

PC Credit User Guide

Security, Neutrality, and Transparency

12 October 2009

PC Credit: Access Through CME Website (1/2)

Website Link: www.CME-CH.com

- Existing PC SPAN user has a User ID and Password - need to request access to PC Credit.
- Non PCSPAN user request access to PC Credit

CME contact information:

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Three Components:

1. PC Credit
2. SpanPosConv (modify Excel portfolio file to FIXML for PC Credit)
3. RiskReporter

PC Credit: Access Through CME Website: Website Screen Shot (2/2)

cme
Chicago Mercantile Exchange

CME CLEARING HOUSE

SPAN® Firms Area Exchanges Area

PC-SPAN® Software Distribution Site

Resources Available
[AdminStaff](#)

- [User Maintenance Screens Version 1.0](#) Click here for access to the PCSPAN User Maintenance screens for www.cme-ch.com (Updated Tuesday, May 14, 2002)

[PC-CREDIT](#)

• [PC-Credit software Version 4.5 Build 496](#) Software for calculating CDS margin requirements (Updated Tuesday, October 06, 2009)

• [SpanPosConv Version v.2.5](#) Conversion utility for creating XML SPAN position files from Excel spreadsheet (CSV file). This utility requires .NET Framework (a free download from Microsoft web site). (Updated Monday, October 12, 2009)

• [RiskReporter Version 3.26](#) New .NET reporting utility for SPAN 4 It requires .NET Framework 3.5 to be installed. .NET Framework 3.5 can be downloaded from Microsoft website (free download). RiskReporter utility v.3.18 supports the batch mode. If no parameters specified, it would run in a regular interactive mode. In the batch mode, any number of predefined reports can be generated. The interactive mode syntax is: `SpanReporter.exe [inputXmlFile]` Where: `inputXmlFile` – input XML file full name The batch mode syntax is: `RiskReporter.exe inputXmlFile /PbReq [/NetPos /PosBal]` Where: `inputXmlFile` – input XML file full name `/PbReq` - 'PB Requirements' report `/NetPos` - 'Net Positions' report `/PosBal` - 'Position Balance' report For example, if a `/PosBal` parameter is specified, the 'PosBal.csv' report will be generated in the same subdirectory where the input file is located. A log file will be generated as well. (Updated Monday, October 12, 2009)

CONTACT CME CLEARING

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CME SPAN

STANDARD PORTFOLIO ANALYSIS OF RISK

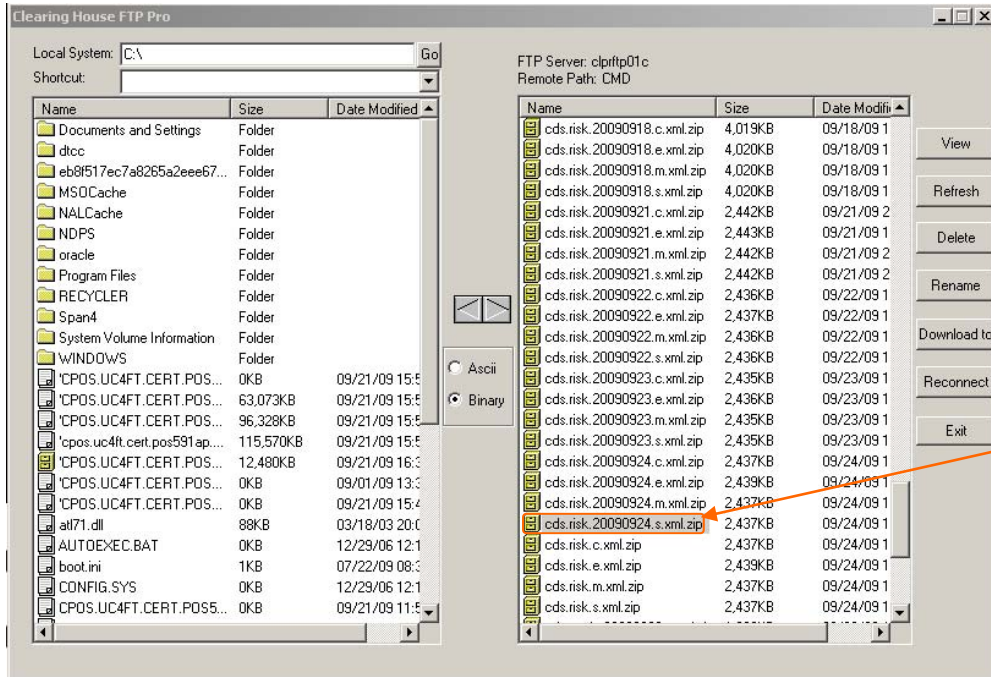
LEARN MORE

VERISIGN SECURED

About SSL Certificates

Three Components

Step 1: Save SPAN Risk Parameter File Locally (1 of 4)



