of data within a table. You may have multiple unique keys on a table (though that isn't likely), but you can only have one primary key. In flat file systems you can sometimes get away with a pointer to the physical location of the data in the file, but in SQL databases the physical storage is abstracted; you simply don't have access to that kind of low level information, which is why a primary key is essential.

Whether you're using flat file or SQL databases, I strongly advise you to create one unique, primary key for each table.

You'll notice that in Figure 17 the error icon is visible beside the OK button. If I hover the mouse over the icon I see the tooltip message "At least one Key Component must be specified." Well, that makes sense; the key has to be based on data. I click on the Columns tab to specify a key component, and then on the Add icon (Figure 18). The Select a Column dialog appears.

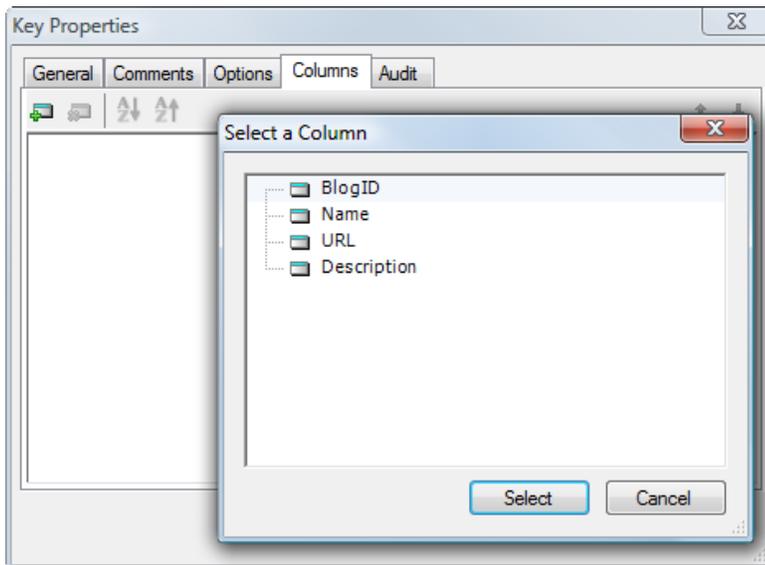


Figure 18. Adding a column to the key

Once you've selected a column (by double-clicking on the column, or selecting the column and clicking Select) the Select a Column reappears, on the assumption you may want to add more columns. If you're all done then cancel. Figure 19 shows the Key Properties window with BlogID added to the key. Note the two buttons for changing the sort order of each component. Currently the key is set to ascending order (lowest values first), but I've moved the mouse over the descending order button, and the tooltip provides clarification. You can have a mix of ascending and descending components in a given key.

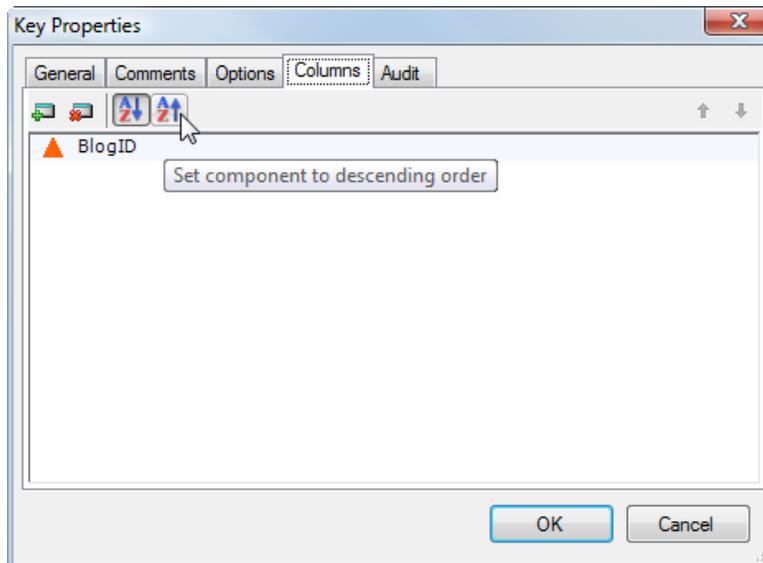


Figure 19. Modifying the key component sort order

Pools, globals, relationships and other options

I've only scratched the surface of what can be done with the dictionary editor. You can also use this editor to manage commonly-used data types, define global data, determine which controls should be used for columns on forms and reports, set up validation rules, define relationships between tables and much more. I'll come back to these topics in future editions of the C7 101 series. In the next article in this series, however, I'll use this simple dictionary to generate

an application, and I'll delve into the inner workings of the C7 AppGen.

[David Harms](#) is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors ([ASJA](#)).

Reader Comments

[Add a comment](#)

Clarion Magazine

Faster Newsgroup Access With Hamster

by Dave Harms

Published 2007-02-22

Most of the time I find the SoftVelocity newsgroups painfully slow. I don't mean the people are dense (although that happens often enough in chat), I mean it can take the better part of a minute for a message to load after I click on the header in Thunderbird. I don't know if that's a Thunderbird problem or a server problem, but I know I'm not alone. Ordinarily I wouldn't even notice as I prefer to set my newsreader to download all messages automatically, but Thunderbird, which I otherwise like a lot, has a "download all" feature that, for my purposes, is essentially useless and buggy to boot.

A few days ago Sean Cameron posted a message (which I eventually managed to read) saying that CapeSoft uses Hamster, a news and mail proxy server for Windows, to get around this problem.

I'm indebted to Sean. Since installing Hamster my newsgroup reading experience has been transformed. Now that I have a local cache of the SV server I never have to wait for a message to load.

There were, however, a few bumps on the road to Nirvana. In this article I'll show you how to set up Hamster and configure it to cache the SV news server.

Installing Hamster

The first thing is to make sure you're using the right version of Hamster. I started out with something called Hamster Playground from www.elbiah.de/hamster. I'm not going to make that link live, because I don't want you to go there accidentally. No, it isn't a porn site. Hamster Playground is in fact Hamster, but it appears to be some early version and it has an unbelievably convoluted user interface (not that I find the Hamster I use that much more intuitive, but anyway...). The main problem I had with Hamster Playground, once I figured out how to set it up, was that I couldn't get it to post to the SV news server. Instead I had to post all messages from Thunderbird directly to the SV news server, which was a bit of a hassle. Then I asked Jono Woodhouse how he'd set up posting to the SV server, and as soon as I got his screen shots I knew I had the wrong rodent in the house. Thanks, Jono!

The version you and I want is Hamster Classic 2.0 or later. I downloaded 2.1.0.11 from [SoftPedia](http://www.softpedia.com).

Installing Hamster is a breeze. It comes as a zip file, and you unpack it into whatever directory you like. A tip for those of you who travel: I occasionally sync my Thunderbird setup to my laptop, and to keep this process simple I put Hamster in a subdirectory of my Thunderbird data folder. You can install Hamster on your desktop machine or on another machine on your network; it really doesn't matter as long as you can access Hamster's port, which defaults to 119, the standard NNTP port.

Hamster comes with two executables: hamster.exe and ham.exe. Hamster.exe is the one you want to run, and you'll probably want to set up a shortcut as well.

The first time you run Hamster (see Figure 1) you'll see a bunch of warning messages about directories Hamster needed to create. You can safely ignore these warnings.

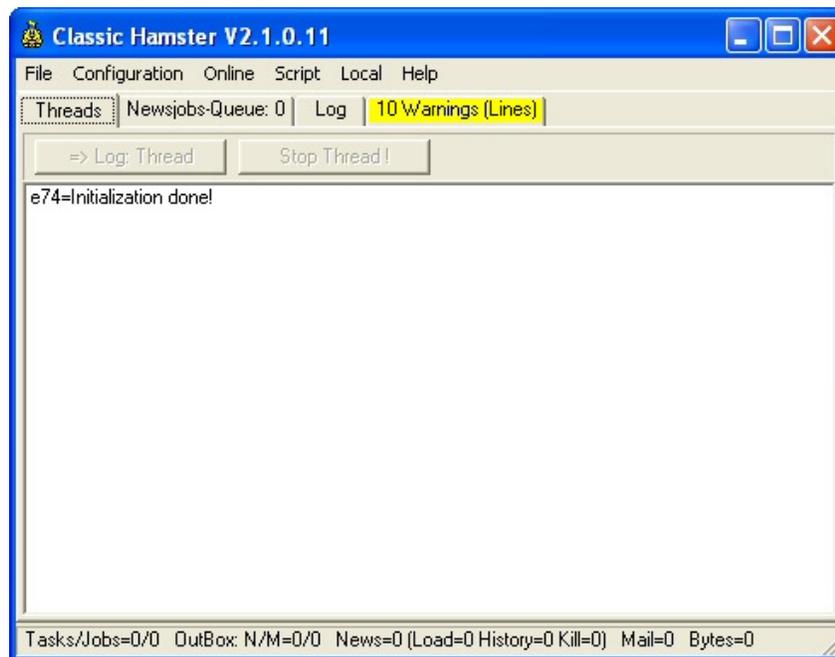


Figure 1. Hamster on startup

Next you need to set the admin password. As noted in the help, you won't be able to connect to Hamster with your newsreader unless you do this. Choose Configuration, Accounts & Passwords ..., highlight the second line (Hamster Administrator) and click on Edit. You'll see the window shown in Figure 2.

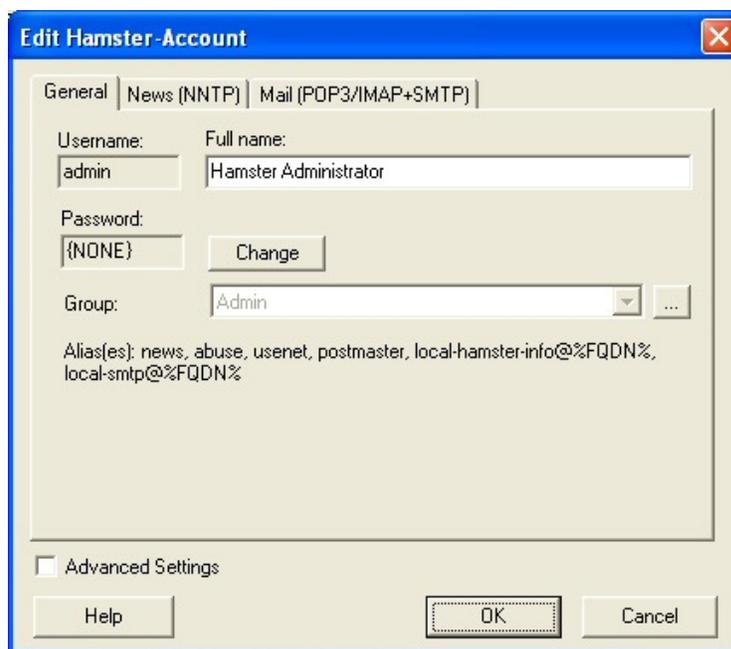


Figure 2. Changing the admin password

Click on Change to set a new password. You need this for your news server to access Hamster (and you'll need to tell your newsreader to use the userid admin and the password you specified).

Now go back to the main menu to create a news server record. Choose Configuration|News: Server, Groups, Pulls for the News Configuration window (see Figure 3).

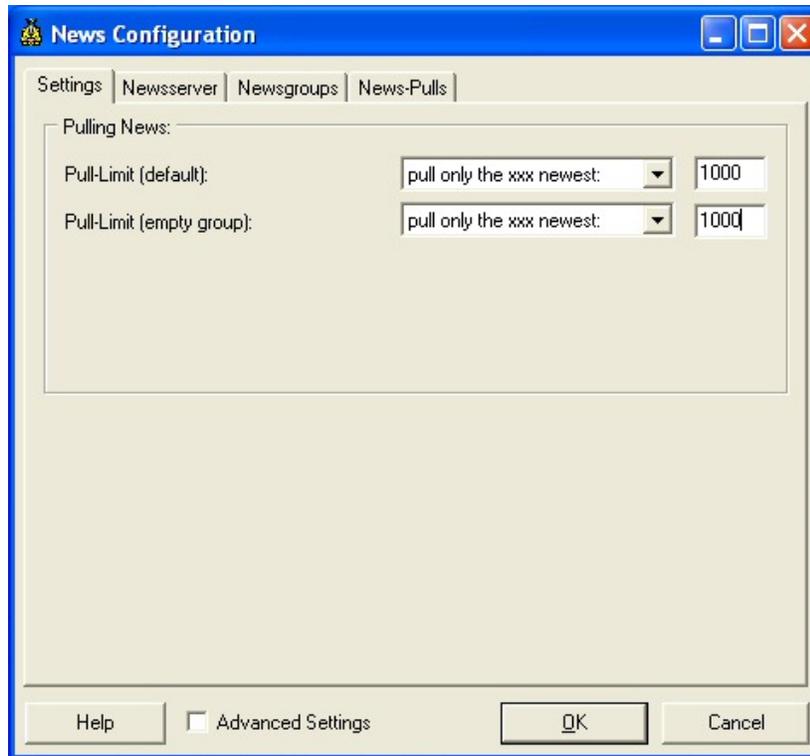


Figure 3. Setting the pull limits

On the General tab the default settings, at least on the version I installed, are to pull only the 100 oldest items for each group. That makes no sense on the SV groups; change this to the newest items. I'm pulling the 1000 newest.

