



# Web-based Application Platforms: Part 1

presented by John Kelley

# Coghead: Stats

- Founded 5/2003
- Site launch 8/2006
- Total funding \$11.2 M
- Employees 21
- User base 25,000+

## About:

The Coghead platform is an all-in-one, 100% web-based application environment that lets you quickly create and deliver a nearly limitless variety of business applications. Build your applications without coding and then deploy them to your end-users immediately. There's never any software to install or servers maintain.

# Coghead: Main Concepts

- Collections: Containers for data records
- Actions: Application logic performed on records

The screenshot displays the Simple CRM application interface. At the top, there is a navigation bar with the title "Simple CRM" and version "V0.1 Prototype". The user is signed in as "romulusx" and can sign out. The account is "john-test". There are links for "HOME" and "HELP". Below the navigation bar, there are tabs for "Leads", "Accounts", "Opportunities", "Contacts", "Products", "Activities", "Resources", and "Help". The "Leads" tab is active, showing a "Leads View" with a search bar and an "Advanced Search" option. The table below shows a list of leads with columns for Lead Name, Lead Status, Lead Quality, First Name, Last Name, Phone, and Create Date. The first lead is "Office move" with status "Contacted", quality "Warm", first name "Frank", last name "White", phone "231-124-1412", and create date "2008-01-02". The second lead is "Office expansion" with status "New", quality "Hot", first name "Peter", last name "Roberts", phone "123-123-1235", and create date "2008-01-04". Below the table, there is a detailed view of the "Office move" lead. It includes fields for Lead Name, Company Name, Lead Owner, Lead Status, Lead Quality, Lead Source, Create Date, First Name, Last Name, Phone, and Email. The description field contains the text "They have 100 employees and plan to replace furniture for the whole company". Below the description, there is a section for "Related Activities" with a table showing activities like "Send a price quote" with status "Not Started", priority "High", assigned to "Susan Sales", and due date "2008-01-25".

Signed in as romulusx Sign Out  
Account: john-test HOME HELP

Leads Accounts Opportunities Contacts Products Activities Resources Help

New More EDIT Leads View

Advanced Search 25 Records 1 - 2 of 2

Lead Name	Lead Status	Lead Quality	First Name	Last Name	Phone	Create Date
Office move	Contacted	Warm	Frank	White	231-124-1412	2008-01-02
Office expansion	New	Hot	Peter	Roberts	123-123-1235	2008-01-04

\* Lead Name\*  
Office move

Company Name  
ACME Inc

\* Lead Owner\*  
John Marketing

Existing Account

Lead Status  
Contacted

Lead Quality  
Warm

Lead Source  
Website

Create Date  
2008-01-02

First Name  
Frank

Last Name  
White

Phone  
231-124-1412

Email  
frwhite@mytestcompcorp.com

Description  
They have 100 employees and plan to replace furniture for the whole company

Related Activities

Subject	Status	Priority	Assigned To	Due Date
Send a price quote	Not Started	High	Susan Sales	2008-01-25

Show Properties

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# Coghead: Form Editor

The image shows the Coghead Form Editor interface. On the left is a 'Form Widgets' palette with various controls like Column Box, Section, Tab, Label, Input Box, Text Area, Check Box, Radio Button, Date Picker, Combo Box, List Box, Attachment, Image, Link, Action Button, and Grid. The main canvas displays a form layout with fields for Lead Name\*, Company Name, Lead Owner\*, Existing Account, Lead Status, Lead Quality (highlighted), Lead Source, Create Date, First Name, Last Name, Phone, Email, Description, and a Related Activities table. On the right, the 'Data Structure' panel shows a list of data fields including LeadName, NewAccountName, LeadOwner, LeadStatus, LeadQuality (highlighted), LeadSource, FirstName, LastName, Phone, and Email. Below it, the 'Properties' panel for a 'Combo Box' widget shows options for Data and Widget, Simple and Calculated modes, and fields for Data Type, Values, Required Field, and Display in Collection view. At the bottom right, there are 'Save' buttons.