CME SFTP Access: Require User ID and Password

External CME FTP User Managers:
 Farris Oweimrin 312.648.4780
 Peter Cherniavskij 312.207.2582

FTP Path Directory:
 PUB/CMD

File Naming Convention:
 cds.risk.YYYYMMDD.s.xml.zip

1

Choose a File

2

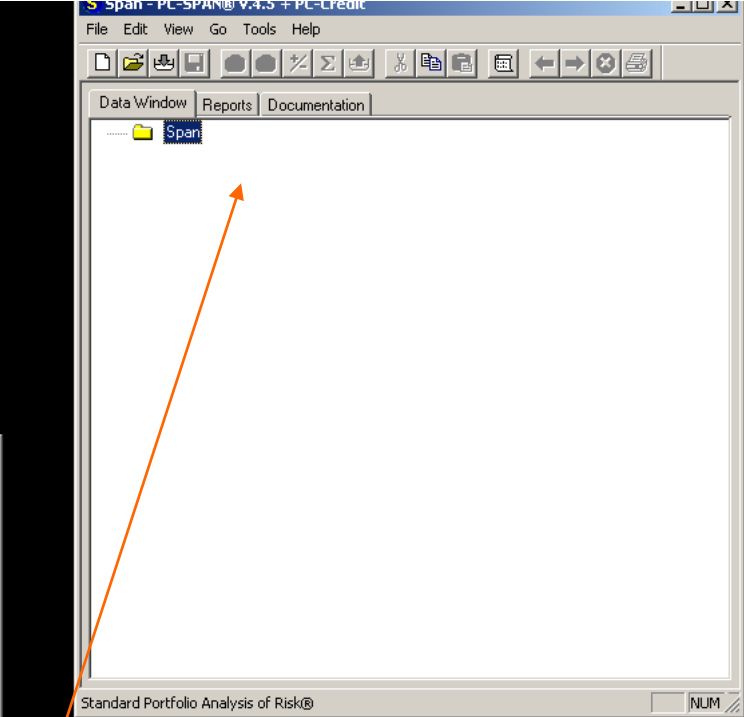
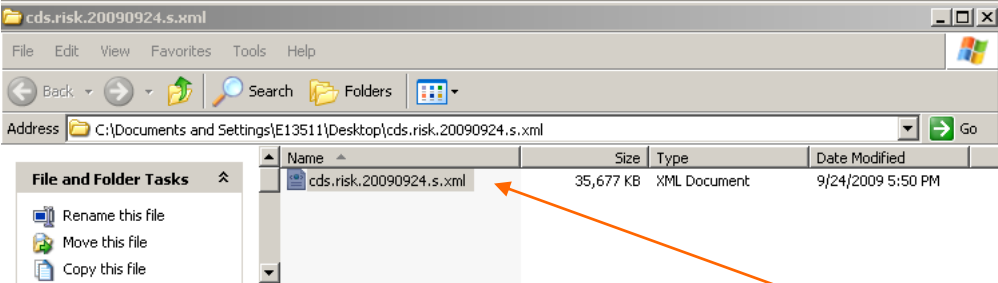
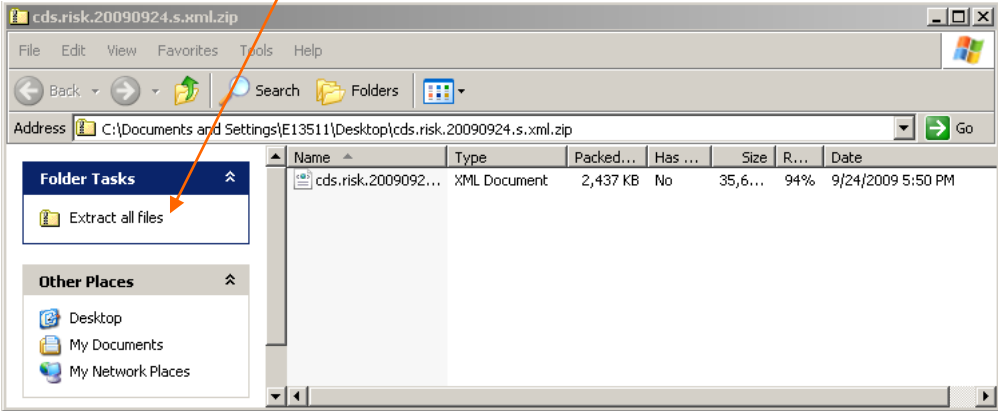
Save the File locally