Now to go the Newsserver tab and click on Add. Enter the SV news server name as shown in Figure 4.

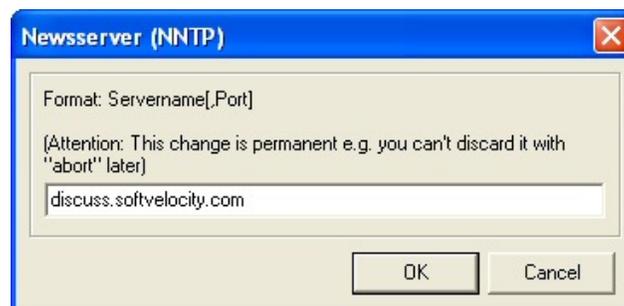


Figure 4. Setting the server name

Click OK and the server settings window appears (Figure 5).

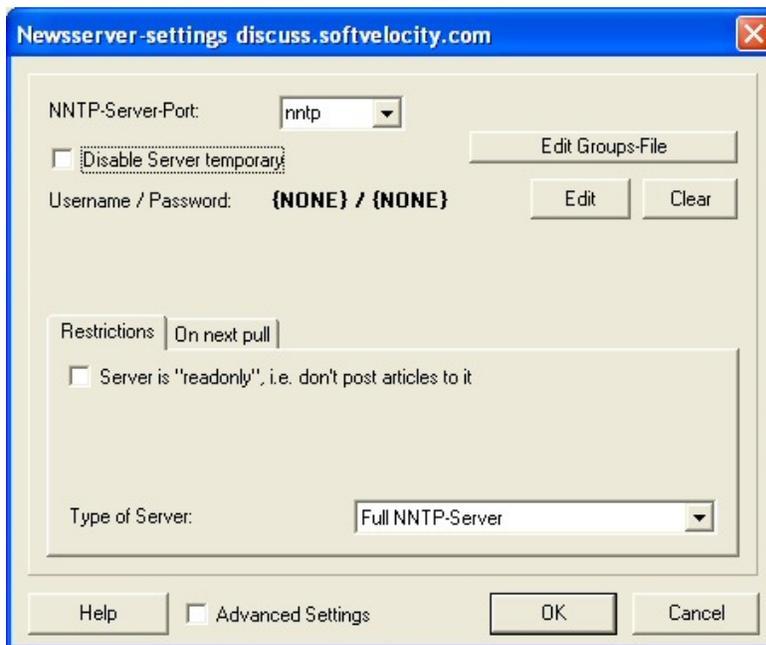


Figure 5. Server settings

If you're using a userid/password with the SV news server click on Edit to set those values.

At this point you've configured the news server but you don't yet have a list of newsgroups. To get those you have to go online. Go back to the main Hamster screen and choose Online|All NNTP-servers (or you can specify just the SV news server you set up). This tells Hamster to go online and do any waiting tasks (and like a good little rodent it knows that you need the list of newsgroups because you've just added the server).

Now you need to tell Hamster which of the newsgroups you want to pull from the SV server. Go to Configuration|News: Server, Groups, Pulls ..., make sure the SV news server is highlighted, and click on News-Pulls. Select the newsgroups you want to download and click on Subscribe selected groups (see Figure 6). Note the Show groups with drop list. The available options include matching on a regular expression, simple string matching, "begins with", and a really nifty one for anyone who uses newsgroups a lot, match on initials. For this last option "clc" would match comp.lang.clarion.

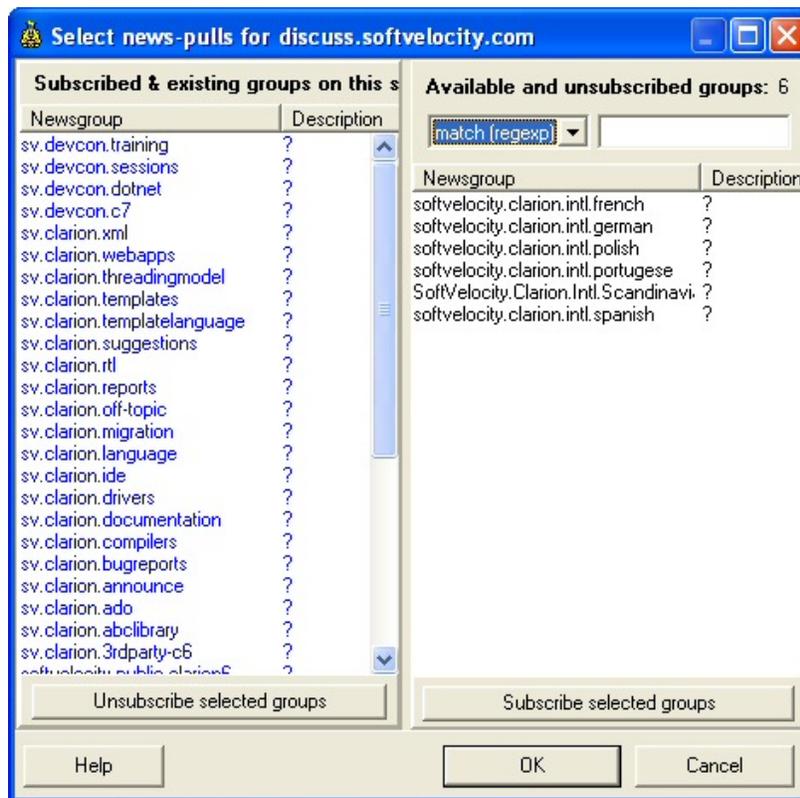


Figure 6. Selecting the newsgroups

With the groups selected you're now ready to download messages. Go to the main menu and once again choose Online|All NNTP-Servers. Depending on the Pull-limit options you specified earlier it may take a long time to download messages and get the database up to date.

To update the local cache you can do one of two things - repeat the last step of going online, which gets a bit tedious after a while, or set up an automated task to poll the SV news server.

Periodic news retrieval

If you want to automatically retrieve newsgroup messages at regular intervals you need to create a simple script. Choose Script|Manage scripts and modules ..., then click on the Scripts tag (Figure 7).

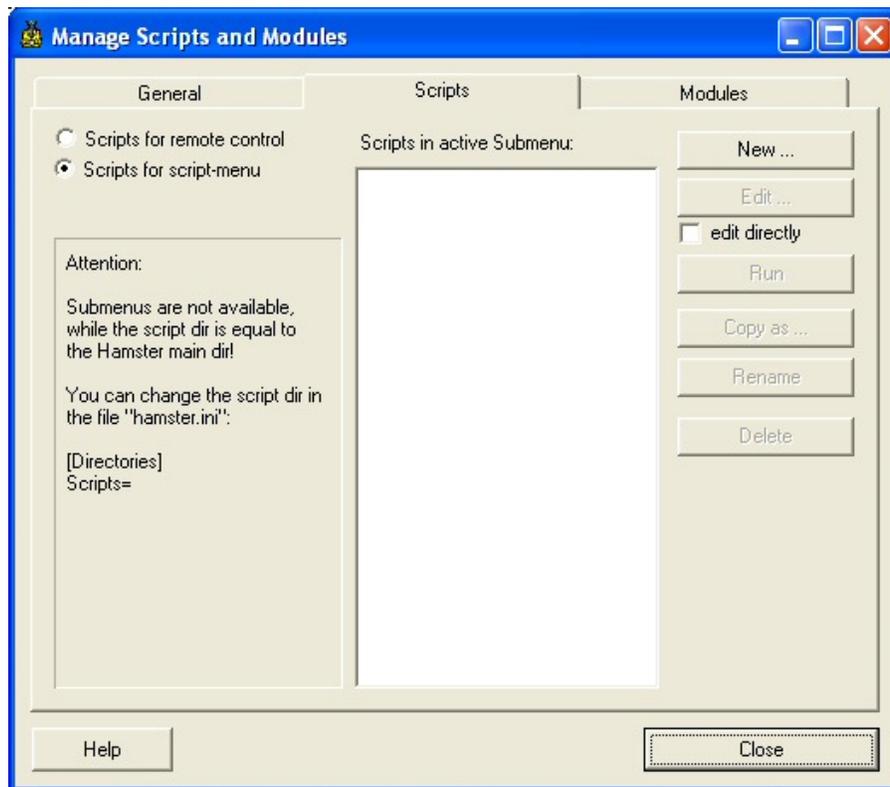


Figure 7. Managing scripts

Click on New and enter a suitable file name (Figure 8). You don't need to specify the .hsc extension.

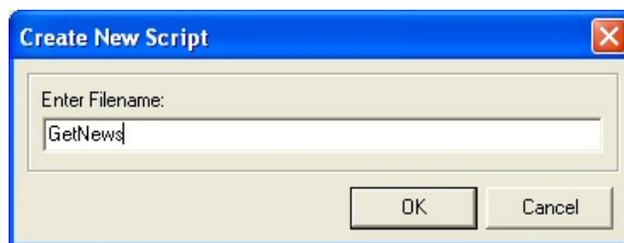


Figure 8. Creating a script

When you click OK Hamster opens notepad with a default script containing a comment and a quit statement. Delete these and paste in the following text:

```
#!hs2
while( true )
  HamNewsJobsClear
  HamNewsJobsPostDef
  HamNewsJobsPullDef
  HamNewsJobsStart
  HamWaitIdle
  sleep(300000 )
endwhile
quit
```

This script is an endless loop which posts and pulls newsgroup messages, waits until all tasks are done, and then sleeps for five minutes (sleep times are in milliseconds) before looping again.

Save the file and exit notepad; you should now see GetNews.hsc listed in the scripts list. Go back to the main menu.

To run the script immediately just select it from the Script menu where you'll now see it listed.

Running Hamster automatically

There are two more parts to fully automating Hamster: starting Hamster automatically, and starting the script automatically.

To run Hamster at startup just create a shortcut to Hamster.exe and copy it to your \Start Menu\Programs\Startup folder (at least under XP - I haven't tried this with Vista yet).

To tell Hamster to run the script automatically on startup choose Configuration|Automation and click on the Actions tab (Figure 9). Expand Hamster and click on Startup. In the Run script dropcombo choose GetNews.hsc.

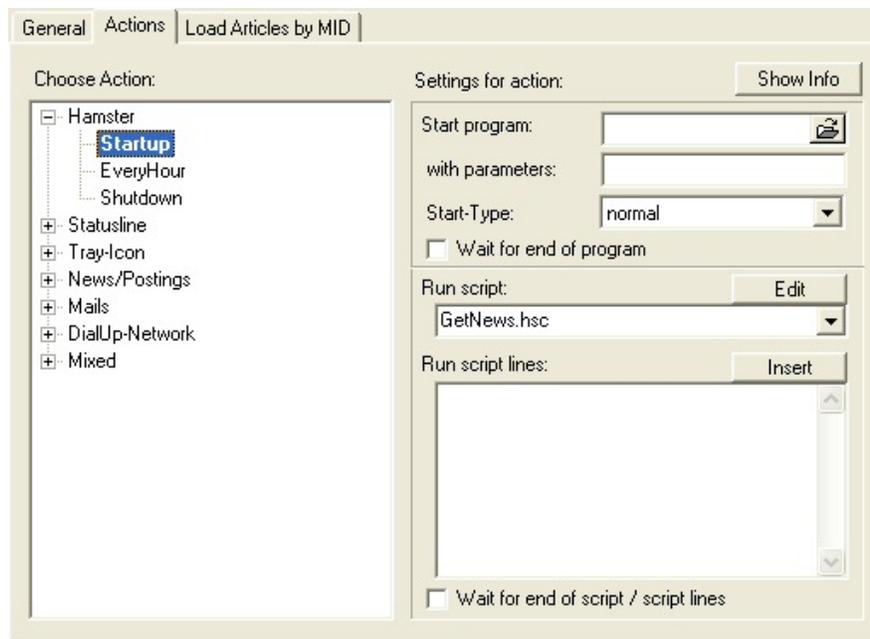


Figure 9. Setting the script to run at startup

Now you're all set. Hamster will run whenever you start Windows, and it will poll the SV news server for news items at the interval you specify in the script.

Hamster minimizes to the system tray so it's out of the way unless you need it. Sean Cameron says he's found Hamster to be a bit unstable and in occasional need of a restart. I haven't noticed any problems yet; your mileage may vary.

Posting messages

Unlike my experience with Hamster Playground, I didn't encounter any problems posting messages back to the SV server using Hamster Classic. I didn't have to modify any other settings; Hamster simply accepts my messages and posts them to the SV server on the next iteration of the script.