# Coghead: Action Editor

The screenshot displays the Coghead Action Editor interface for an action named "Detonate". The interface is divided into several sections:

- Steps:** A vertical list of action types on the left side, including Branch, Loop, For Each, Exit, Perform Action, Retrieve Records, Alert User, Set Value, and Script.
- Flowchart:** A central workspace showing a flowchart for the "Detonate" action. It starts with a green funnel labeled "Leads", followed by a tree icon, two grey rectangular boxes, a gear icon, another grey box, and an "IF" decision diamond. The "IF" diamond has an "ELSE" diamond to its right. Both diamonds lead to a final red funnel labeled "Leads".
- Variables:** A panel on the right titled "Variables" with the instruction "Drag and drop onto editor to create a SetValue". It lists variables: Input (Leads), Output (Leads), ScratchPad (), Context (Context), and AdditionalInput (). Below the list is an "Add Custom Variable" button.
- Input Properties:** A section below the variables panel with "Input Properties" including radio buttons for "Single Record" (selected) and "Collection", and a checkbox for "Action has no Input". Below these are input fields for "Collection" (containing "Collection") and "Leads" (containing "Leads"), with an ellipsis button to the right.
- Footer:** An orange bar at the bottom containing "Save", "Save and Exit", and "Exit" buttons.

# Coghead: Extras/Summary

- Application Versioning
- REST access to your data
- Coglets
  - Widgets that expose slice of application in other web pages

## Takeaway:

- Business applications written by business users (with some tech savy)
- Adobe Flex front-end, Amazon EC2 back-end

# BungeeConnect: Stats

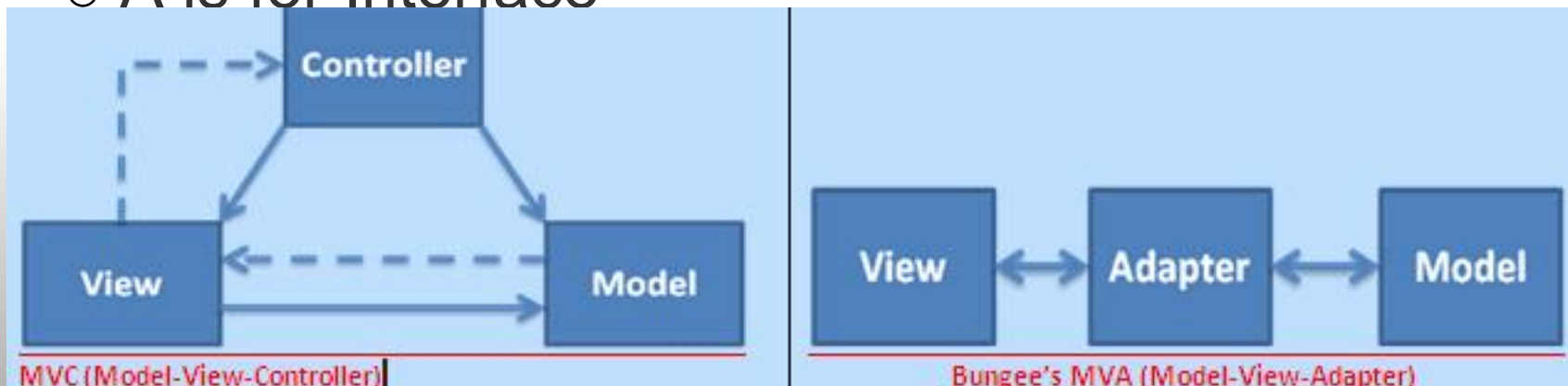
- Founded 2005
- Total funding \$8 M
- Employees 38
- User base ?

## About:

Bungee Connect™ is a web-based 100% Ajax environment for creating interactive web applications. The goal of the product is to allow developers to “efficiently create and instantly deliver rich web applications for the small-to-medium business market.”

