

# Axys Tips and Tricks

Advent User Group

Chicago

Spring 2005

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# About CSSI

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- Founded in 1995
- Focus on customizing and automating Axys
- Products
  - ClientBuilder – manages cli/grp creation and maintenance
  - Management Fee Receivable Utility – Quickbooks upload
  - Account Translation Utility – translates single account# into multiple cli files (eg, allocates cash)



# Custom Reporting

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- Separately Managed Assets
  - Reports that “roll up” separately managed assets
- Performance by Security – Adjusted IRR
  - Average Capital Base
  - Discounted Cash Flow
- After Tax Performance
- Cash Allocation
  - equity+cash TWR, fixed+cash TWR, etc
- Custom reporting

# Other Services

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- Interfaces, Interface cleanup
- Scripting
  - Overnight processing
  - Automated builds, extracts, edit checks
- Graphical Report Packages
- Workflow analysis and recommendations
- Training
  - See free white papers on [www.cssi.org](http://www.cssi.org)
  - Training classes



# In a nutshell

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- CSSI helps companies
  - Wisely Choose
  - Effectively Use



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Client Server Specialists, Inc.  
[www.cssi.org](http://www.cssi.org)

Tel: (610) 992-9287  
Fax: (610) 992-9289

# Today's presentation

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- Advanced Automation
  - FAQs
    - Frequently Automated Quirks
- Simple changes to reports
  - Adding \$ and % to Report Writer Pro reports

# FAQs

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- Frequently Automated Quirks
  - Morning Process
    - Dataport Translate and Post
    - Reconciliation Report
  - Evening Process
    - Group Builds
  - Running Processes on Server
  - Names in performance files
  - Simple Report Packages