However, as Jono Woodhouse has pointed out to me, there is a potential problem with using Hamster as a proxy for multiple users. Some of SV's groups are public access, and some require a password. If you're logging in, the server

enforces the name that's in your login profile on the SV server. You can't change that simply by changing your newsgroup client settings. Because of this, all messages posted to the SV news server via a login account will appear to come from one user. For this reason Jono has set up two news servers within Hamster, one for the public access newsgroups, and another for the subscriber-only newsgroups.

Summary

If like me you find the SoftVelocity newsgroups too slow, give Hamster a try. It's free, it's fairly easy to configure (once you know what to do) and it will give you lightning-fast access to newsgroup messages. Hamster even supports NNTP searches, something missing from the SV server.

Hamster also offers mail proxying (POP3, SMTP, and IMAP) if that's something you're after.

[Download Hamster](#)

[David Harms](#) is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors ([ASJA](#)).

Reader Comments

Posted on Monday, February 26, 2007 by Dave Harms

I've updated the text with a correction - Jono pointed out to me that he's set up two news servers within Hamster, not two Hamster servers, as might have been construed from the text.

Dave

Posted on Wednesday, February 28, 2007 by Phillip Carroll

Well, it certainly sounded like a great idea. I guess "your mileage may vary" applies here.

Unfortunately, now the messages in TBird no longer match the headers. In fact, I have fewer messages than headers. Things are really scrambled up!

In addition, I now get from TBird:

Error!

newsgroup server responded:no such article number in this group

Perhaps the article has expired

<A921.1168277462.10038@discuss.softvelocity.com> (41090)

[Click here to remove all expired articles](#)

I am now trying to get back to where I was with TBird. :(

Posted on Wednesday, February 28, 2007 by Dave Harms

I've had my share of troubles with TB as well which is one of the reasons I like Hamster - if TB blows up I can get the Hamster cache quite quickly.

Evidently you changed your existing account to use TB instead of setting up a new one. I can't think why that should present a particular problem since the message numbers are set by the SV server. But have you tried setting up a new newsgroup account for Hamster?

Dave

Posted on Wednesday, February 28, 2007 by Phillip Carroll

I have set up a new account with Hamster as the server, and subscribed to just the new private (Alpha) group. That seems to work fine.

However, flipping thru the Hamster group folders, I am finding a lot of inconsistency among the .INI files. It seems that when it has run into timeouts, it made a mess of the ini files. For instance, comp.lang.clarion had the following .ini file section:

```
[Ranges]
Local.Max=648
news.softvelocity.com.Min=1
news.softvelocity.com.Max=130977
news.softvelocity.com.Low=1
```

As a result of this local max limit, when I added c.l.c to the new TB account, all I got was 648 messages, which were basically a random sampling of the last 4 years of c.l.c. I reset these settings using the News Configuration|Newsgroups|Settings dialog.

The logs indicated I had a lot of timeouts. I have increased the timeout value to 5 minutes for data loading, and decreased the wait time in the script loop to 1.5 minutes. I think what was happening with the timeouts was that Hamster was telling the Clarion server it wanted 130k messages for c.l.c, and this caused the Clarion server to go think about this for awhile.

Note: My global settings were set to download all messages in each group. I have now gone back to News Configuration|Settings, Set the pull limits to 2000 newest for an empty group and 500 newest otherwise, and enabled splitting with the default values of 300 as the split threshold, and 250 entries in each part.

Hamster is now happily downloading all of c.l.c in nice little batches. (No timeouts or errors of any kind) So, these settings seem to be working.

BTW: I have Hamster on a network machine. TBird Tip: If you ever want to have more than one account go to the same server (I do this all the time), edit the Windows Hosts file. Add entries with different names, aliased to the same host. Use the alias names in TBird.

Posted on Wednesday, February 28, 2007 by Dave Harms

Phil, thanks for the TB tips and the timeout info. I also found it took quite a while to get everything downloaded and at first I seemed to get a random sampling, but after a while Hamster picked up all the messages.

Posted on Wednesday, February 28, 2007 by Phillip Carroll

Changing to xxx newest turned out to be a bad idea. It then ignores all older messages. I changed back to pull all, but left the splitting feature turned on, which I think is key. I had to go in and manually change the ini files to get it to go pick up the older messages.

Also, I changed the settings in Configuration|Local Servers|NNTP|Storage Settings to all zeroes (keep forever). Otherwise, it would start purging articles after 7 days.

I want a permanent database of these articles for searchnig purposes. Which reminds me: You mentioned that Hamster supports NNTP searching. How do I use that with TBird? The only way I have been able to do TBird searches of newsgroups in the past has been to enable offline for a group, then go offline to search the downloaded messages.

Posted on Thursday, March 01, 2007 by Dave Harms

Right-click on a newsgroup and choose Search. Unfortunately TB only searches this way on Subject and From. Dunno if that's an NNTP limitation or a TB limitation.

Dave

Posted on Thursday, March 01, 2007 by Charlie Anderson

Ever since we switched to GroupWise as our email and coloboration software, I have been unable to use the SV newsgroups effectively.

I followed these excellent instructions and GroupWise is suddenly a useful news reader; and my postings will comply with our archiving requirements.

Posted on Thursday, March 01, 2007 by Dave Harms

Charlie,

Cool, I'm glad it's been helpful!

Dave

Posted on Thursday, March 01, 2007 by Phillip Carroll

I solved the problem of NNTP searching on TBird. (I am using version 1.5.0.9) This is really kewl.

Whenever a group is selected, a search entry field appears in a header line just above the pane layout. (I use classic view) I don't remember this search field in the previous version. Whatever. If you click the magnifier (search) icon, a drop down list is presented that lets you choose what to search. "Entire message" is in the list. Choose "Entire message".

Select a group in an account attached to Hamster (where TB has downloaded only headers). Hint: It may a good idea to limit your view to a subset of the articles. I initiated a full text search of clc in its entirety (about 130k articles) and TB locked up. Possibly, the fact I have Hamster on a network machine may exacerbate the problem, but evidently TB doesn't like hefty searches. On a smaller group (the new private group) I got instant results.

Enter a search value in the entry field. The entry field is an incremental locator. As soon as you enter something, the NNTP search will start, the hourglass icon will appear, and the list of headers will shrink to just those that contain the search argument. Select any of these headers, and the article will appear with all instances of the search text highlighted. Love it!

Note: Searches of groups in an account served directly by Clarion always come up empty. I guess because it does not support NNTP searching.

Posted on Thursday, March 01, 2007 by Dave Harms

Sweet! Thanks, Phil!

Posted on Friday, March 02, 2007 by George Riddell

How you get ThunderBird to work with Hamster.

The article was at the level that I expected to be connected to ThunderBird instead of NOTHINGH.

How do you connect? I've wasted too much time on this mindless matter.

Posted on Friday, March 02, 2007 by Phillip Carroll

I misspoke in my previous note. It turns out that in order to make use of the group search feature in TBird, the group must be selected for offline use, and (presumably) the messages must have been downloaded. (That is: File|Offline|Download/Sync Now) The search can be conducted with TBird in online mode, but it is not an NNTP search, it is a local search. I can't seem to find a TBird feature for auto-syncing at intervals. (Like the hamster script loop)

At this point, assuming I download/sync full articles into TBird for the search capability, it looks like the only potential value adds provided by Hamster are:

- 1) You can easily program filters into Hamster that are not possible with TBird (possibly useful for advanced twit filters)
- 2) It can presumably reduce WAN traffic when you have multiple newsgroup clients on a LAN. (They can all use a LAN-based Hamster server instead)

Since neither of these features is currently important to me, I will probably ditch Hamster. I suppose if I use a news client that supports nntp search, there may some value, depending on whether it has at least the features of TBird. But then again. I don't really know how much functionality there is in nntp search.

One thing I urgently need to do is move TBird's data folders off my C drive. It is really creaking...

[Add a comment](#)

Clarion Magazine

A Brief History of Clarion (Updated)

The following is a work in progress. If you have material you'd like to contribute to this history of Clarion, [please send it along](#) or post a comment at the bottom of the page (you must be logged in first).

Events with incomplete or uncertain information are colored yellow.

Date	Description	Notes
1973	Bruce Barrington starts HBO & Company.	Barrington writes a multi-user operating system and macro language for the IVPhase desktop computer, one key feature of which is memory-mapped video. BB forms ideas that would later evolve into Clarion.
1979	Niels Jensen starts Midas ASP	Develops and markets software for microcomputers. First product is WordIndex, an add-on for WordStar. Midas acquires an Irish shell company named Borland International Ltd. Eventually Midas begins doing business as Borland, and later Phillippe Kahn is hired to run the US operations.
1981	HBO goes public, BB lives "pretty comfortably"	BB buys an Apple II but finds Pascal frustrating. Doesn't consider this a business machine
1981	IBM releases the PC	BB says Aha! Memory mapped video! and calls up some HBO pals.
1983	Work begins on Clarion 1.0	Monty Shaw joins the team in late summer and persuades BB that development should be done in C. Bob Steinke is hired out of HBO but doesn't officially start until 1984.
1983	Niels Jensen and Poly Pascal	Jensen discovers a product for the CPM-80 called Poly Pascal, written by Anders Heilsberg. Borland acquires marketing rights and renames Poly Pascal to Turbo Pascal. Jensen's team later writes the enormously popular Sidekick.
1984	Work continues on Clarion 1.0	Bob Steinke is brought in to write the compiler and collaborate with BB on language design. Gary Liming starts a few weeks after Bob Steinke; Shaw, Liming and Steinke have known each other since grade school and become the "three musketeers" for much of 1984. John Herron is hired late in the year and helps recruit the rest of the core team, including Stephen and Kim Kemp and Tony Jackson.

1985	Borland moves to London	Begins developing new compiler line for Modula-2, C and C++
1986	Clarion 1.0 released, April.	Clarion 1.0 is released at Spring Comdex in Atlanta. To combat copy protection, the first release of Clarion requires a hardware dongle (the "Actuator"), as do all apps created with Clarion. Unfortunately the industry is in the midst of a backlash against copy protection; negative press almost kills Clarion. BB reluctantly agrees to remove the Actuator in release 1.1.
1986	JPI is formed	Niels Jensen is also one of the founders of Borland (1983).
1987	Borland USA acquires Wizard C, which became Turbo C	The Borland language team leaves and forms JPI.
1987	Designer under development	Bruce Barrington and John Herron begin writing the Designer product. Steve Parker recalls BB saying John Herron was the creator of Designer: ("It took him a year and it almost killed him").
1988	CPD 2.0 released, May	The first version of Clarion to include Designer. Wins PC Magazine's Editor's Choice. InfoWorld rates CPD along with Paradox as the best programmable database.
1990	TopSpeed technology licensed	Niels and Bruce work out a deal to use TopSpeed compiler technology in Clarion 3.0 (CDD 3.0)
1990	Report Writer introduced	Approx date: "a year and a half after CPD"
1991	Euro Sales Manager	George Ratcliff of Essex is hired as the European Sales Manager
1991	CLARIONET	No, not the thin client technology for Clarion for Windows, but an online information service announced by Clarion Software as part of the Clarion Developer's Exchange, for just \$150 per year. Ten hours of toll free access included!
1991	DevCon #1	The very first Clarion DevCon was held Sept 22-25 at the Westin Cyprus Creek Hotel in Ft. Lauderdale. CDD 3.0 announced, but little shown of substance. Keynote speakers included Bruce Barrington, Will Fastie, and Niels Jensen.
1991	Clarion Conference in Johannesburg, South Africa	November 12&13 at the VW Midrand Conference Centre. BB was present at this conference.
1992	Staff turnover	Six of the original seven R&D people, as of 1990, have left.