Step 2: Loading the Parameter Files (2 of 4)

1

Open Zip File and Extract all files



2

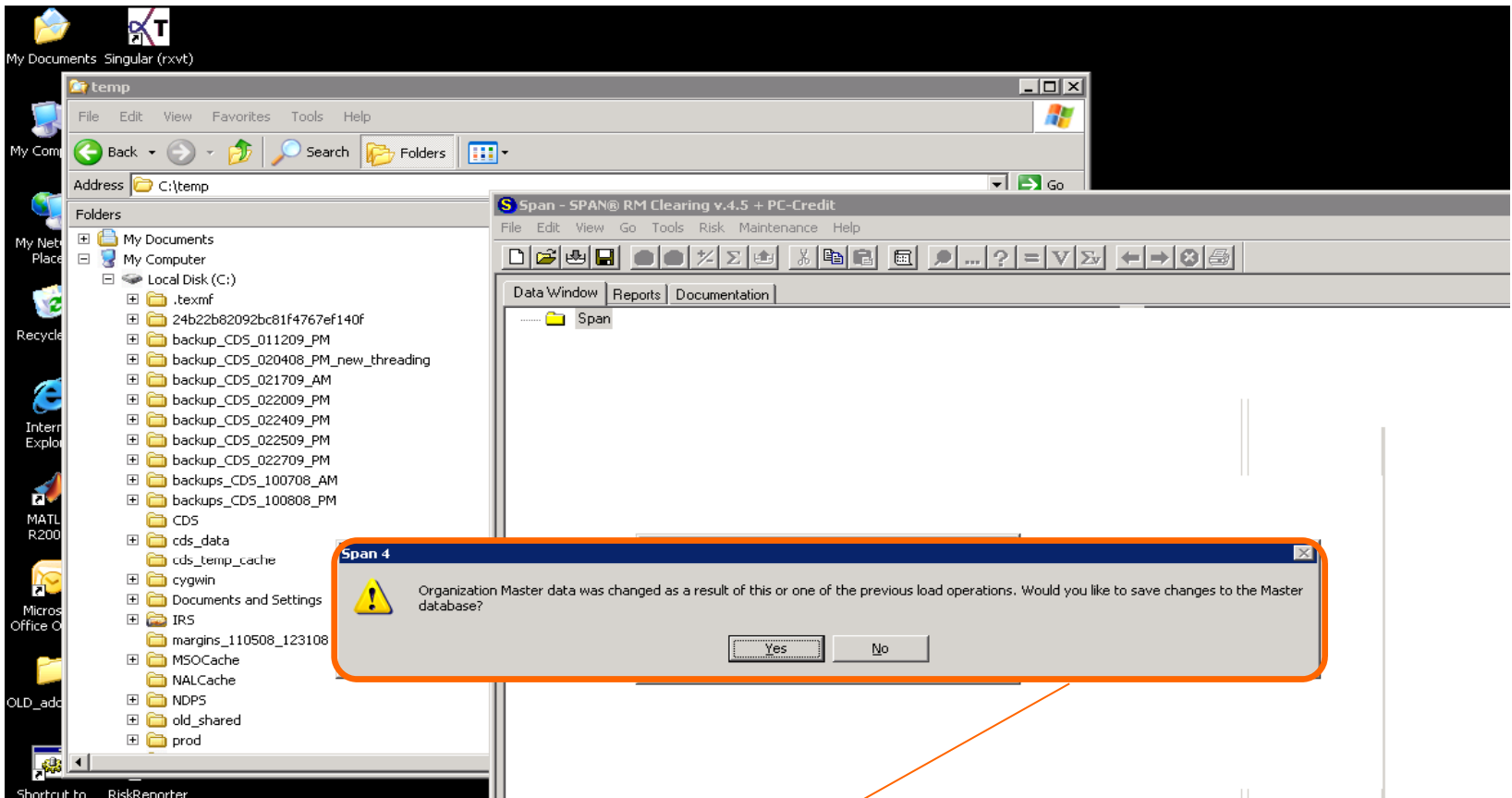
Click and drag unzipped file to Span

Step 2: Loading the Parameter File (3 of 4)