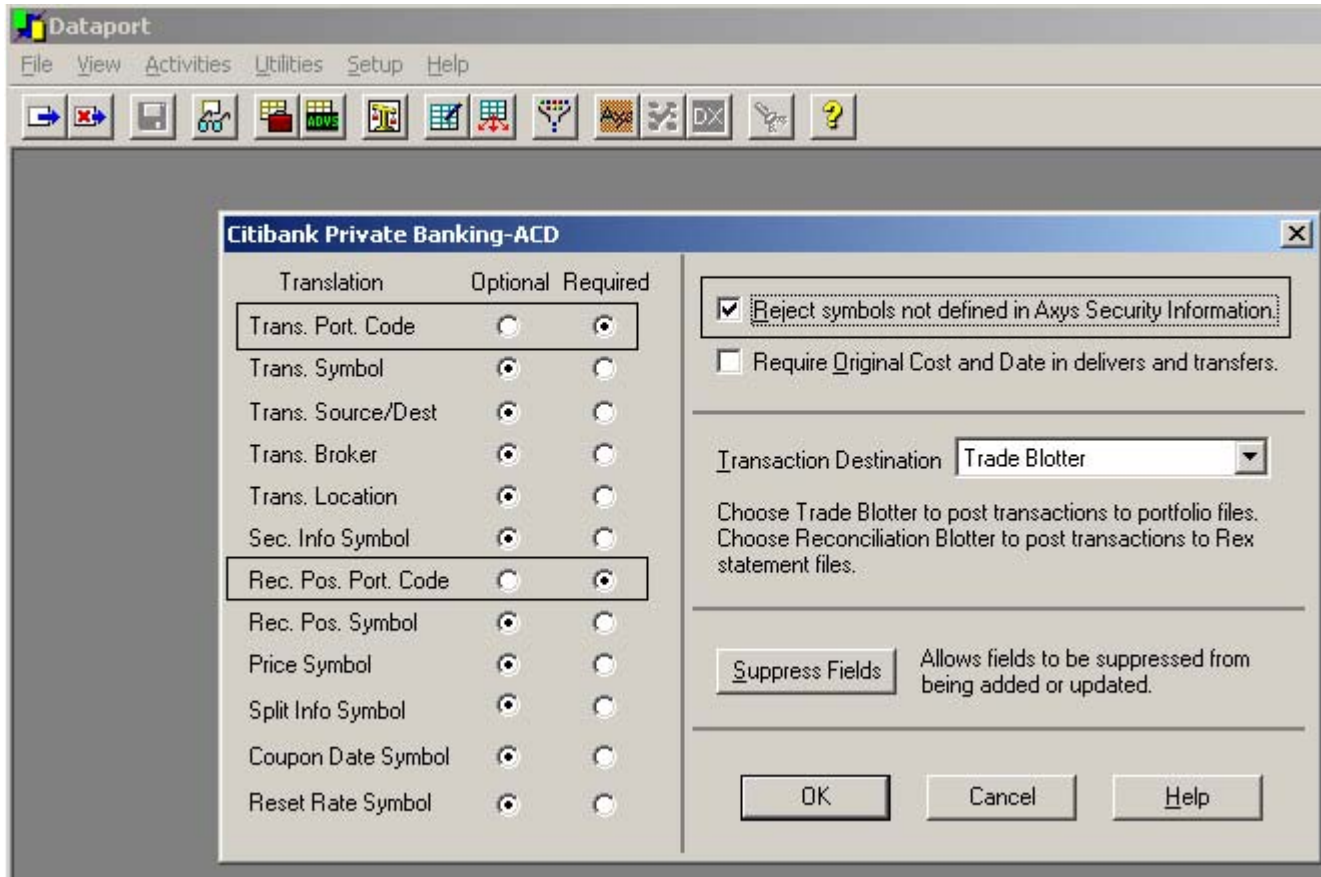
# Dataport Translate and Post

---

```
1 REM set date. Assume process is run daily.
2 set a=${{last}}
3
4 set s=${$pathrjt}
5
6 REM clean rejected symbols and rejected accounts files
7 delete %snewsec.rbk
8 delete %snewport.rbk
9 ren %snewsec.rjt %snewsec.rbk
10 ren %snewport.rjt %snewport.rbk
11
12 REM clean up interface files
13 excel.exe clnup.xls -%a
14
15 REM call dataport for all interfaces
16 datapo -tsTran,fb,%a -tsTran,sb,%a -tsTran,lp,%a -tsTran,q5,%a -tsT
17 datapo -tsPrice,fb,%a -tsPrice,sb,%a -tsPrice,lp,%a -tsPrice,q5,%a
18 datapo -tsRecPosn,fb,%a -tsRecPosn,sb,%a -tsRecPosn,lp,%a -tsRecPos
19
20 REM post
21 post -u
22 pospos -D -u
23
24 REM run undefined symbols, append new, and print resulting report
25 reprun -mundefsym -u -vp
26
27 REM call idc, update using newsec.pri and newbond.pri
28 widc32.exe UpdtUndf
```



# Dataport Recommendations



# Setting Reconciled Flags

- If \$rectrn = y in Network/System Settings
  - Reconciliation Report will build
    - Unrecon.trn
      - » %reconto
      - » %unrecto
    - Unrecon.grp

Report y:\axys\_351\rep\sipos30

This report compares positions in Axys to those downloaded from your Interface Partner, and independently calculates positions from Axys Portfolio (\*.cli) files.

Portfolio: @austin

Date: 033005

Reporting Currency: us

Reconcile Specific Securities

Reconcile market values

Reconcile by cost basis

Include security description on the report

List...

Unreconciled positions only

Unreconciled positions and names of unreconciled portfolios

All positions and names of unreconciled portfolios

Page break between portfolios

Include Unsupervised Assets

Exclude Securities

Ignore All Security Types

Ignore trade date in position files

OK

Cancel

Browse

Settings

# Post the unrecon blotter

---

```
21 REM post
22 post -u
23 pospos -D -u
24
25 REM run undefined symbols, append new, and print resulting report
26 reprun -mundefsym -u -vP
27
28 REM call idc, update using newsec.pri and newbond.pri
29 widc32.exe UpdtUndf
30
31 REM the bigrec macro will set the recon flags and build the unrecon.grp
32 reprun -mbigrec -p@allint -u
33
34 post -funrecon -bn -u
35
36 reprun -mposrec -p@fb -u -tfb%a
37 reprun -mposrec -p@sb -u -tsb%a
38 reprun -mposrec -p@lp -u -tlp%a
39 reprun -mposrec -p@q5 -u -tq5%a
40 reprun -mposrec -p@ub -u -tub%a
41 reprun -mposrec -p@pd -u -tpd%a
42 reprun -mposrec -p@ag -u -tag%a
43 reprun -mposrec -p@ae -u -tae%a
44
```