1992	DevCon #2	Marriott Harbour Beach in Ft. Lauderdale. CDD 3.0 shown, but not in final release yet. Jeff Duntemann the editor of PC Techniques was keynote speaker, this was presumably following his article in Dr. Dobbs Journal in 10/91 entitled "Sympathy on the Loss of One of Your Legs"
1992	CDD release at end of year (or might have been early '93)	
1992	JPI and Clarion Software merge in April, announcement made at the end of the year.	The new company has a head office in Pompano Beach and a development center in London (LDC). Later the LDC is revealed to be under contract to TopSpeed.
1993	Aussie DevCon	Sydney, Australia, CW 1.5 released, also "pen stuff" for CDD
1993	DevCon #3 , Sept, first CW demo	Ft. Lauderdale (Marriott Harbour Beach again?). David Bayliss speaks and shows some actual Clarion for Windows applications. Ross Santos finds the third party vendor displays "boring". Keynotes by Will Fastie and Mark Burgess.
1993	DevCon Boston	Hosted by Ben Brady
1993	Tom Moseley hired to work on templates	Tom previously worked with Dave Howington on the LPM add-on.
1993	Clarion RADical Conference in Johannesburg	May 6&7 at the Fourways Indaba Hotel
1994	CW 1.0 Beta 2 released	Then called CDDW
1994	CW 1.0 Beta 3 released	Mid-year release, and the first to include the AppGen.
1994	Clarion Consulting Services formed	headed up by Chris Behling, former VP of Marketing
1994	Randy Wood hired as VP of Product Development	March 21, 1994
1994	DevCon #4	The Boca Raton Resort & Club. Keynote by John Dvorak (?) Outside events (sailing etc.) are cancelled due to the weather, attendees are not reimbursed for the extra money spent to keep spouses happy.
1994	DevCon West	May 7&8, Los Angeles
1994	Aussie DevCon	Sydney, Australia

1994	Clarion Software becomes TopSpeed Corporation	
1995	DevCon West	John Griffiths recalls the DoubleTree hotel in '95 (confirmed by Stamos) and Bruce Barrington showing an early CW beta, presumably of 2.0.
1995?	South American DevCon?	Argentina?
1995/09	CW 1.5 released	
1995	CDD 3.1 released	
1996/01	Final CW 1.5 release	Version 1.502. Includes support for 32 bit executables.
1996	Kerrville gathering	Kerrville, TX. <i>Pics.</i> Ross Santos discovers fire ants.
1996/06	CW 2.0 Released	Adds object orientation, ActiveX support, enhanced SQL support
1996/09	DevCon #5	Held at the Hyatt Regency at the Orlando airport, and generally regarded as the absolute worst DevCon location.
1996	Arizona DevCon, Nov	Mesa Pavillion Hotel. Hosted by Kathryn & Phil Carroll, and I think Larry Teames had just a bit to do with it as well.
1997/01	Aussie DevCon, Feb	Sydney, Australia. The 1997 Oz DevCon was held at the Gazebo hotel, Sydney Jan/Feb and included Bruce Barrington, Tom Mosely, Scott Ferret etc. Internet Connect was shown and was very exciting. Who would have thought you could flick a switch and turn your desktop app into an internet app?? It was all going to be just soooo easy...
1997/03	Final CW 2.0 release	
1997/04	Euro DevCon	Held at the International Hotel in London. "A bunch of folks went to Beefeaters dressed up in costume. James Fortune was Friar Tuck....and a great time was had by all." - Skip Williams
1997/09	DevCon #6	Radison Bahia Mar Hotel, Ft. Lauderdale. Keynote by Peter Coffee.

1997/12	Clarion 4 released	Introduced the ABC class library and template chain. The "for Windows" was dropped from the product name. There was no version 3; the official reason was that "1.5 should have been 2.0" and so 2.0 should have been 3.0, but it's generally believed that the company wishes to avoid any numerical association with the CDD 3 debacle.
1998/02	Sydney DevCon	Sydney, Australia. The 1998 Oz DevCon was originally also to be held at the Gazebo hotel but this was changed and it was actually held the Millennium Hotel (not The President's Hotel) in late March. Presenters included Bruce Johnson (a much appreciated regular in Australia...), Erik Pepping, Scott Ferret and Gus Greces. A sales guy from TopSpeed called Antonio Rajan managed to antagonise nearly everyone with his session but fortunately none of his "future directions" such as dumping the desktop development environment and becoming an "Internet company", and changing the name from Clarion ever came to fruition... well so far anyway...
1998	eData is formed	Hank Asher goes on to hire most of the London team.
1998/05	Clarion 5.0 released	First appearance of Professional and Enterprise versions
1998/05	Euro DevCon	Ramada Gatwick Airport
1998/09	DevCon #7	Marina Marriott hotel in Ft. Lauderdale. Keynote: Mr. Edward E. Iacobucci - Citrix chairman, chief technical officer and vice president of strategy and technology.
1998/05	ETC I	Lee White holds the first East Tennessee Clarion Conference in Gatlinburg.
1998/11	ConVic	Ballarat, Victoria, Australia. The first of Chris Livingstone's ConVic conferences
1998/11	South African DevCon	Johannesburg, Indaba Hotel, FourwaysCorrection. Richard Taylor was present.
1999/02	ClarionMag begins publication	
1999/03	Aussie DevCon	Sydney, Australia. Article .
1999/04	Euro DevCon	Amsterdam, Golden Tulip Barbizon Palace
1999/05	DevCon Latin America	Article

1999	Roy Rafalco resigns, Frank Watts hired as new CEO	
1999	ConVic '99	Mt. Buffalo, Australia. Article . Article .
1999/06	Clarion 5.0B released	Final 5.0 release
1999	Clarion 5.5 beta	
1999/09	DevCon #8	Hyatt Regency's Pier Sixty Six in Fort Lauderdale. Hank Asher keynotes, Main Street USA strategy announced, and it appears to many attendees that the company is being sold out in an attempt to grab a slice of the dot com pie.
2000/05	ETC II	Lee White holds the second East Tennessee Clarion Conference in Gatlinburg.
2000	ConVic	Daylesford, Australia. Article .
2000/08	Clarion 5.5 released	Adds interfaces to the language
2000	ConDev Gescla, Brazil	Bonito - Mato Grosso do Sul
2001/10	South American ConDev	Argentina (last Argentinian Clarion conference before the economic collapse)
2001/03	ConVic 2001	Mt. Buffalo, Australia. Article .
2001	ConDev Gescla, Brazil	São Paulo
2002/01	Clarion 5.507 released	Final 5.5 release
2002	ConDev Gescla, Brazil	Florianópolis - Santa Catarina
2002	ConVic 2002	Geelong, Australia. Article .
2002/05	ETC III	Lee White holds the third East Tennessee Clarion Conference in Gatlinburg. Articles .
2002	ConDev Gescla, Brazil	Curitiba - Paraná
2003	ConVic 2003	Geelong, Australia. Article .
2003/11	Clarion 6.0 Gold	C6 Gold released. Major changes include support for full OS threads.
2004/05	ETC IV	Lee White holds the fourth East Tennessee Clarion Conference in Gatlinburg. Articles .
2004	ConDev Gescla, Brazil	Porto Alegre - Rio Grande do Sul

2004/05	Clarion 6.1	C6.1 Changes include XP theme support.
2004/09	DevCon #9 , Orlando	Held at the Disney contemporary resort. First SoftVelocity DevCon. Some Clarion# vaporware shown. Articles .
2005/05	Clarion 6.2	New features include enhanced SQL functionality, new core templates, EIP, RTL and RTF improvements.
2005	ConDev Gescla, Brazil	Foz do Iguaco, Brazil. Article #1 . Article #2 .
2006/01	Clarion 6.3	C6.3 released.
2006	ConDev Gescla, Brazil	Bonito - Mato Grosso do Sul
2006/05	Aussie DevCon	Geelong, Australia. Articles .
2007/02	First Clarion 7 hand coder's release	Build 1457 was released on Feb 23, 2007
2007/05	Aussie DevCon	Sydney, Australia. Articles .
2007	ConDev Gescla, Brazil	São Paulo - São Paulo
2007/11	First Clarion# hand coder's release	Nov 17
2008/05	Aussie DevCon	Eden, Australia. Articles . First public appearance of AppGen.
2008/10	C7 AppGen Third Party Release	Oct 21
2008/12	C7 AppGen CSP release	Dec 24
2008	ConDev Gescla, Brazil	Juiz de Fora - Minas Gerais
2009/04	C7 Gold Release	April 13
2009/06	CONDEV GESCLA (Brazil)	June 11-14 in Curitiba

My thanks to Bob Steinke, Luis De Almeida, Geoff Robinson, Paul MacFarlane, Mike Hanson, Stamos Fafalios, David Jung, David Bratovich, Jose de Mello Junior and other unnamed Clarion folk for their contributions and corrections.

Larry Sand notes that the [Internet Archive Wayback Machine](#) shows the history of the TopSpeed web site until early 2001. Then the [SoftVelocity web site](#) is phased in late 2000.

Reader Comments

Posted on Monday, March 02, 2009 by Luis De Almeida

November 12&13, 1991: Clarion Conference in Johannesburg, South Africa, at the VW Midrand Conference Centre. BB was present at this conference.

May 6&7 1993: Clarion RADical Conference in Johannesburg at the Fourways Indaba Hotel. Richard Taylor (in charge of Documentation & Training, I think) was the TopSpeed representative.

Posted on Monday, March 02, 2009 by Luis De Almeida

Correction: Richard Taylor was at the Johannesburg Clarion "Wizatron" Conference in 1998, not the Clarion RADical Conference in 1993! Maybe someone else can shed a bit more light on this...

Posted on Monday, March 02, 2009 by Larry Sand

The Internet Archive Wayback Machine shows the history of the TopSpeed web site until early 2001.

http://web.archive.org/web/*/http://www.topspeed.com

Then the SoftVelocity web site is phased in late 2000:

http://web.archive.org/web/*/http://www.softvelocity.com

Posted on Monday, March 02, 2009 by Geoff Robinson

The 1997 Oz DevCon was held at the Gazebo hotel, Sydney Jan/Feb and included Bruce Barrington, Tom Mosely, Scott Ferret etc. Internet Connect was shown and was very exciting. Who would have thought you could flick a switch and turn your desktop app into an internet app?? It was all going to be just soooo easy...

The next year the 1998 Oz DevCon was originally also to be held at the Gazebo hotel but this was changed and it was actually held the Millennium Hotel (not The President's Hotel) in late March. Presenters included Bruce Johnson (a much appreciated regular in Australia...), Erik Pepping, Scott Ferret and Gus Greces. A sales guy from TopSpeed called Antonio Rajan managed to antagonise nearly everyone with his session but fortunately none of his "future directions" such as dumping the desktop development environment and becoming an "Internet company", and changing the name from Clarion ever came to fruition... well so far anyway...

Posted on Tuesday, March 03, 2009 by Paul MacFarlane

I believe the '95 devcon was in Los Angeles at a Hotel near LAX. I was trying to get there but had a conflict.

Posted on Thursday, March 05, 2009 by Daniel Scott

DevCon4 The Boca Raton Resort & Club

Clarion pisses off all the wives when outside events (Sailing Etc.) are cancelled due to the weather. We were never reimbursed for the extra money we spent to keep our wives happy. An omen of things to come when paying Clarion in advance?

Posted on Thursday, March 05, 2009 by Mike Hanson

One of the DevCon Wests was definitely at the Doubletree Hotel, which I think was near LAX. I'm not sure if it was the one in El Segundo, though.

Posted on Thursday, March 05, 2009 by Stamos Fafalios

You have me wrong, they were Florida Devcons I was thinking about, and yes it was the Westin (not Hyatt, I was wrong there)

I have the flyer for Devcon 92 in my hand, Jeff Duntemann the editor of PC Techniques was keynote speaker, this was presumably following his article in Dr. Dobbs Journal (which I have) in 10/91 entitled "Sympathy on the Loss of One of Your Legs" and I presume the photos in there are from Devcon 1.

I have the handout of the 1991 Conference with roster of attendees and 3rd party folks also flyer for Devcon 96.

There is a bunch of stuff here like a big article by Richard Aarons (Jan 87) from PC Magazine describing the Clarion language at the time of 1.1 and saying that in '87 Clarion will bring out a compiler able to produce executables <G>.

Give me a couple of weeks and I'll find you lots of stuff.

Posted on Friday, March 13, 2009 by David Jung

1994 DevCon #4? The Boca Raton Resort & Club. Keynote by John Dvorak.

I don't know if it was #4 or not, but I was at this DevCon with my wife. I happened to throw out the binder and conference materials about a month ago after having kept them up to this time. If I had thought about it, I would have asked if anyone wanted them...

Posted on Friday, April 03, 2009 by David Bratovich

DevCon West 1994 took place on May 7th & 8th.

Posted on Monday, April 06, 2009 by Dave Harms

Thanks David.

Dave

Posted on Tuesday, April 07, 2009 by Jose de Mello Junior

Hi,

In Brazil there is a group of users called GESCLA. We are organized since October/2000 performed as a first event for professionals who work with CLARION. Today we are organizing our 10th event, which will be held in the city of Curitiba, State of Paraná in the period from 11 to 14 June 2009, under the name CONDEV GESCLA, an event organized entirely by users.

City Year

2000 Bonito - Mato Grosso do Sul

Caraguatatuba 2001 - São Paulo

2002 Florianópolis - Santa Catarina

2003 Curitiba - Paraná

2004 Porto Alegre - Rio Grande do Sul

2005 Foz do Iguaçu - Parana

2006 Bonito - Mato Grosso do Sul

2007 São Paulo - São Paulo

2008 Juiz de Fora - Minas Gerais

2009 Curitiba - Paraná

Posted on Tuesday, April 07, 2009 by Dave Harms

Thanks Jose - I'll add that to the document.

