



macromedia  
**COLDFUSION 5**  
The Fastest Way to Build and Deploy Powerful Web Applications

### What's new? More than you may know

Charlie Arehart

Founder/CTO Systemmanage  
carehart@systemmanage.com

SystemManage: *our practice makes you perfect* SM

1

*our practice makes you perfect* SM

www.systemmanage.com

## Agenda

- **What's New in ColdFusion 5**
  - There's more than you may have heard about
  - Not even covering all that's new (not enough time)
- **Some Issues to Note**
  - Some (but not all) of the challenges you may encounter
- **Where to Learn More**
  - Dozens of available resources
- **Q&A**

2

*our practice makes you perfect* SM

www.systemmanage.com

## What's New in ColdFusion 5

- **Easy, Reliable Upgrade**
- **Increased Productivity**
- **New Business Intelligence Capabilities**
- **Easy Management**
- **Enhanced Performance**
- **Other Enhancements**

3

*our practice makes you perfect* SM

www.systemmanage.com

## Easy, Reliable Upgrade

- **Most extensive CF beta program in history**
  - Current code is backward compatible
  - See release notes, "documentation update", "faq" for more
- **Pre-built example applications demonstrate new features**  
`http://<servername>/cfdocs/examplehome.cfm` (if installed)

4

*our practice makes you perfect* SM

www.systemmanage.com

- **Increased Productivity**

5

*our practice makes you perfect* SM

www.systemmanage.com

## User-Defined Functions



DoLatXChange(Am t, direction)

- **Write code once, re-use it within template**
- **Can pass data to, return data from function**
  - New **var** and **return** statements available within CFSCRIPT

6

*our practice makes you perfect* SM

www.systemmanage.com

## www.cflib.org

- **CFLib.org Common Function Library Project**
  - An open source resource for useful UDF's
  - Several categories, more than 250 UDF's already
    - String Manipulation (formatting, list processing)
    - Data Manipulation (query result processing)
    - Security (string hashing)
    - Math (geometric, statistical, scientific, general)
    - Date, Financial, FileSys, Science, & Utility now added
- **Let's run some**
- **Also Granularity.com's UDF library for XML**
  - <http://chapterhouse.granularity.net/udf/xml/>
- **Also see the Macromedia Developer's Exchange**

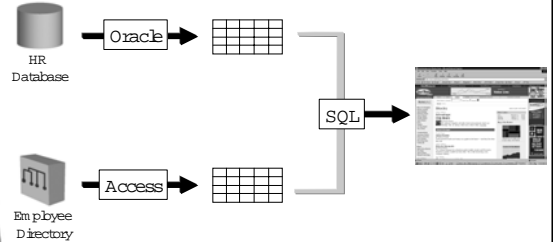
7

our practice makes you perfect™

www.systemanage.com

## Easy Data Integration

- **Easily integrate information from multiple data sources**



8

our practice makes you perfect™

www.systemanage.com

## Query of Queries

- **Formally called "Query of queries"**
  - Referred to as CFSQL for a time, but no longer
- **Increase query performance by querying result sets in memory**
- **Can perform Select, Join, Union, aggregate functions, and more**
- **Let's see a simple example**
  - *Qoq\_Simple.cfm*

9

our practice makes you perfect™

www.systemanage.com

## Combine Any Result Sets

- **Lots of possibilities:**
  - Query disparate datasources
    - Join Access and Oracle queries
  - Query previous query
    - Subset or summarize a previous query, for instance
  - Query cached queries
    - Subset a cached query
    - Join a cached lookup table
    - Can query both variable-cached and query-cached results
  - Query output of any tag that creates resultset

10

our practice makes you perfect™

www.systemanage.com

## Query a Previous Query

```
<CFQUERY NAME = "GetSalaries" DATASOURCE = "CompanyInfo">
SELECT FirstName, LastName, Salary, Department.Dept_Name, Employee.Dept_ID
FROM Department, Employee
WHERE Department.Dept_ID = Employee.Dept_ID
ORDER by LastName
</CFQUERY>

<CFQUERY DBTYPE = "query" NAME = "getavg">
SELECT Dept_Name, AVG(Salary) AS AvgSal FROM GetSalaries
GROUP BY Dept_Name
</CFQUERY>

<CFOUTPUT QUERY="getsalaries">
  <B>#FirstName# #LastName#</B> #dept_name# #dollarformat(salary)# <BR>
</CFOUTPUT>
<H4>Salary Analysis</H4>
<CFOUTPUT QUERY="getavg">
  <B>#dept_name#</B>: #dollarformat(avgsal)#
</CFOUTPUT>
```