# Cleaning Data – Before it gets in

- Dataport Filters
  - Filter out unwanted transactions
  - Filter out excessive comments

**Add Filter**

Name: [ ] Modified By: diane Date: 03/29/05

Comment: [ ]

Apply To:

- Transactions
- Initial Positions
- Reconciliation Positions
- Label

Add or Modify Condition

Field:	Operator:	Value:
Accrual Account		
Broker		
Close Meth.		
Comm. Purpose		
Comment		
Commission		

Accept Clear

Conditions

AND OR NOT ( ) Modify Delete

Filter attached comments only  
 Show filtered transactions in the log file

OK Cancel

# Cleaning Data – Before it gets in

- Cleanup Utility
  - Change transactions

The screenshot displays two windows from a Microsoft Excel application. The top window, titled 'Microsoft Excel - clnup.xls', shows a spreadsheet with columns A, B, and C. Column A is labeled 'Field', B is 'Position', and C is 'Length'. The data in the spreadsheet is as follows:

	A	B	C
1	Field	Position	Length
2			
3	at,a1,a2,a3,a4,a5,a6,a7,a8,a9		
4	PortfolioCode	0	8
5	TransactionCode	9	2
		12	2
		15	12
		44	20
		65	12
		76	20

The bottom window, titled 'clnup.xls - Module1 (Code)', shows VBA code for a procedure named 'LoadACPDSetup'. The code includes comments and variable declarations for transaction record positions and lengths:

```
' variables to hold plces and lengths of Transaction Records
Dim g_intTRNCodePlace As Integer
Dim g_intTRNCodeLength As Integer
Dim g_intTRNPortPlace As Integer
Dim g_intTRNPortLength As Integer
Dim g_intTRNAmtPlace As Integer
Dim g_intTRNAmtLength As Integer
```

# Cleaning Data – After it gets in

---

- Transaction Reports
  - Transactions by Process Date
  - Missing Prices
  - Zero Prices
  - Transaction with Missing Cost Basis
  - Transactions with Possible Errors

# Automation Resources

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- Using DataExchange and Dataport
  - Chapters 4 and 5
- Automating Axys
- Connection website

# Evening Process

---

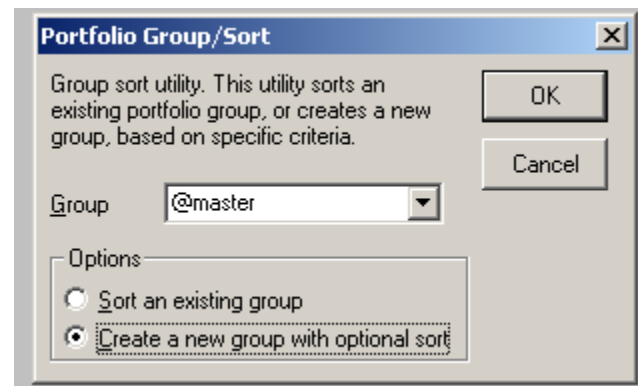
- Group Builds
- Rebuild Dataport Account Table(s)



# Group Builds

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- Build Groups automatically wherever possible
- Portfolio Group/Sort utility



# Group Builds – group.rep

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- Standard Portfolio Group/Sort builds one group at a time
  - Based on label
  - Based on market value
  - Based on %assets

```
1 set g=${$pathgrp}
2
3 REM delete existing manager groups
4 REM eb.grp
5 REM jt.grp
6 REM mr.grp
7
8 if not exists %geb.grp goto noeb
9 delete %geb.grp
10
11 :noeb
12 if not exists %gjt.grp goto nojt
13 delete %gjt.grp
14
15 :nojt
16 if not exists %gmr.grp goto nomr
17 delete %gmr.grp
18
19 :nomr
20 REM rebuild manager groups
21 reprun -mbuildeb -p@master -u
22 reprun -mbuildjt -p@master -u
23 reprun -mbuildmr -p@master -u
24
```