Dave

Posted on Wednesday, April 08, 2009 by Stamos Fafalios

As promised, here are my Archives if they are of use:

DEVCONS

1st Devcon 91 at Westin Cypress Creek Ft Laud Docs Yes

2nd Devcon 92 at Marriot Harbour Beach Resort Docs Yes

3rd Devcon 93 at Docs Yes

4th devcon 94 at Boca Raton Resort & Club Docs Yes

Devcon 96 at Hyatt Regency Orlando Airport Docs Yes

Devcon 97 at Radisson Bahia Mar Ft Laud Docs Yes

Devcon 98 at Marina Marriott Ft Laud Docs Yes

Devcon99 at Hyatt Regency Pier 66 Ft Laud Docs Yes

Devcon 2004 at Docs Yes

Euro Devcon 97 at International Hotel london Docs Yes

Euro Devcon 98 at Ramada Gatwick London Docs Yes

Euro Devcon 99 at Golden Tulip Barbizon Amst. Docs Yes

ETC 98 Docs Yes

ETC 2000 Docs Yes

ETC 2004 Docs Yes

Devcon West 95 at Doubletree hotel LA Docs Yes

Arizona 96 CW Expo at mesa pavilion hotel AZ Docs Yes

PUBLICATIONS

The Clarion Technical Journal complete July/Aug 89 Vol1 No1 to July/Aug 95 Vol 7 No4, all good condition also on CD

The Clarion for Windows Journal Vol1 No1 to Vol 1 No6, good condition

BoxSoft Banter 1 - 3

PPS !COMMENTS various 93 - 95

Clarion Herald 1.1 July 92 - 1.6 Jun 93

Clarionette V1 No1 to V1 No3

Clarion Developer V2 No9 to 1994, most issues

Topspeed Developer 1995 feb

Written Clarification (UK) 96 - 99 various

Posted on Thursday, April 09, 2009 by Dave Harms

Thanks Stamos! I'll update the document.

Dave

Posted on Friday, May 01, 2009 by David Jung

And to make this really interesting...where are the people named in the list now? :)

Posted on Friday, May 01, 2009 by Ray Rippey

I think somewhere around Clarion for Dos 3 Topspeed released a personal edition that was very inexpensive (I think around \$99)... the idea was great to get folks introduced to Clarion and have it affordable so schools would buy it (if my memory serves correctly). It was a great little program that I think was wizard driven so you could make simple databases very quickly.

Anyone have more particulars on this?

[Add a comment](#)

Clarion Magazine

First Look: C7 Gold Shows Promise

by Dave Harms

Published 2009-04-16

Clarion 7 Gold is now in the wild, having been released in stealth mode by SoftVelocity (a.k.a. SV) on April 13, 2009. Yes, there have been blog entries leading up to gold release, but as of this writing there's been no official announcement other than the email sent out to Core Subscription Program participants.

Originally SV announced two release candidates prior to gold, but added a third release candidate on April 8 and pushed the gold release date back from April 10. The torrid pace of bug fixes continued through the release candidate stage. RC2 added a "run only" button to the toolbar (no build invoked) and implemented the Report Designer's missing Page View. There were close to thirty fixes in the gold release also, in particular one that indicated that the root cause of many unhandled exceptions in the AppGen was found and fixed.

Advertisement

Save \$80 or more during Clarion Magazine's Tenth Anniversary Subscription Sale!

ClarionMag is celebrating its TENTH ANNIVERSARY with a HUGE subscription sale! Renew your subscription for two years for as little as \$89.50 per year. We have great deals all our subscriptions and renewals (one, two and three years). Renew/subscribe now and stay on top of C6, C7 and Clarion#!

Sale ends Friday, April 24 2009

[Subscribe/Renew Now](#)

Several items were notably missing from the gold release. The PDF documentation wasn't shipped; a download link is expected soon. TopScan somehow didn't get included in the installation (an oversight which SV says will be rectified) and a 32 bit Report Writer, as expected, was absent. Robert Zauere has said that development of the new Report Writer is well under way and indicated that a beta could go out to CSP participants by June.

C7 window designer issues

Window designer/previewer differences between C6 and C7 continues to be a hot topic. There are several aspects to this, but the most problematic one for many developers has to do with tabs. In fact, Clarion tabs aren't standard Windows tab controls; they're mimics with some peculiar behavior.

Sheets with tabs (both Clarion and standard Windows variety) are container controls, meaning they contain other controls nested within them. In a Clarion window structure, a SHEET with one TAB containing a BUTTON looks like this:

```

Window WINDOW('Caption'),AT(.,135,171),|
    FONT('MS Sans Serif',8,,FONT:regular),GRAY
    SHEET,AT(60,39,133,123),USE(?Sheet1)
    TAB('Tab 1'),USE(?Tab1)
    BUTTON('&OK'),AT(74,73,35,14),USE(?OkButton),LEFT,DEFAULT
    END
    END
    END

```

Figure 1 shows a Clarion 6 (*not* 7) window containing these controls. The button is on the tab. If you add a second tab to the sheet you'll find that the button only appears when the button's tab is selected.

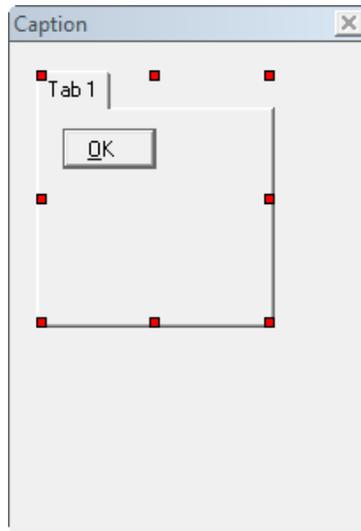


Figure 1. A button on a tab (C6)

So far so good.

But now go back to the Clarion 6 window formatter and drag the button to the area below the sheet. You'll be asked "Move button into window?" Whichever way you answer, the window will look like Figure 2.

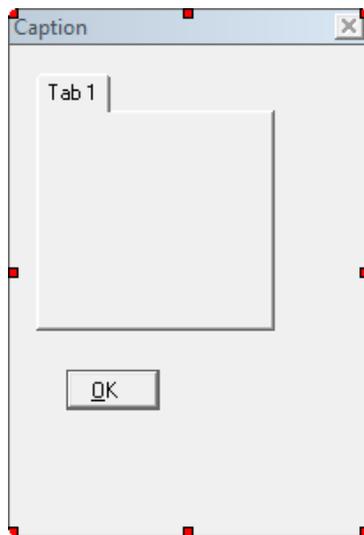


Figure 2. A button outside a tab (C6)

If you answer Yes to the question "Move button into window?" your window structure will look like this:

```
Window WINDOW('Caption'),AT(.,135,171),|
    FONT('MS Sans Serif',8,,FONT:regular),GRAY

    SHEET,AT(10,10,90,90),USE(?Sheet1)
        TAB('Tab 1'),USE(?Tab1)
        END
    END
    BUTTON('&OK'),AT(21,113,35,14),USE(?OkButton),LEFT,DEFAULT
    END
END
```

And if you answer No, the window structure will look like this:

```
Window WINDOW('Caption'),AT(.,135,171),|
    FONT('MS Sans Serif',8,,FONT:regular),GRAY

    SHEET,AT(10,10,90,90),USE(?Sheet1)
        TAB('Tab 1'),USE(?Tab1)
        BUTTON('&OK'),AT(21,113,35,14),USE(?OkButton),LEFT,DEFAULT
        END
    END
END
```

Take a close look at those two structures. The second one is downright weird, yet pretty central to how many, if not most, Clarion developers work, as I'll explain shortly. The code suggests the button is inside the tab, but visually it's outside the tab. And if you add a second tab to the sheet the button disappears when the second tab is selected, and reappears when the first tab is selected *even though the button is nowhere near the tab control itself*. Any non-Clarion developer would find this behavior

utterly bizarre.

The first structure demonstrates how standard Windows container controls operate. They only show whatever is inside their own bounds. That's because controls are really just little windows and you'd no more expect a button to be able to display outside the bounds of the tab than you would expect the sheet of tabs to display outside the bounds of the form (which is the sheet's parent window).

Clearly C6 and earlier versions of Clarion do something pretty funky with tabs.

The C7 window designer, on the other hand, is a pure .NET creature. Tabs in the C7 designer are real OS tabs and they behave the way control containers should. If you drag a button onto a sheet it's declared inside the currently selected TAB in the window structure. If you drag a button outside of the TAB, it's moved outside the TAB (and SHEET) structure in the window designer. There's none of this funny business where a control is declared inside the TAB structure but is displayed outside the TAB.

The problem is not that the C7 runtime does anything different than the C6 runtime; your C6 programs, compiled unchanged in C7, will behave exactly as before.

The problem *is* that the C7 designer, which is .NET code, doesn't handle C6's freaky container behavior very gracefully. For one thing, it won't display child controls unless at least some part of the control is physically within the container, so you have no way of seeing or moving controls positioned outside their containers. You have to resort to manipulating the source code (or pasting the source code into a text file and working with it in C6, then copying it back, which I haven't tried and can't recommend).

But not everyone uses tabs to hide/show controls outside the sheet structure, so there's an argument (though not a very strong one) that this is a special case and anyone using this approach should just change their code.

Unfortunately the designer differences in C7 result in another behavior that has the potential to affect almost every Clarion developer. I call that behavior "inadvertent parenting."

Inadvertent parenting

Find a standard wizarded browse procedure with several tabs on the browse. You'll see something like the following, which is the window definition from the School app's BrowseEnrollment procedure (I've removed all the buttons and I've abbreviated the LIST statement):

```
QuickWindow WINDOW('Browse the Enrollment File'),AT(.,260,188), |
    RESIZE,CENTER,GRAY,IMM,MDI,HLP('~BrowseEnrollment'),SYSTEM
    LIST,AT(8,20,244,142),USE(?Browse:1),HVSCROLL,FORMAT(|
        ! And a bunch of other LIST attributes omitted for clarity
    SHEET,AT(4,4,252,162),USE(?CurrentTab),#ORIG(CurrentTab),#ORDINAL(5)
    TAB('by Student Number'),USE(?TAB1),#ORDINAL(6)
    END
    TAB('by Class Number'),USE(?TAB2),#ORDINAL(7)
    END
    END
    END
```

Note that the LIST control is near the top of the structure, and SHEET is below. The tabs don't have any child controls; their only purpose is to trigger events by which the browse procedure can change the sort order. It may appear to the user as if

each browse has its own listbox, but that's not the case. The listbox appears on top because it's earlier in the Window structure. If, however, you go open this window structure in the C7 Window Designer, grab the list box with the mouse and move it ever so slightly, the window structure changes to this:

```
QuickWindow WINDOW('Browse the Enrollment File'),AT(,260,188),|
    RESIZE,CENTER,GRAY,IMM,MDI,HLP('~BrowseEnrollment'),SYSTEM
    SHEET,AT(4,4,252,162),USE(?CurrentTab),#ORIG(CurrentTab),#ORDINAL(4)
    TAB('by Student Number'),USE(?TAB1),#ORDINAL(5)
    LIST,AT(8,20,244,142),USE(?Browse:1),HVSCROLL,FORMAT(|
        ! And a bunch of other LIST attributes omitted for clarity
    END
    TAB('by Class Number'),USE(?TAB2),#ORDINAL(7)
    END
    END
    END
```

The listbox is now inside the first tab. If you click on the second tab, in the designer or at runtime, the listbox will disappear since it's now a child of the first tab.

The C7 designer moved the listbox into the tab because it has no concept of Clarion's peculiar tab behavior. There's no "Move into tab?" message. The C7 designer simply saw a control being moved, located that control's upper left-hand corner as being within the bounds of the tab, and updated the window structure accordingly.

The only way I know to correct this problem is to edit the window text and move the listbox above the sheet.

The moral: be *very* careful about making changes to the appearances of browses. Always check your tabs and be sure you haven't moved a listbox onto a tab by accident.

SV is reportedly working on a fix that will restore the move in/out behavior as found in C6. The harder part of that task is allowing controls to display outside the bounds of their parents.

Mask

Another widely used feature, MASK, also remains broken. MASK is an attribute that can be placed on windows (and, as of Clarion 7, individual controls). It impacts numeric entry, dates and money fields, for example. Date fields with the MASK attribute on the window currently take an entry but blank when tabbing off. There is an active PTSS on this.

Circular calls

A number of developers have encountered problems with migrating multi-DLL applications to C7, where those applications contain circular calls (DLL A calls DLL B and vice versa). It's hard to blame this one on C7 since it's the first version of Clarion to allow multi-project solutions, and those who want C7 to handle multi-pass compiles are really asking it to imitate third party batch compilers, not maintain some existing C6 functionality.

There are workarounds, however. The short answer is to change all project references to library references and individually build the DLLs until you have all the LIBs needed to do solution builds. It's also possible to automate this process using MSBuild, as I've explained in [Handling Circular References in C7](#) (which is now a free access article).

Usability and the learning curve

C7 is definitely a more mouse-oriented place to work than C6. In part this can be attributed to the modality of C6 (which makes hotkeys easier to manage) and the complexity of C7. SV has indicated for some time that keyboard shortcuts will be improved, and some small progress has been made. Inevitably there will be some relearning involved, as with the IDE as a whole.