# BungeeConnect: Main Concepts

- Full featured IDE completely geared to web apps.
- Object oriented
  - classes
  - inheritance
  - interfaces (8 types)
- Logic Drag and Drop
- Applications built around Model-View-Adapter (MVA) pattern
  - A is for Interface





# BungeeConnect: Main View

The screenshot displays the Bungee Builder application interface within a Windows Internet Explorer browser window. The browser address bar shows the URL `https://builder.bungeeconnect.com`. The application's main menu includes **Start**, **Design**, **Staging**, **DesignGroups**, and **Preferences**. The **Design** tab is active, showing a central **Design Editor** with a toolbar above it. The design editor contains a form with two sections: "Object Collection to List selection example:" and "Selected Item:". The "Object Collection" section has a list with "Item 1", "Item 2", and "Item 3". The "Selected Item" section has input fields for "First Name:" and "Last Name:". To the left is a **Toolbox** with various controls like "CollectionStatementComplete", "DataEdit", "DynamicForm", "GoogleMap", "ImageButtonPopup", "Label", "MonthCalendarList", "MultilineLabel", "PopupStyleButton", "PulseTimer", "StatementComplete", "TabList", and "Tree". Below the toolbox is a tree view of "Common Controls" including "Text", "All", "Buttons", "Embedded", "Other", "Lists", "Containers", "Menu", and "DateTime". To the right is the **Solution Explorer** showing a project structure under "Control\_Examples (amy@bungeelabs.com)", including a "List" folder with items like "Ex1\_PicFruit", "Ex2\_VegetableCollection", "Ex3\_PersonCollection", "Ex4\_PersonCollectionWithSelection", "Ex5\_PersonCollectionWithViewSelection", "Ex5\_EditPersonCollection", "Person", "Detail", "NewPersonDetail", "DoubleClick", "Remove", "Fullname", and "LastnameFirst". Below the design editor is the **Property Editor** for the "selectedPerson" object, showing properties like "Access Modifier" (Public), "Collection" (unchecked), "Default Value" (Path, <not set>), "Enumeration" (unchecked), "IsMap" (unchecked), "Is Persistent" (unchecked), "Name" (selectedPerson), "Nullable" (checked), and "Type" (Person). At the bottom right, the **Solution Detail** view shows a tree for "Ex4\_PersonCollectionWithSelection" with items "Person selectedPerson", "Ex4\_PeopleSelection", and "ListConnection # ListAdapter".

**Toolbar**

**Tabs**

**Toolbox**

**Design Editor**

**Solution Explorer**

**Property Editor**

**Solution Detail**

Property	Value
Access Modifier	Public
Collection	<input type="checkbox"/>
Default Value	Path <not set>
Enumeration	<input type="checkbox"/>
IsMap	<input type="checkbox"/>
Is Persistent	<input type="checkbox"/>
Name	selectedPerson
Nullable	<input checked="" type="checkbox"/>
Type	Person