11

our practice makes you perfect™

www.systemanage.com

- **New Business Intelligence Capabilities**

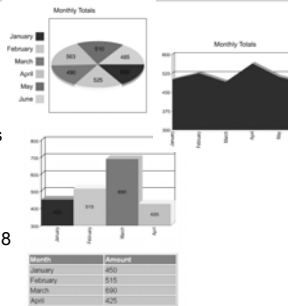
12

our practice makes you perfect™

www.systemanage.com

## Charting and Reports

- **Charting Engine**
  - <CFGRAPH> Interface
  - 12 common business charts
  - High-performance options
- **Reporting Integration**
  - <CFREPORT> Interface
  - Reuse existing reports
  - Supports Crystal Reports 8



13

our practice makes you perfect™

www.systemanage.com

## Charting Details

- **Supports Bar, Line, and Pie charts**
  - Flash, JPG, and PNG formats
  - Many options to control look and feel
- **Drill-down supported as well (in flash format)**
- **Can graph any query result set**
  - Remember, that's more than just CFQUERY
- **Can also graph non-query data, with CFGraphData**

• *Let's see installed example*

14

our practice makes you perfect™

www.systemanage.com

## Enhanced Verity K2 Search

- **New Verity K2 Engine**
  - Supports newer document types
  - Includes international language packs
  - Supports site spidering and more
- **Increased Document Counts with K2 Server**
  - 125,000 with Professional
  - 250,000 with Enterprise
- **Out-of-Process Integration**
  - K2 Server runs separately from CF Server
  - Increased performance
  - Can support indexing/querying multiple servers

15

our practice makes you perfect™

www.systemanage.com

## Enhanced Legacy Verity Support

- **Previously available Verity features still supported**
  - Now known as VDK mode
  - All previous tags, admin interface remain the same
- **Can support more document types**
  - Including Office 2000, and more
- **International Language Support pack (limited set) now available on install CD**
  - No longer needs to be purchased
  - Support for more languages can be purchased
- **CF now automatically locks Verity operations**
  - Concurrent read/write operations on an index are protected from stepping on each other

16

our practice makes you perfect™

www.systemanage.com

- **Easy Management**

17

our practice makes you perfect™

www.systemanage.com

## Enhanced Administrator Interface

- **New design, streamlined functionality**
  - Multiple layers/tabs
- **Online help**
- **Every change to admin configuration is tracked for reporting purposes**
- **Can now add custom features to administrator**
  
- *Let's take a look*

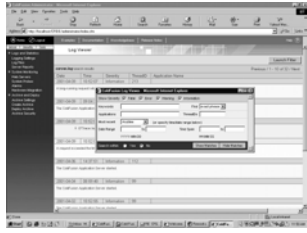
18

our practice makes you perfect™

www.systemanage.com

## App Analysis & Troubleshooting

- **Log File Analyzer**
  - Quickly diagnose server errors
  - Search multiple logs files simultaneously
  - Filter by keyword, threadID, time period, or severity



19

our practice makes you perfect™

www.systemanage.com

## Server Reports

- **Easily analyze performance**
  - 8 reports on several CF statistics
  - Filter report by timeframe, date, interval
- **Monitor administrator configuration changes**
  - Track each change
  - Create snapshot report of current configuration

20

our practice makes you perfect™

www.systemanage.com

## Advanced Application Monitoring

- **Configurable Probes**
- **Scriptable Recovery**
- **Automatic Notification**
- **SNMP Integration**



21

our practice makes you perfect™

www.systemanage.com

## Monitoring Features

- **Can set an unlimited number of probes**
  - Built-in (some provided with CF, or any web page)
  - Custom (any command-line cmd or script)
- **Can trigger almost any response**
  - Something as simple as emailing the administrator
  - Restarting the server
  - Starting a more elaborate repair script
- **Can monitor a remote server**
  - Though not recommended, very useful for those with remotely deployed applications