Ctrl-M is a handy way to generate and build the solution; Ctrl-Q closes some windows but not others. And you still have to be careful about using the green checkmark when closing AppGen windows; click once too often and you've close the app as well. The app-level icon has been changed slightly to a check mark with what appears to be a miniature disk (the save icon) added.

The embed tree always opens up fully expanded, with the top record selected, but Ctrl-J and Ctrl-B work for finding filled embeds both in the embed list and in the embeditor. You can find the full list of keyboard shortcuts in the Help under the Getting Started section.

Subscription plan changes

With the gold release SoftVelocity has made some changes to the [subscription plans](#). The Simple Maintenance Plan (SMP) is gone, and there is new pricing on the Core Subscription Plan (CSP). Various renewal and new subscription options are available, from \$400 for a one year Professional Edition CSP renewal all the way up to \$2000 for a brand new Enterprise Edition license with one year of updates. Users with no existing maintenance plan subscription are eligible for the \$600 (PE) or \$1000 (EE) upgrade to CSP as are SMP subscribers (who receive credit for any unused portion of the SMP). All renewals must be made within 18 days of the end of the previous subscription program.

C7 in a production environment

Early results from the current ClarionMag survey show that 10% of the respondents will convert their applications immediately, 17% in three months and 27% within six months. That's a little over half of respondents looking at a near-term shift to C7.

As with the late betas, there are wide ranging opinions on the stability and usability of C7. Clearly it's possible to use C7 productively in some circumstances; equally clearly there are still important bugs to be fixed.

[David Harms](#) is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors ([ASJA](#)).

Reader Comments

Posted on Thursday, April 16, 2009 by Andrew Guidroz II

Another thing to watch for ...

Under Vista, selective export pops up a window for you to select which procedures you want to export ... except the window is blank. I'm not certain if this is Vista specific.

Posted on Thursday, April 16, 2009 by Stephen Bottomley

Hi Dave,

It's good SV has recognised that some issues really do need to be resolved and have indicated they are working on fixes, two thumbs up.

On subscriptions, did you get the information of them being 1 year from SV? Is a major update included? I know, ask SV.

I can't find any information on what you're actually get for your \$US400 - \$US2,000. Also, the Pro vs EE page seems horribly out of date, it does make it difficult to make a decision with only 18 days.. or hasn't the 18 days started, I've not been informed of any expiration. My tiny little mind is confused.

Posted on Thursday, April 16, 2009 by Stephen Ryan

change the clarion win 32 rtl sheets and tabs to be OS Ones?

any down side to this?

Posted on Thursday, April 16, 2009 by Stephen Bottomley

I would consider breaking many existing applications a downside, but I'm funny like that.

Maybe add OS containers and mark current ones as deprecated for removal in a future incarnation. This would allow SV to remove the headache in the future (C8?) and give people an opportunity to redesign existing apps without having to keep a copy of C6.

Posted on Friday, April 17, 2009 by mogamat

Gold? Maybe gold plated is a better name for the last release. I think it has some work on it still, but looking at the subscription changes, me thinks they are eager to finalise their commitment to the old C6 CSP users and get in some fresh cash. What they haven't been able to fix they've simply left out!

I certainly think we'll be suckered into at least a SMP subscription to get a fully working version 7.x....

Posted on Friday, April 17, 2009 by Stephen Bottomley

Unless I'm mistaken, Bob has made commitments to putting out fixes to C7 gold to people that have C7.0 licences (kudos again to SV).

I'm a bit more worried about moving from a subscription (you will get x for your dollars per subscription) to more of a maintenance and support agreement (we'll help you and give you upgrades as and when they are available).

The current CSP subscription renewal is 40%ish of original cost. I've never paid more than 23% for an M&S agreement.

And I still don't know if my original CSP is valid or if I'm on the 18 day clock.

Posted on Friday, April 17, 2009 by Dave Harms

Steve B - Unfortunately I don't have anything official to add as far as what CSP covers or what patches we can expect. Bob Foreman did mention a hotfix in the beta newsgroup, which to me suggests there will be some sort of no-charge patch. But that's just an assumption on my part.

Dave

Posted on Friday, April 17, 2009 by Dave Harms

Steve R - Since C7 supports previous versions of Clarion which are most definitely NOT going to change their TAB behavior, I think the only alternative is to leave the runtime as it is and modify the window designer to accommodate Clarion's non-standard tabs.

Dave

[Add a comment](#)

Clarion Magazine

Template Development And Testing In C7

by Dave Harms

Published 2009-04-30

Lately I've been writing a lot of templates, and naturally I'm interested in any productivity improvements offered by Clarion 7 (C7) and/or Clarion.NET. In fact, I started using Clarion.NET for template development a long time ago, mainly because I could easily add template files to a project where they were readily available. I couldn't figure out how to do that in early builds of C7.

But then C7 grew a template editor, and suddenly it was a much more appealing place to do template development. So I was pretty happy again, except that I found C7 a painful place to actually test the output of my templates. That's because of the lack of keyboard shortcuts. In C6 I could load, generate, and unload a template all without touching the mouse. In C7 I had to click all over the dang IDE. I also couldn't get search to work properly with templates.

Then SoftVelocity's Diego Borovitch and the generically-named "SV Support" person put me on the right track, and I discovered that I can actually write *and* test templates in C7 more effectively than I can in C6. In this article I'll show you how to do just that.

Setting up the IDE

The first thing you need to do is set up a couple of IDE options to facilitate template testing. The basic cycle I go through when writing templates is:

1. Create the initial version of the template
2. Register the template
3. Apply the template to a test application
4. Generate the code
5. Review the code and make changes to the template
6. Close and re-open the application to apply the template changes
7. Repeat steps 5 & 6 until I'm done

The weak link for me in C7 has always been step 6. I couldn't find a way to close an application, open it and generate the changes that didn't involve a whole lot of clumsy mouse-clicking. So here's what you need to do to reduce all that mouse movement to as little as a simple double-click (assuming you're simply checking the output of code generation).

First, close any open applications and go to Tools | Application Options (Figure 1). On the Registry tab make sure that Re-Register when changed is checked. You want the IDE to automatically detect any changes you make to your templates whenever an app is loaded, so that those changes will be applied.

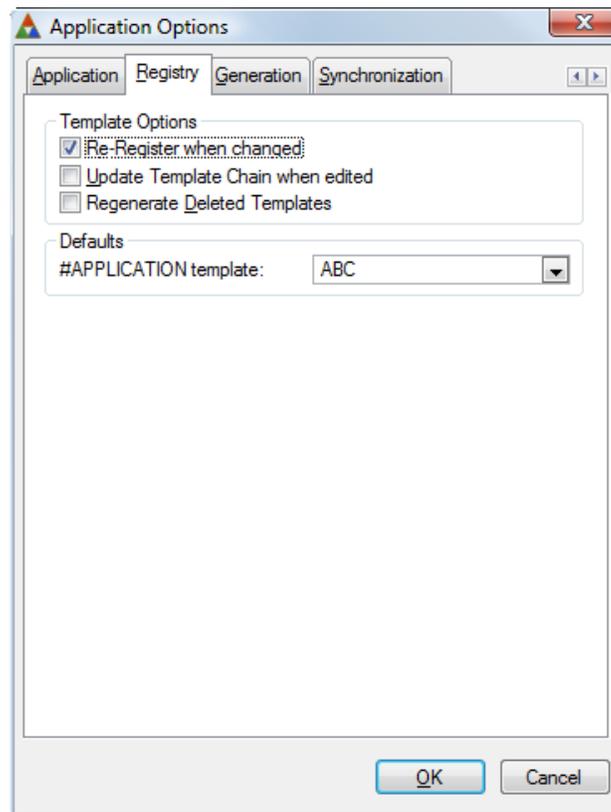


Figure 1. Verifying the Re-Register when changed template option

Second, go to Tools | Options | Clarion | Applications General Options (Figure 2). Make sure that Cache Applications In-Memory after Editing is *unchecked*! You do *not* want the IDE to cache the application. One of the biggest hurdles I faced in switching to C7 was that I had to close the entire solution in order to get the templates to be re-registered. That's because by default the registry cache isn't cleared until the solution is closed. (Note: on one occasion I found that this setting was not persisted into the next session, although I haven't been able to duplicate this. If you have problems with the registry not reloading, double-check this setting.)

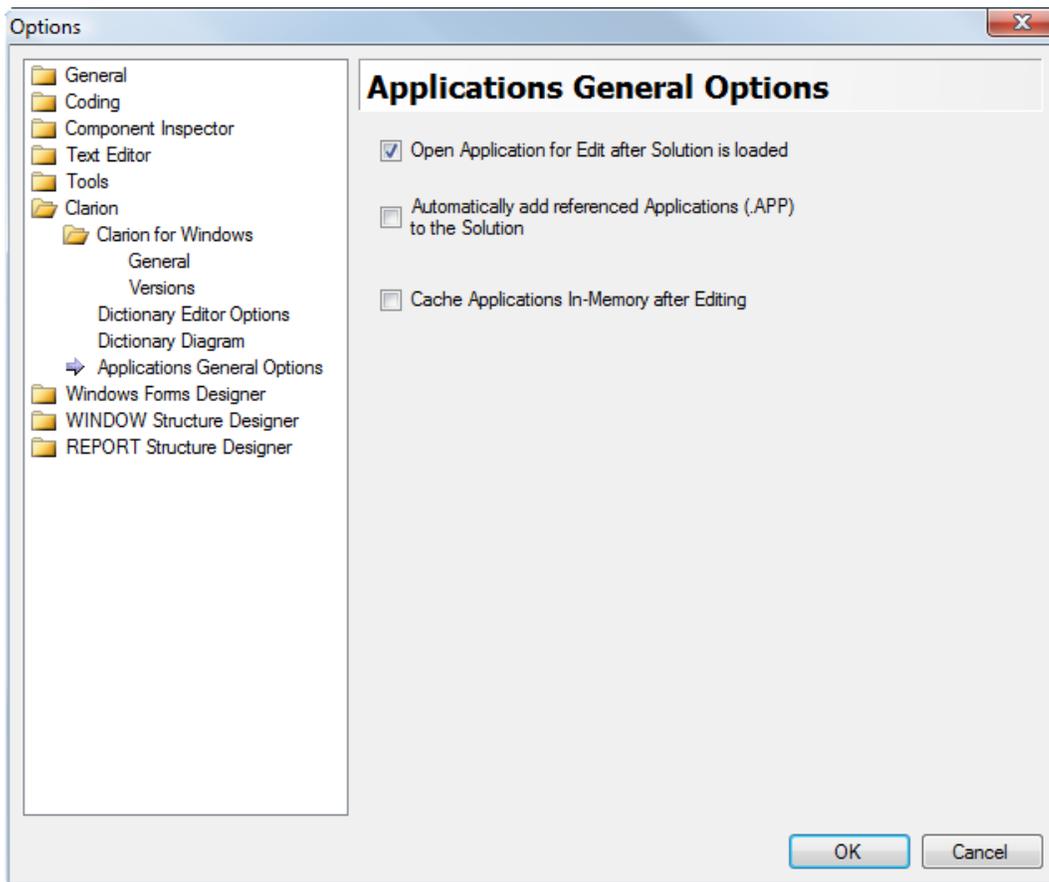


Figure 2. Disabling the application cache

That takes care of the IDE settings.

The template editing scenario

Most Clarion devs who work on templates do so using custom templates, not the shipping templates. But since everyone has the shipping templates, I'll demonstrate how the process works using ABCHAIN.TPL, the "head" file of the ABC template set. If you do follow along and make changes to the ABC templates, I strongly advise you to make a backup copy first. And really, modifying the shipping templates leads to all sorts of other problems, most notably the overwriting of your changes whenever you install an update. But that's not the subject of this article.

Let's say then, for the sake of argument, that you're going to be making changes to the ABC templates and you're going to test them using the Invoice example application.

Load Invoice.app into the C7 IDE. If you're using a C6 version of the app it will be converted for you. In any case, you'll now have a solution containing an Invoice.app and the Invoice project data, as in Figure 3.