# BungeeConnect: Code View

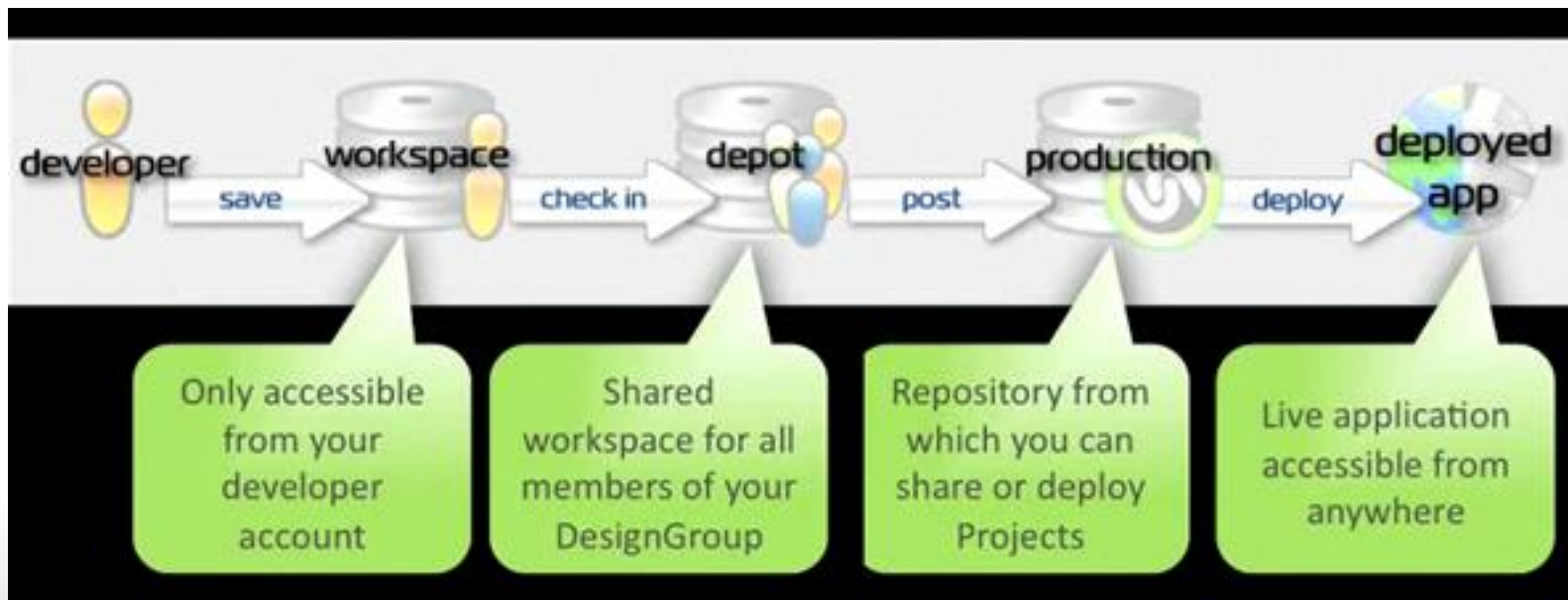
The screenshot displays the BungeeConnect web builder interface in a Windows Internet Explorer browser. The address bar shows the URL `https://builder.bungeeconnect.com/internal`. The application's navigation bar includes tabs for Design, Staging, DesignGroup, and Preferences, along with utility buttons for BCDN, Docs, and F. Below the navigation bar is a toolbar with Solution, Run, and Code buttons. The left sidebar contains a Schema tree with categories like field, function, and var, and a Statements list including OnError, assignment, call function, case, collection iteration, comment, dialog message, for iteration, if (condition), log message, open dialog, return, and while iteration. The main workspace shows the code for the `onCreate()` function in the `main` namespace. The code is as follows:

```
public onCreate()
{
    var sfUserSession varSession;
    queryArgs.getQueryArgs(varSession);
    sfSession = varSession;
    sfAPI.userSession = varSession;
    sfAPI.sfdcSvc.address = varSession.apiServerUrl;
    condition
    {
        case(varSession.sessionId == "")
        {
            selectedForm = 0;
            // Display only the login screen
        }
        case(varSession.currentOpportunityLineItem == "")
        {
            selectedForm = 2;
            // Display the full app
            getUserInfo(void);
        }
        case(varSession.currentOpportunityLineItem != "")
        {
            selectedForm = 1;
            // Display only the inventory list
            getUserInfo(void);
        }
    }
}
```

At the bottom, the Properties window for the `onCreate` function is visible, showing the Access Modifier set to `Public` and an empty Adapter List.

# BungeeConnect: Deployment

- Built-in staging management



# BungeeConnect: Extras/Summary

- Wrap any web service/resource easily for use
- All development free / pay for using deployed apps
- Can shift hosting off Bungee's grid to Amazon EC2 or personal hardware.

## Takeaway:

- Developers can build just about any type of application in a browser IDE
- Focus on OO development & design and ignore some web plumbing
- 100% AJAX, no plugins needed