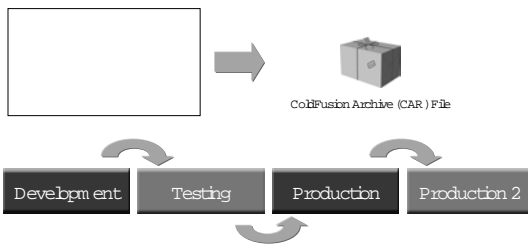
22

our practice makes you perfect™

www.systemanage.com

## Application Deployment Services

- **Easily archive, deploy & restore entire applications**



23

our practice makes you perfect™

www.systemanage.com

- **Enhanced Performance**

24

our practice makes you perfect™

www.systemanage.com

## A Faster CF

- **Lab tests show a major improvement in performance**
  - Up to three times faster on Windows and Linux, compared with ColdFusion 4.5
  - Up to 33% faster on Solaris (less dramatic due to improvements already made in 4.5)
- **See Performance Brief**
  - At Macromedia's ColdFusion 5 Site

25

our practice makes you perfect™

www.systemanage.com

## Performance Enhancements

- **Faster Page Requests Under Load**
- **Enhanced SMP (multiprocessor) support**
- **Automatic Memory Footprint Reduction**
- **Efficient Memory Utilization**
- **Available Hardware Load Balancing Integration**
- **Available Merant Wire Protocol ODBC Protocol Drivers**

26

our practice makes you perfect™

www.systemanage.com

## • Other Enhancements

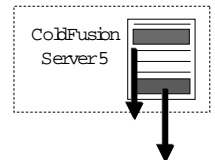
27

our practice makes you perfect™

www.systemanage.com

## Incremental Page Delivery

- **Not a performance improvement**
  - But increases *apparent* responsiveness
- **CFFlush sends any output available at time of flush**
  - or can send when x bytes generated
- **Some issues to be aware of**
  - See documentation
- **Let's see the installed example**



28

our practice makes you perfect™

www.systemanage.com

## New/Enhanced Tags

- **CFSaveContent**
- **CFOBJECTCache**
- **CFDump**
- **CFLOG**
- **New CFFTP Action attribute value: "Removedir"**
- **Various CFFORM enhancements**
  - *Let's see the installed example*

29

our practice makes you perfect™

www.systemanage.com

## More Additions

- **CFINPUT and CFTEXTINPUT allow regular expressions for validation**
  - VALIDATE="regular\_expression" PATTERN=""
- **GetHttpRequestData() function**
- **GetException() function**
- **IsCustomFunction() function**
- **Dynamic Java Class Loader**
- **Merant ODBC Text driver**
- **Dynamic DB connections**

30

our practice makes you perfect™

www.systemanage.com

## Other Enhancements

- Studio “Tag Infusion Pack” at Macromedia Site
- Enhanced Examples on install
- Advanced Security Cache Enhancements
- Some new options can be disabled in Basic Security
  - Including support for Tag/attribute restrictions
    - Rather than previous “whole tag” restrictions
- Multiple Custom Tag directories
  - See Admin>Server>Extensions>CustomTag Paths
- Enhanced COM Integration
- Rearchitected CORBA support
- Support for SuSE Linux and Cobalt RAQ, XTR, and Qube servers
- ...to name a few

31

our practice makes you perfect™

www.systemanage.com

## Problems Fixed

- Problems in previous release now fixed
  - Duplicate() function works as expected
  - Improperly formatted file in mail spool no longer causes all spool files to never be sent
  - “Disable database connection” in Admin now works as expected
  - CFFILE no longer converts spaces in file names to underscores
  - ... to name a few, and there are many more
    - See Release Notes under “Resolved Issues”

32

our practice makes you perfect™

www.systemanage.com

## • Some Issues to Note

33

our practice makes you perfect™

www.systemanage.com

## Some Other Issues

- Several HotFixes available
  - See <http://www.allaire.com/Handlers/index.cfm?ID=20371>
- Underlying applet used for CFForm tags (slider, tree, etc.) uses a signed certificate that expired 12/16/01
  - Macromedia coming up with new patch for that
  - Watch <http://forums.allaire.com/coldfusion/messageview.cfm?catid=3&threadid=235225>