# Group Builds – group.rep

---

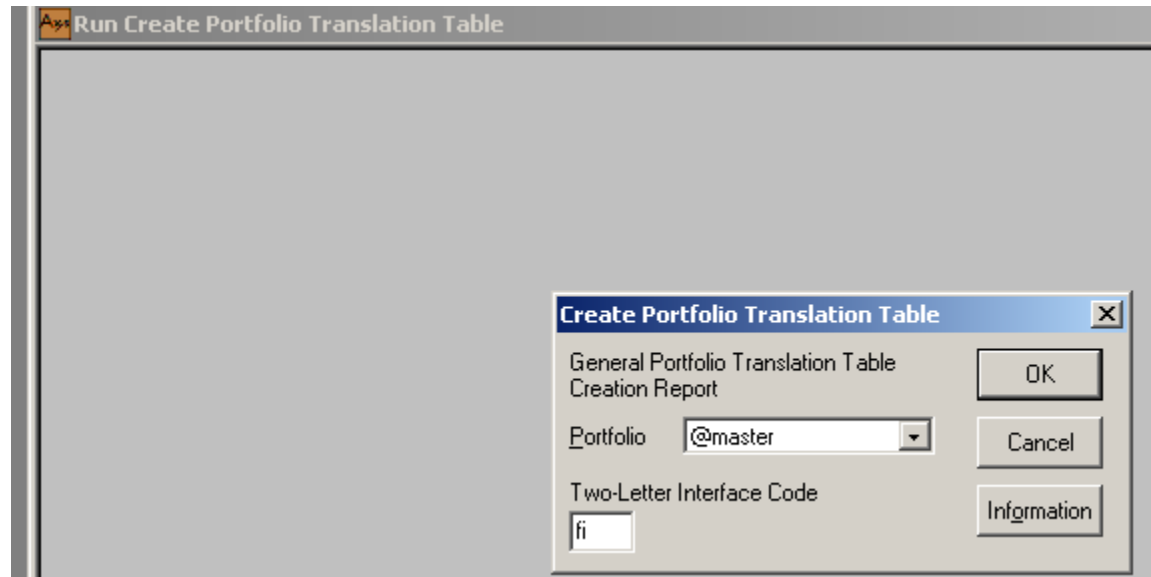
- `_group.rep` builds two groups at a time
  - Regular group
  - Complement group (ie, everything not in the regular group)

```
11 :noeb
12 if not exists %gjt.grp goto nojt
13 delete %gjt.grp
14
15 :nojt
16 if not exists %gmr.grp goto nomr
17 delete %gmr.grp
18
19 :nomr
20 REM delete invalid manager group
21 if not exists %g_mgrbad.grp goto nobad
22 delete %g_mgrbad.grp
23
24 :nobad
25 REM rebuild manager groups using _group.rep
26 reprun -mbuildeb -p@master "-1$grpcode2 not_eb" -u
27
28 if not exists %gnot_eb.grp goto alleb
29 reprun -mbuildjt -p@not_eb "-1$grpcode2 not_ebjt" -u
30 delete %gnot_eb.grp
31
32 if not exists %gnot_ebjt.grp goto allebjt
33 reprun -mbuildmr -p@not_ebjt "-1$grpcode2 _mgrbad" -u
34 delete %gnot_ebjt.grp
35
36 :allebjt
37 :alleb
```

# Rebuild Dataport Account Table

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- Portxlat.rep



# Other Ideas?

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- Morning Automation
- Evening Automation
- Weekly/Monthly/Quarterly Automation

# Running Processes on a Server

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- On the Server, Lan Admin does a User Install of Axys
- Server Scheduler runs tasks at appointed times, unattended
- “Tasks” can be Axys scripts, batch files, etc