The screenshot shows the Span software interface. On the left is a file explorer window showing the local disk (C:) with various folders, including backup folders and a 'CDS' folder. The main application window is titled 'Span - SPAN@ RM Clearing v.4.5 + PC-Credit' and has a menu bar (File, Edit, View, Go, Tools, Risk, Maintenance, Help) and a toolbar. The main area shows a 'Data Window' with a folder named 'Span'. A dialog box titled 'Span 4' is open in the foreground, displaying a warning icon and the text: 'The definition for currency NOK in XML file is different from the one you currently have in your system. Would you like to replace the definition with the one from XML?'. Below the text are 'Yes' and 'No' buttons. A callout box points to the dialog with the following text:

You may receive pop-ups regarding currency exchanges
YES: If you would like to use CME's currency exchange rate (recommended)
NO: If you'd like use your own pre-loaded exchange rates
Note: This pop-up will repeat for every currency in the file

Step 2: Loading the Parameter File (4 of 4)

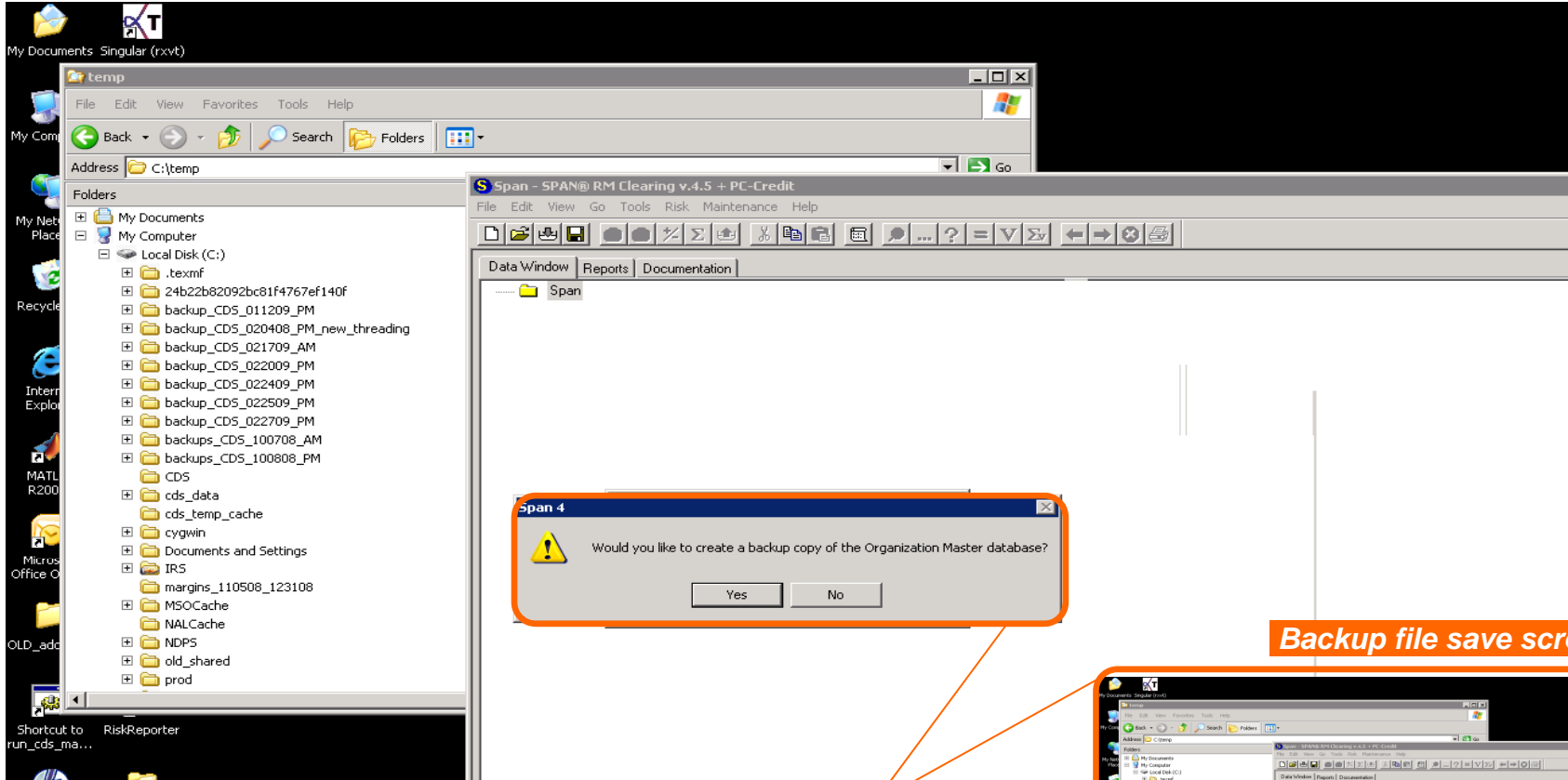


After the file loads you may receive a pop-up asking if you would like to save changes to the master database

YES: If you would like to save the new as the master Span file within PC Credit and use CME's exchange information as your baseline for Span (recommended)

NO: You have a customized exchange on your system

Step 2: Pop Up: Backing-up the Parameter File

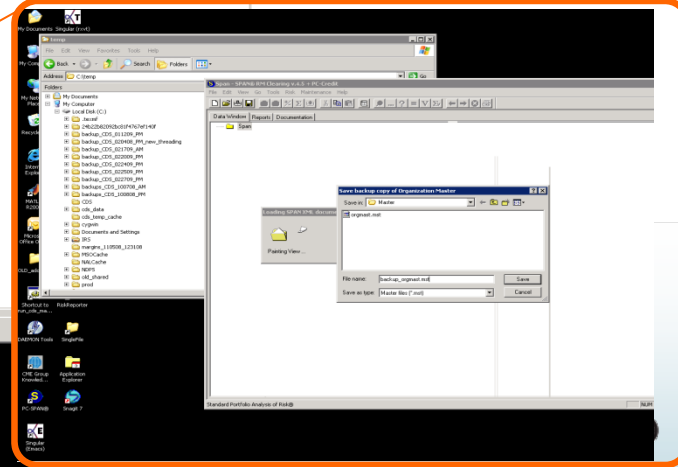


Backup file save screen

You may receive a pop-up asking if you would like to back-up a copy of the Organization Master database

