



WHEN THE  
SOLUTION  
MATTERS

# 4D Ajax Framework v11

All live data, all your applications, all the time

In today's fast-paced business world, you need the right data, right now. So why do so many people rely on web 1.0 applications that deliver data snapshots that are out of date and potentially wrong just moments later? That's not how business works, and that's not how your web applications should work.

4D can help. We've created 4D Web 2.0 Pack, a powerful set of tools that allow you to deliver live web applications to your desktop or even to your iPhone. And at the heart of the 4D Web 2.0 Pack is 4D Ajax Framework.

Live data web applications are responsive and informative, easier to use, and most important, packed with up-to-the-minute data. Best of all, the 4D Ajax Framework makes developing these powerful business tools easier than ever before.

**4D Web 2.0 Pack: Data lives here.™**



## Live Data is Smart Data

4D Ajax Framework is a different kind of Ajax library: It's an integrated platform built on the belief that business application developers should focus on solving business problems. 4D Ajax Framework lets you focus on building the powerful web applications your customers want.

With just a few lines of code, and the 4D Ajax Framework pumping live data, it's simple to create cross-platform web applications. You can even use the 4D Ajax Framework to create powerful mobile computing applications for the iPhone and iPod Touch as well as for desktop browsers. The result? More interaction and more functionality, with less additional coding needed.



## Build Business Dashboards With Ease



4D Ajax Framework includes a Business Intelligence component to create Ajax powered dashboard reports for the desktop browser or for the iPhone and iPod Touch. You can build a new dashboard, insert charts, and perform basic calculations, all without having to write any JavaScript.

The Dashboard Editor is flexible and powerful enough to be used to build cross-browser business intelligence dashboards that can be added to existing websites, as well as iPhone applications that take advantage of the iPhone's unique features. iPhone Dashboard applications can link data directly with the phone, e-mail, or Google Maps.

Drag the objects to the report:

Database Objects

- ID
- BranchID
- Name

Formulas

Show Alternate Cols    Use Chart:     Styles: Blue    Cancel    Save

Show Inspector

Detail Header Branch	Budget	Spent
Group Header #1	Spent in year ##G	
(Detail)	Branch	Budget
Group Footer #1	Sum	Sum
Detail Footer		

Click on a field to add a group:

Add a group

- ID
- BranchID
- Name



## Use Your Live Data in Any Environment

4D Ajax Framework v11 lets you add Ajax objects to an existing web application with ease. You can also create your own front-end using popular Ajax frameworks like jQuery, or even use the built-in client interface. Our framework easily integrates not only your data, but also file types like video, PDFs, Flash animation, and streaming audio.

### A More Interactive Experience

Live data is only useful when it's clean data. Our advanced event handling makes sure that data validation is immediate and that any errors are managed in a user-friendly way.



## Developer Controls - You Have the Power

4D Ajax Framework v11 was built to give 4D developers access to all the power and flexibility that Ajax, JavaScript and CSS has to offer. You choose what users see, what they can do to the data, and what happens on the back end.

### More Objects and More Controls

4D Ajax Framework v11's powerful Ajax objects are building blocks that can be used as-is, or customized completely. For example, the Data Grid object is an extremely powerful list box that offers full control over every aspect of the Grid object – some 80 commands in all. These include drag and drop support, independent cell styling, and many more controls, all of which can be extended through the JavaScript API.

### Hooking It Up

4D Ajax Framework comes with a library of built-in hooks for application logic and controls to handle:

- Form events
- User authentication
- Session management
- Business logic
- Debugging tools



All of the hooks and Ajax objects are designed to give you maximum control with as little additional coding as possible. Plus, 4D Ajax Framework v11 is structure friendly. Using it doesn't add any tables or forms to your existing database structure.

## 4D Ajax Framework – Breathe life into your web data today!

There's no faster or easier way to build 4D applications for the web than with the 4D Ajax Framework. It's designed from the ground up for hassle-free code building that increases your productivity and delights your customers.

Until recently, web application development was limited by technology. Now, with the power of Web 2.0 and Ajax, you're only limited by your own imagination. In a few minutes you can be a data lifesaver and create beautiful, powerful live web applications that run anywhere. Your data will thank you. And so will your users.

### 4D Ajax Framework Features

#### Easy Install and Configuration

- Web Native (No Browser Plug-Ins)
- Server Side Install
- Server Side Preferences
- XML Based Preferences
- Point and Click or Programmatic Configuration
- Cross Browser Support
- Windows, Macintosh, and iPhone/iPod Support
- No additional objects (Forms or Tables) added to 4D Structure
- User/Group based Preference controls
- Native 4D or Custom Password system support
- XML resources
- Compile with all variables typed

#### Developer Controls

- 4D Event Callbacks
- JavaScript Event Callbacks
- Developer Hooks for advanced customization such as Security and Data Modification
- Session Management Controls
- Developer Defined Windows
- Developer Defined Actions
- Error Stack for Debugging

#### Powerful Interface

- Dashboard Toolkit for Desktop and iPhone/iPod users
- Dashboard Toolkit supports drag-and-drop capability
- Data Links for built-in iPhone Applications (e-mail, phone, map)

- Live Data
- Live Scrolling
- Tab Interface
- Input and Output Forms
- Automatic Image handling
- Customizable User Messaging
- Customizable Data Formatting
- Group-based Localization
- Immediate Field level Validation
- Multi Windows
- Grid, Calendar, Image Matrix, Data Tree, and Dashboard Controls
- Extensible with browser plug-ins – Flash, QuickTime, more!

#### Use any Data

- Automatic Table Support
- Eight Levels of Views (Joins)
- Developer Defined Selections (Arrays)
- Use Data from any ODBC Datasource
- Customize Data via 4D or JavaScript Callbacks
- Link External Sites with local data (Mash Ups)
- Extended Character Set Support
- Create your own Query Templates via XML
- Easily override Existing CSS without breaking the Framework
- Customize Input and Output fields based on User Groups
- Dynamic Choice Lists

### Requirements

#### Development

- 4D Developer Professional v11 SQL
- 4D/4D Server Developer Edition 2004.7+
- 4D Web Server 2004.7+

#### Browsers

- Internet Explorer 7+ (Windows), Mozilla Firefox 2+ (Windows/Mac OS), Safari 3+ (Mac OS),

#### Deployment

- 4D v11 SQL Web Application Server
- 4D/4D Runtime Single User 2004.7+
- 4D Web Server 2004.7+