# On-Demand Jobs on a Server

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- Server Scheduler runs task at regular intervals (every 15 minutes, every hour, etc), unattended
- “Task” is a batch file
  - Checks for existence of a specific file
  - If found, starts Axys and runs a script
  - If not found, exits

# Fixing Names in prf/pbf Files

- Identify discrepancies
  - \_Namefix.rep

## PERFORMANCE FILE NAME ISSUES Net of Fees

Portfolio Code	Name	Portfolio Name Two	Portfolio Name Three	PerfName1	PerfName2
oatesl1l	Adam Oates IRA (A/C)	?	test1	Oatesl1l Name Goes Here	?
oatesl12	Jennifer Oates IRA (A/C)	?	test1	Oatesl12 Name Goes Here	?
oatesl1r1	Adam Oates (Retail)	?	test2	Oatesl1r1 Name Goes Here	?
oates1s	Adam Oates IRA (SEP)	?	test2	Oates1s Name Goes Here	?
oates1t	Adam Oates Trust this is a client with a really long name	?	test3	Oates1t Name Goes Here	?
oates1t2	Jennifer Oates Trust	?	test3	Oates1t2 Name Goes Here	?
oates1v1	Adam Oates	?	test4	Oates v1 Name Goes Here	?
oates1v2	Adam Oates	?	test4	Oates v2 Name Goes Here	?
oates1v3	Adam Oates	?	test4	Oates v3 Name Goes Here	?
oates1v4	Adam Oates	?	test5	Oates v4 Name Goes Here	?
oates1v5	Adam Oates	?	test5	Oates v5 Is Longer Than 20 Characters	?





# Fixing Names in prf/pbf Files

- Export to Excel
- Make a trade blotter

Trade Blotter				
Portfolio Code	Tran. Code	Trade Date	Comment	Po
;	;	02/03/2005	post ran 02-03-05 at 20:29:07 by diane	
oatesli1	\$	name	Adam Oates IRA (A/C)	Y
oatesli2	\$	name	Jennifer Oates IRA (A/C)	Y
oatesrl1	\$	name	Adam Oates (Retail)	Y
oatesle	c	name	Adam Oates TDA (SWDA)	Y

# Fixing Names in prf/pbf Files

---

- Now be very careful...
  - Rename \*.prf to \*.cli
  - Change \$pathcli to \$pathprf
  - Post trade blotter
  - Rename the \$pathprf\\*.cli back to \*.prf
  - Change \$pathcli back

# Report Packages

---

- Suppose we have three groups for the Jones family
  - The performance group +@jones1
  - The billing group +@jones2
  - The reporting group +@jones3
- Quarterly report for the Jones family includes
  - Cover page for +@jones3
  - Appraisal for +@jones3
  - Asset Under Management for @jones3
  - Performance Report for +@jones1
  - Billing Statement for +@jones2

# Report Packages

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- Goal
  - One single report package for Jones family
  - Paginated pdf
  - Done entirely in Axys, no special software
- White Paper
  - How to Combine Reports into a Package – Free!

# Report Packages

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- Step 1 – Record the necessary macros
  - Cover page and appraisal for +@jones3
  - Asset Under Management for @jones3
  - Performance Report for +@jones1
  - Billing Statement for +@jones2
  
- Step 2 – Create Script

# Report Packages

---

```
1 SET m=$( $pathrmf)
2
3 if not exists %mjones.rmf goto node1
4 delete %mjones.rmf
5
6 :node1
7 rep32.exe -mvrapr -p+@jones3 -b033104 -u
8 rep32.exe -maum -p@jones3 -b033104 -u
9 rep32.exe -mperf -p+@jones1 -b033104 -u
10 rep32.exe -mfee -p+@jones2 -b033104 -u
11
12 command.com /c COPY /b %mvrapr.rmf+%maum.rmf+%mperf.rmf+%mfee.rmf %mjones.rmf
13
14 rep32.exe -Fjones -vf -u
```

# Keeping Up With the Jones-es

---

- How to extend this beyond the Jones family?
  - If there are 100 clients and list rarely changes
  - If there are 300 clients and the list fluctuates
  - If there are 1500 clients and you can't keep track of what should be on the list