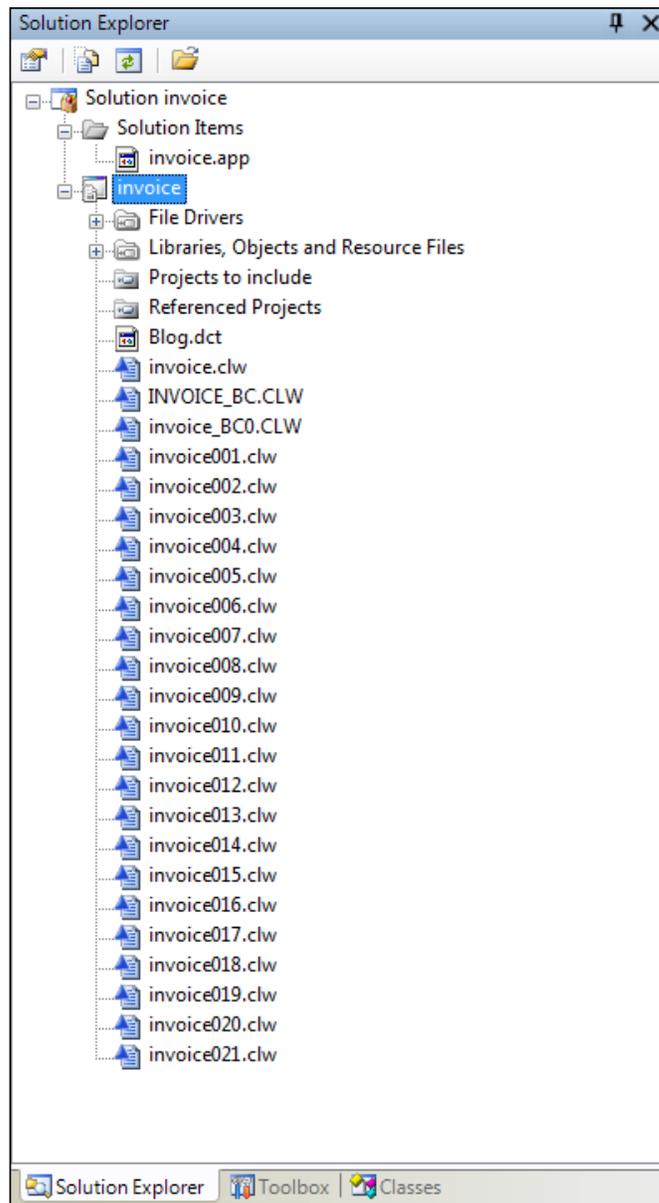


Figure 3. The Invoice solution

The dummy template project

Now you want a way to quickly and easily access the template(s) you will be modifying. I used to do this by creating a new Solution Folder in the Solution Explorer and then adding templates to that folder. And that works, but not as well as it might. I regularly want to search all solution files for, say, a certain template symbol. That simply won't work if the template files are in that solution folder. But what does work is creating a dummy project and adding the templates to that project. And this is actually a better idea than a solution folder since you can easily attach the template project to any other solution; it isn't tied to just the one solution.

Right-click on the Solution and choose Add | New Application or Project (Figure 4).

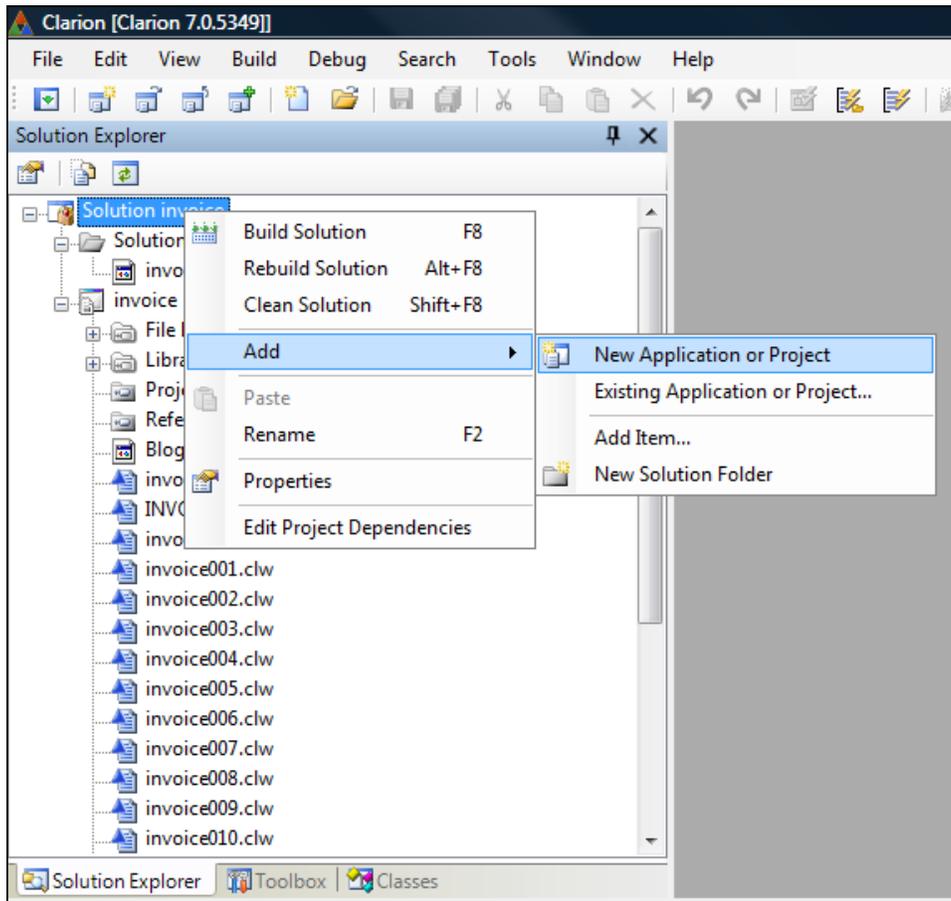
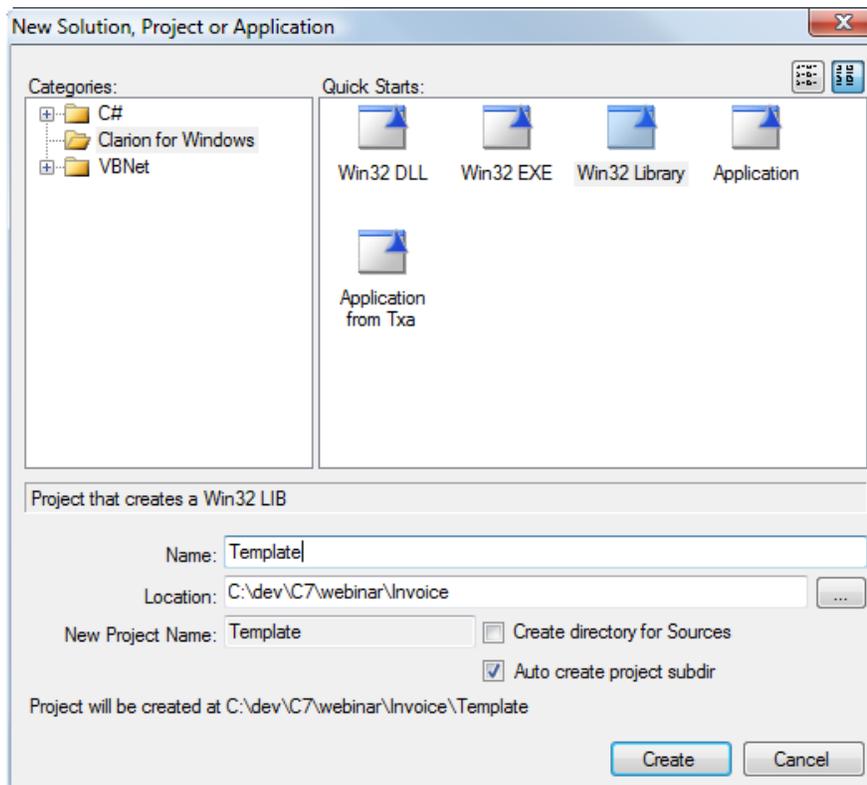


Figure 4. Adding a new project

In Figure 5 I've selected the Clarion for Windows category and the Win32 library Quick Start.



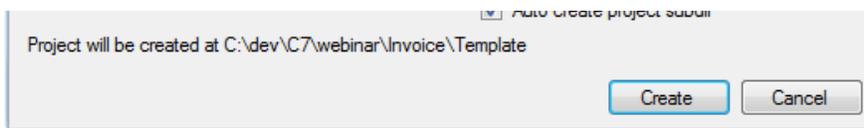


Figure 5. Creating a new template project

Figure 6 shows the solution after the project is added.

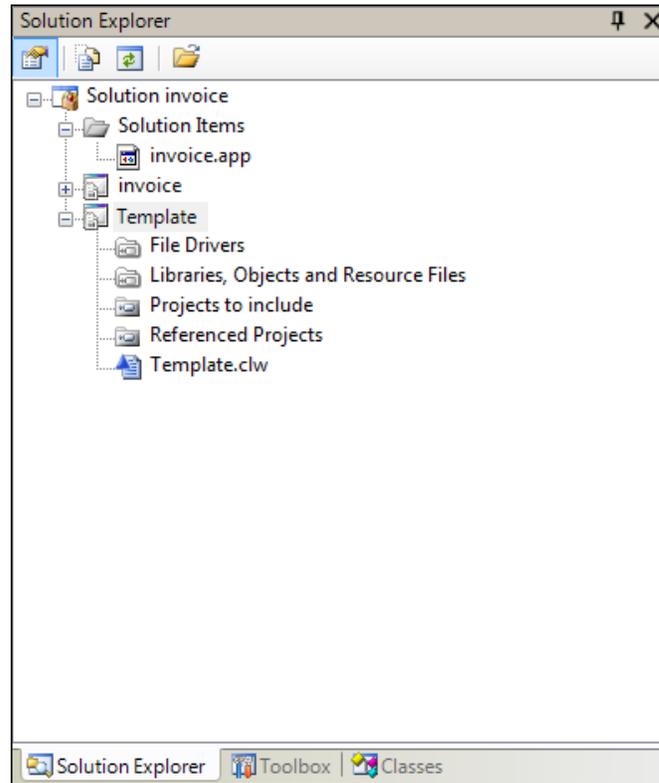


Figure 6. The Template project has been added to the solution

There are two things to do now. First, I remove the Template.clw item from the project, since it isn't needed. Then I add the templates (Figure 7).

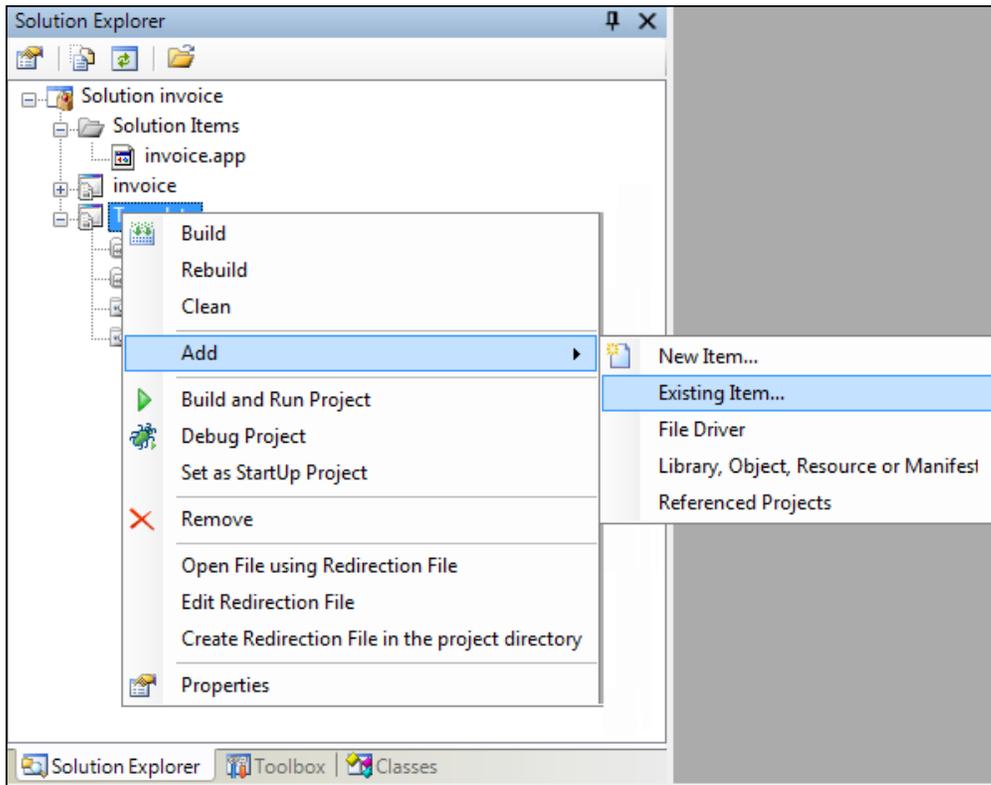


Figure 7. Adding templates to the Template project

On the file selection dialog I change the filter from Clarion Files to All Files, and I use Ctrl- or Shift-click to select the template files I want in my template project. Figure 8 shows the result.