34

our practice makes you perfect™

www.systemanage.com

## Some Other Issues

- Enterprise doesn't support Win98/ME
- Professional doesn't support WinME
- See release notes, “documentation update” for more platform/OS issues
- Examples require that Admin “Variable Scope Locking” setting for “full checking” be turned off
- Examples using CFX datasource failed
  - Needed to uncheck “disable datasource” in Admin

35

our practice makes you perfect™

www.systemanage.com

## Undocumented Problems

- Bug in CFGRAPH
  - If SCALETO attribute not specified, and a non-numeric value exists in the column being graphed, graphing server crashes
- HotFix Available for another bug
  - ColdFusion Becomes Unresponsive when Zeros Are Used in the cfgraph Tag (KB 22253)
- Studio Tag Upgrade has mistakes for CFGRAPH
  - Creates SHOWITEMLABELS
    - Should be singular
  - Tag Insight not creating closing tag
  - Offers VALUELOCATION=“on bar”
    - Should not be a space
- WHERE clause string “matching” in QofQ is case-sensitive
  - Not documented anywhere I could find

36

our practice makes you perfect™

www.systemanage.com

## • Where to Learn More

37

our practice makes you perfect™

www.systemanage.com

## Learning More

- **Information spread over several documents!**
- **Documentation**
  - New manuals (“Installing and Configuring”, “Advanced Admin”)
    - Bundled in print with CF server purchase
    - Installable as HTML with server
    - Available online as PDF at MACR CF5 site
- **CF Admin Help**
  - Not available in printed form
  - Some topics discussed only there
  - Can setup shortcut to point to:
    - <http://<servername>/CFIDE/Administrator/help/cfadminhelp.htm>

38

our practice makes you perfect™

www.systemanage.com

## Learning Still More

- **Several Resources on MACR CF Product Overview page**  
<http://www.macromedia.com/software/coldfusion/>
  - New Features Document
  - Upgrade Guide
  - System Requirements
  - FAQ
  - Edition Comparison Matrix
  - Performance Brief
  - Reviews and Awards
  - Release Notes
    - Updated version over those offered on CD & at overview site
    - <http://www.allaire.com/Handlers/index.cfm?ID=21158&Method=Full>
  - Documentation Errata

39

our practice makes you perfect™

www.systemanage.com

## See Also

### Evaluator's Guide

[http://www.macromedia.com/software/coldfusion/→resources/evaluation/cf5\\_evaluators\\_guide.pdf](http://www.macromedia.com/software/coldfusion/→resources/evaluation/cf5_evaluators_guide.pdf)

### What's So Great About User Defined Functions?

<http://www.allaire.com/handlers/index.cfm?ID=20763>

### Understanding Progress Meters in CF 5

<http://www.allaire.com/handlers/index.cfm?ID=21216&Method=Full>

### Simple Caching Techniques with CFSAVECONTENT

<http://www.allaire.com/handlers/index.cfm?ID=21422>

40

our practice makes you perfect™

www.systemanage.com

## “CF 5 In Depth” Seminar

- **Couldn't cover all details in this brief overview**
  - Despite offering several details
  - Gathered from the several resources and extensive testing
- **Still more to cover, and many more details**
  - Offering day-long seminar on-site, perhaps public
    - More new features, details on using features
    - More about solving problems not well-documented
    - Deprecated and Enterprise-only features
    - Lots more
- **See attached flyer for details, costs, contact info**

41

our practice makes you perfect™

www.systemanage.com

## Contact Information

- **Contact for follow-up issues**
  - **Email:** [carehart@systemanage.com](mailto:carehart@systemanage.com)
  - **Phone:** (301) 604-8399
  - **Web:** [www.systemanage.com](http://www.systemanage.com)
- **Also available for**
  - Training (custom or pre-written)
    - CF, DB, Jrun/J2EE, Javascript, wireless, and more
  - Consulting (very short-term)
    - best practices, architecture, setup
  - Developer Group Mentoring

42

our practice makes you perfect™

www.systemanage.com

## Q&A

?