# Making your own custom reports

- Simple changes to reports
  - Add \$ and % to report writer pro reports



# Time For Some Programming

---

- Warning...
  - Proceed at your own risk
  - Unless you've had some training, stick to the exact changes outlined/documentated
  - Easier to download the free report from [www.cssi.org](http://www.cssi.org)
  - Advent will not support your modifications

# Adding \$ and % to reports

- Start by creating a Performance Report in Report Writer Pro
- Save as `_myperf.rpw`

Portfolio Value on 09-30-02	11,385,053.46
Accrued Interest	2,213.87
Contributions	1,000,000.00
Withdrawals	0.00
Realized Gains	0.00
Unrealized Gains	1,885,502.90
Interest	100.00
Dividends	0.00
Change in Accrued Interest	214.17
Portfolio Value on 12-31-02	14,270,556.36
Accrued Interest	2,428.04
Average Capital	11,735,093.42
Management Fees Paid By Client	-6,000.00
Total Fees	-6,000.00
Total Gain after Fees	1,879,817.07
<b>IRR for 0.25 Years</b>	<b>16.02</b>

# Copy as .rep and Open

---

- Text editor
  - Do not use
    - Wordpad
    - Word
  - Use
    - Programmers File Editor
    - UltraEdit
    - Notepad

```
C:\AXYS3_mc\rep\_myperf.rep
1 ;Axys Report Writer Pro Version 1.0.0.272
2 ;Report class RECON (portfolio-summary)
3 ;Fixed width
4 call a define constants
5 ;Dialog
6 ;Set custom dialog text
7 $_asdtxt This report displays a portfolio's pe
8 cfuse y
9 rsetup showai pmai pennies fnote dsclaim
10 $igroup y
11 $sector y
12 dosens
13 ;The code is only needed when igroup or sector
14 ;used as a group without a more outer type gro
15 ;and the report is sensitive to these settings
16 ;That is hard to detect so we include the code
17 DIALOG
18 ASCG_TEXT
19 ASCG_PORT
20 ASCG_TWODATE
21 ASCG_ACB
22 ASCG_PERFFEE
23 ASCG_ANNUALIZE
```



# Find the Market Value lines...

```
380 #suba47 #extcut
381 #suba49 #extwith
382 label j end of row eval a
383 next tran
384 ;PrintGrandTotals
385 $ _ndhspc f
386 ;print custom subtotal row 0 sort 0
387 ~ ~ ~
388 $_arg0 Portfolio Value on
389 #_arg2 #date1
390 cvt $_pot1 %0_arg2
391 $_arg1 $_pot1
392 cvt $_pot0 $_arg0$_arg1
393 cvt $_cst0 $_pot0
394 .~$ _cst0~#~8suba35\g
395 ;print custom subtotal row 1 sort 0
396 if #suba5 #_zero =~?
397 .~Accrued Interest~#~8suba5\g\FJ
398 ;print custom subtotal row 2 sort 0
```

```
436 ;print custom subtotal row 13 sort 0
437 ~ ~
438 .\g
439 ;print custom subtotal row 14 sort 0
440 ~ ~ ~
441 .~-----\g
442 ;print custom subtotal row 15 sort 0
443 ~ ~ ~
444 $_arg0 Portfolio Value on
445 #_arg2 #cutdate
446 cvt $_pot3 %0_arg2
447 $_arg1 $_pot3
448 cvt $_pot2 $_arg0$_arg1
449 cvt $_cst0 $_pot2
450 .~$ _cst0~#~8suba38\g\FJ
451 ;print custom subtotal row 16 sort 0
452 if #suba6 #_zero =~?
453 .~Accrued Interest~#~8suba6\g\FJ
454 ;print custom subtotal row 17 sort 0
455 ~
456 .\g
457 ;print custom subtotal row 18 sort 0
458 ~
```