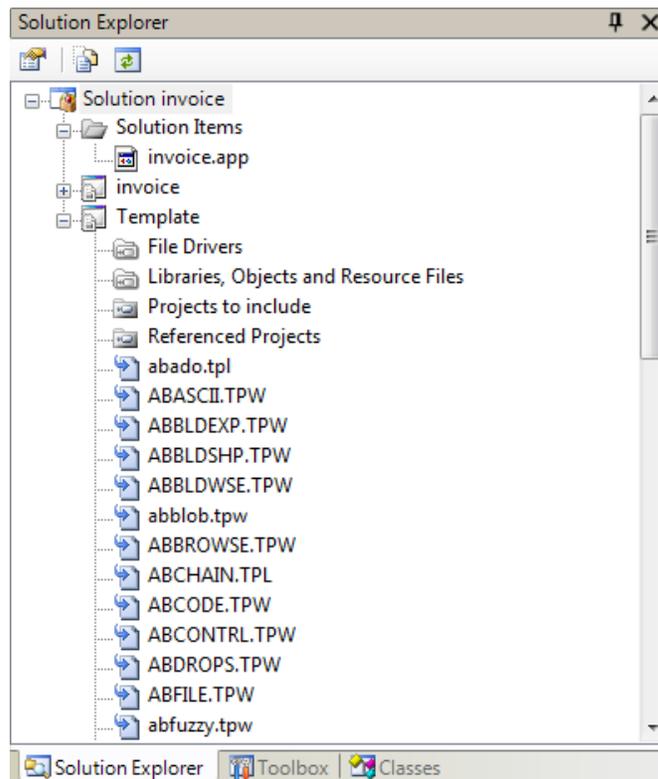


Figure 8. The solution and projects reading for testing

WARNING: If you're following my ill-chosen example of modifying the shipping templates, and you're on Vista and you're running UAC and you've installed to the default directories, that means that your templates are under the Program Files directory. Theoretically, since the IDE runs under elevated privileges you should be able to edit the templates which would otherwise be protected, but I can't guarantee that because I finally gave up on UAC last year.

To make a change to a template just double-click on it in the Solution Explorer to load it into the template editor. In Figure 9 I've added a new comment at line 71 of ABCHAIN.TPL to display a comment on the application global properties.

```

63 #PREPARE
64 #CALL(%ReadABCFiles)
65 #CALL(%SetupGlobalObjects)
66 #ENDPREPARE
67 #INSERT(%OOPPROMPTS)
68 #SHEET,ADJUST
69 #TAB('&General'),HLP('~\TPLApplication_General')
70 #DISPLAY('')
71 #DISPLAY('My comment!')
72 #PROMPT('Program &Author :',@s40),%ProgramAuthor
73 #PROMPT('Default Ico&n:',ICON),%ProgramIcon,DEFAULT('')
74 #PROMPT('&Use column description as MSG() when MSG() is blank',CHECK),%Mess
75 #PROMPT('Gene&rate template globals and ABC's as EXTERNAL',CHECK),%GlobalE
76 #ENABLE(%GlobalExternal)
77 #PROMPT('External Globals and ABC's Source Module',OPTION),%ExternalSour
78 #PROMPT('D&ynamic Link Library (DLL)',RADIO)
79 #PROMPT('Statically &Linked Library (LIB)',RADIO)
80 #ENDENABLE
81 #PROMPT('Generate E&MBED Comments',CHECK),%GenerateEmbedComments,AT(10,,180
82 #BOXED('Non Volatile Storage Settings'),AT(10,,180)
83 #PROMPT('Location:',DROP('INI File[NVD_INI]|System Registry[NVD_Registry
84 #BOXED,SECTION

```

Figure 9. Modifying ABCHAIN.TPL

If I open the Invoice application the template will be automatically re-registered; if I go to the Global Properties tab and click on Actions, I can see my comment (Figure 10).

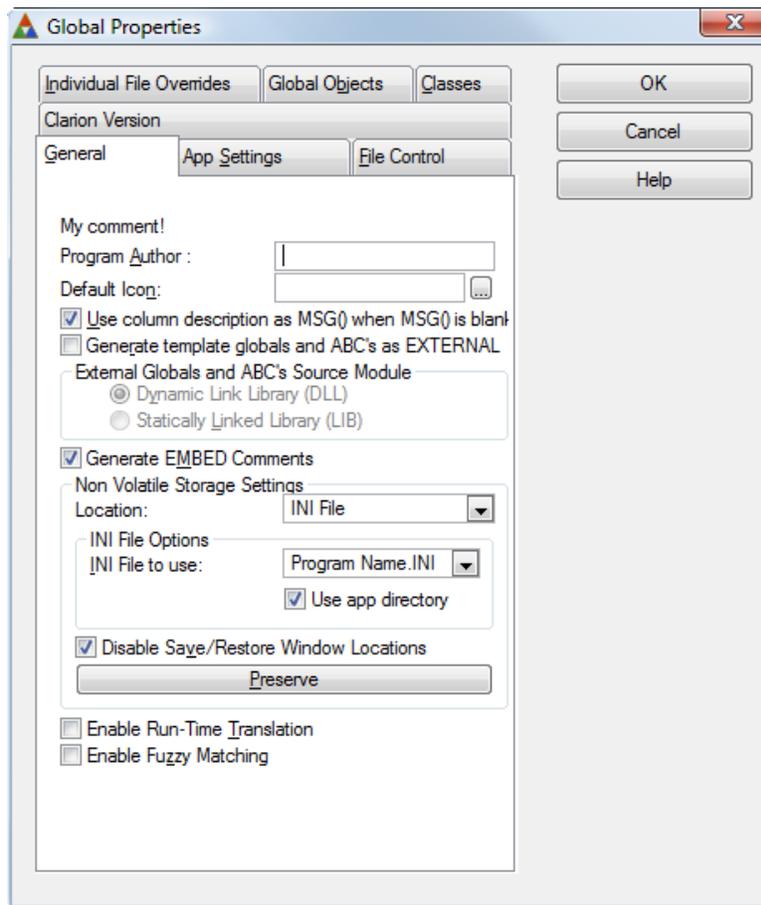


Figure 10. The template prompt appears

If I make further changes to the application, all I have to do to see those changes is:

- save the change(s) to the template(s)
- close the app (minimum one click)
- reopen it via the Solution Explorer (double-click)

I don't have to close my template files I'm modifying - they can stay on their tabs (but they won't be saved automatically).

If all you need to do is check the output of your generated code, things get even easier.

The Applications pad

Locate the Applications pad, shown in Figure 11. You may have to hunt around for it, and occasionally I've found it just disappears on me and I don't know why. If you don't see it at all, try View | Applications. If that doesn't work try restoring the layout, and then if necessary try View | Applications.



Figure 11. The Applications pad

Notice the right-most toolbar item (Figure 12) is a combination of a button and a drop icon. Click on the drop icon. On the resulting menu set Generate All to true (at least in a situation where you only have one APP in the solution).

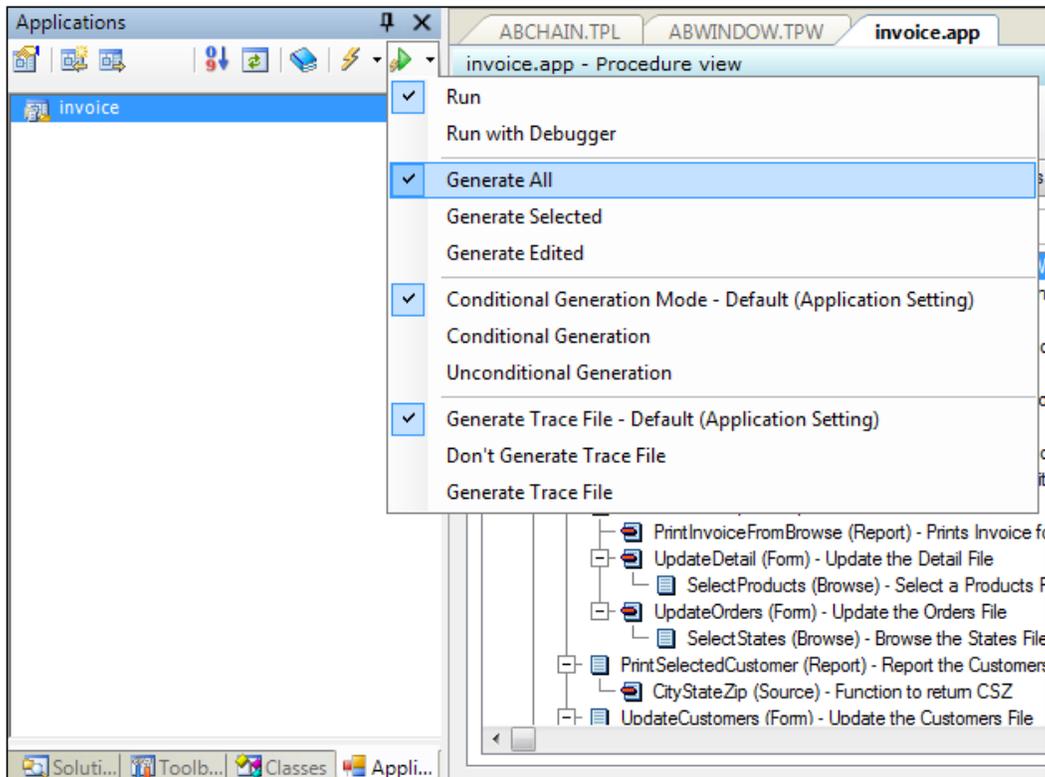


Figure 12. Setting generation options

Now you keep your APP closed. Make your template changes, save the template files, and when you want to generate the code you just click on that green go button in the Applications pad. Your app will load, generate, and unload.

Summary

Although I've used C7 (and before that, Clarion.NET) for template editing, until recently I still relied on C6 for my actual code generation because C7 seemingly forced me to reload the entire solution before my template changes would take effect. By employing the techniques I've described here, however, I'm now happily using C7 for template editing *and* generation/testing.

My thanks to Diego Borovitch and the mysterious SV Support person for their assistance.

[David Harms](#) is an independent software developer and the editor and publisher of Clarion Magazine. He is also co-author with Ross Santos of *Developing Clarion for Windows Applications*, published by SAMS (1995), and has written or co-written several Java books. David is a member of the American Society of Journalists and Authors ([ASJA](#)).

Reader Comments

Posted on Friday, May 01, 2009 by Phil Will

What I do to modify both SV shipping templates and 3rd party templates is create a modified folder under the template directory and another one under the libsrc(win in the case of C7) directories. The redirection file is modified to point to these directories first. If there is a new install, I use BeyondCompare to compare the newly installed files with the modified files. In most cases, it is very easy to copy over to the modified file wanted changes in the new install.

In the case of my own product development, all the file changes are made in the standard directories. When an update is produced, I compare a directory of shipping files to what's in the standard directories.

I also have a template that generates template code that is useful for creating shells for including class libraries - another article someday. Among other things, this handles attributes such as Categories, Link and DLL modes, and can copy over controls from a window to create control templates.

Posted on Friday, May 01, 2009 by Dave Harms

Good tips - thanks Phil. Also if you're keeping Clarion itself under version control you can more easily migrate changes to the standard templates.

Dave

[Add a comment](#)

Clarion Magazine

The ClarionMag Blog

Get automatic notification of new items! [RSS feeds](#) are available for:

 [All blog entries](#)

 [All new items, including blogs](#)

Blog Categories

- [»All Blog Entries](#)
- [»Clarion 7 Clarion.NET](#)
- [»Future Articles](#)
- [»News flashes](#)
- [»Nifty Stuff](#)

FireFox printing problems, again

Direct link

Posted Thursday, April 30, 2009 by Dave Harms

I had another report the other day of problems with FireFix printing source code as gibberish. This has come up before [in the blog](#), but I've come across a suggestion that [creating a new profile](#) is a cure for certain FireFox printing problems.

Hidden Start nixes console/batch windows (updated)

Direct link

Posted Monday, April 13, 2009 by Dave Harms

Among other things C7 RC2 now has two Run buttons. The previous Run functionality (which calls MSBuild first to verify all the pieces are there) is now assigned to a "play" button which has a little lightning bolt added. The plain "play" button is now a Run the Startup Project button which calls the solution's EXE without doing any checks first. I'm delighted to report that this means my [previous blog post](#) about a simple Clarion app to RUN whatever program was passed to it, along with a Tools menu option to call the app, is now irrelevant.

What I neglected to mention in that blog post is that I also considered creating a batch file to run the solution's EXE directly,

but batch files pop up console windows. My Clarion solution using RUN executed the EXE transparently.

But RUN isn't the solution to every problem. For instance, Brahn Patridge discovered some problems with the maximum length of parameters accepted by the template #RUN statement which he [circumvented](#) by writing out and executing a batch file. And that resulted in the annoying console window popup. Brahn eventually found a nifty tool called [Hidden Start](#) that executes batch files and console apps without displaying a window. Hidden Start is free, although a license is required for [commercial distribution](#). Thanks for the tip, Brahn.

UPDATE: Mark Riffey tells me that AVG flags Hidden Start as a virus. As far as I can tell this is because Hidden Start can be used to run programs without the user receiving any indication that the program is running, not because there's an actual virus. But use appropriate caution.