# Convert to string and append \$...

```
388 $_arg0 Portfolio Value on
389 #_arg2 #date1
390 cut $_pot1 %0_arg2
391 $_arg1 $_pot1
392 cut $_pot0 $_arg0$_arg1
393 cut $_cst0 $_pot0
394
395 cut $suba35 \ $ #8suba35
396 .~$_cst0~$~suba35\g
397
398 ;print custom subtotal row 1 sort 0
399 if #suba5 #_zero =~!
400 .~Accrued Interest~#~8suba5\g\fJ
401 ;print custom subtotal row 2 sort 0
402 .\n
403 ~Contributions~#~8suba5\g\fJ
```

```
443 ~ ~ ~
444 .~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ \g
445 ;print custom subtotal row 15 sort 0
446 ~ ~ ~
447 $_arg0 Portfolio Value on
448 #_arg2 #cutdate
449 cut $_pot3 %0_arg2
450 $_arg1 $_pot3
451 cut $_pot2 $_arg0$_arg1
452 cut $_cst0 $_pot2
453
454 cut $suba38 \ $ #8suba38
455 .~$_cst0~$~suba38\g\fJ
456
457 ;print custom subtotal row 16 sort 0
458 if #suba6 #_zero =~!
459 .~Accrued Interest~#~8suba6\g\fJ
460 ;print custom subtotal row 17 sort 0
```

# Find IRR line...append %

```
533 #_arg5 #suba15
534 #_arg6 #suba16
535 #_arg7 #suba17
536 #_arg8 #suba18
537 #_arg9 #suba37
538 calcperf #_arg3 #_arg4 #_arg5 #_arg6 #_arg7 #_
539 #_pot10 #perf #:miss $status "y" =* ?
540 #_arg2 #_pot10 100 *
541 #_pot8 #_arg2
542 #_cst2 #_pot8
543 .~$ _cst0~#^2_cst2\g\FN
544 ;print custom subtotal row 27 sort 0
545 #_arg0 #_pot8
546 #_arg1 #suba7
547 #_pot11 #_arg0 #_hun / #_one + #_one #_arg1 / ^
548 #_cst2 #_pot11 0 $_ann "y" =$ ?
549 if #_cst2 #_zero =~!
550 .~Annualized IRR~#^2_cst2\g\FJ
551 ~
552 call l display missing data labels
553 call c initialize missing data labels
```

```
533 #_arg5 #suba15
534 #_arg6 #suba16
535 #_arg7 #suba17
536 #_arg8 #suba18
537 #_arg9 #suba37
538 calcperf #_arg3 #_arg4 #_arg5 #_arg
539 #_pot10 #perf #:miss $status "y" =:
540 #_arg2 #_pot10 100 *
541 #_pot8 #_arg2
542 #_cst2 #_pot8
543 .~$ _cst0~#^2_cst2\g\FN
544 ;print custom subtotal row 27 sort 0
545 #_arg0 #_pot8
546 #_arg1 #suba7
547 #_pot11 #_arg0 #_hun / #_one + #_one
548 #_cst2 #_pot11 0 $_ann "y" =$ ?
549 if #_cst2 #_zero =~!
550 .~Annualized IRR~#^2_cst2\g\FJ
551 ~
552 call l display missing data labels|
553 call c initialize missing data labels|
```

# Test...

Portfolio Value on 09-30-02	\$ 11,385,053.46
Accrued Interest	2,213.87
Contributions	1,000,000.00
Withdrawals	0.00
Realized Gains	0.00
Unrealized Gains	1,885,502.90
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Total Fees	-6,000.00
Total Gain after Fees	1,879,817.07
<b>IRR for 0.25 Years</b>	<b>16.02%</b>

The logo for Client Server Specialists, Inc. (CSSI) features the letters "CSSI" in a bold, white, serif font, centered within a dark blue square. The square has a thin white border.

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# If you want to learn more...

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- Report Writing Language Programmer's Guide
  - Available on Advent's connection website
    - REPU34
    - REPU351
- AUG Newsletter
- Free White papers on [www.cssi.org](http://www.cssi.org)



# Training Classes...

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- Training Link on [www.cssi.org](http://www.cssi.org)
  - Intro to Replang Programming
  - Intermediate Replang Programming
  - Advance Replang Programming

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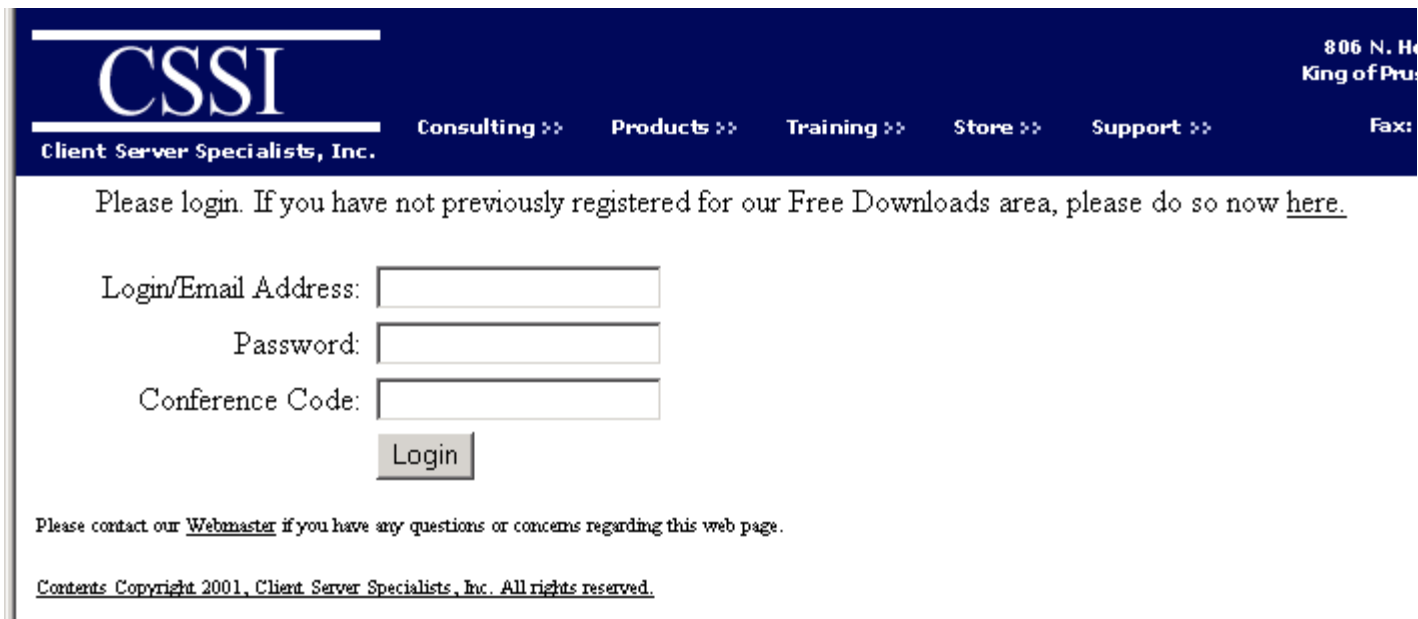
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# Enter Userid and Password

---

- Conference code -- chug




The screenshot shows the CSSI website's login page. At the top, there is a dark blue header with the CSSI logo on the left, the text "Client Server Specialists, Inc." below it, and navigation links for "Consulting", "Products", "Training", "Store", and "Support" in the center. On the right side of the header, there is contact information: "806 N. H...", "King of Pru...", and "Fax:". Below the header, the main content area is white. It starts with a paragraph: "Please login. If you have not previously registered for our Free Downloads area, please do so now [here](#)." Below this are three input fields: "Login/Email Address:", "Password:", and "Conference Code:". A "Login" button is positioned below the "Conference Code" field. At the bottom of the main content area, there is a small text block: "Please contact our [Webmaster](#) if you have any questions or concerns regarding this web page." and a copyright notice: "Contents Copyright 2001, Client Server Specialists, Inc. All rights reserved."



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This is a special area for those who attended the Atlanta AUG Meeting

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- [Information on ClientBuilder](#)
- [Information on Account Translation Utility](#)
- [Other How-Tos](#)
- [Free Downloads Area](#)
- [Information about the Introduction to Replang class](#)
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# Q&A

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