YES: If you would like to backup the information incase of inability to later re-download the file

NO: You would not like to backup the file



Step 3: Inputting Portfolio Information (Large Portfolio Option)

In order to enter a large portfolio you should utilize the .csv option using an excel file as your portfolio information depository

Open an excel file and input the following columns

- Date
- isSettle
- firm
- acctid
- acctType
- isCust
- seg
- currency
- ec
- cc
- exch
- pfCode
- pfType
- pe
- undePe
- o
- k
- net
- coupon

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	date	isSettle	firm	acctid	acctType	isCust	seg	currency	ec	cc	exch	pfCode	pfType	pe	undePe	o	k	net	coupon
2	20090806	1	888	ECAccc	S	1	CUST	USD	CME	AABRME	CMD	AABRME	CDS	201006				50	0.05
3	20090806	1	888	ECAccc	S	1	CUST	USD	CME	IBMRDU	CMD	IBMRDU	CDS	201006				-100	0.05
4																			
5																			

Step 4: Inputting Portfolio Information (1 of 2)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	date	isSetl	firm	acctid	acctType	isCust	seg	currency	ec	cc	exch	pfCode	pfType	pe	undPe	o	k	net	coupon
2	20090806	1	888	ECAccc	S	1	CUST	USD	CME	AABRME	CMD	AABRME	CDS	201006				50	0.05
3	20090806	1	888	ECAccc	S	1	CUST	USD	CME	IBMRDU	CMD	IBMRDU	CDS	201006				-100	0.05
4																			
5																			

For each portfolio position enter the following

date (column A): Date of the input pc credit parameter, if it is different pc credit will prompt you if you would like to value the portfolio in a different point in time (if you'd like to value a portfolio for a date in the past for example)

isSetl (column B): Settlement flag, always "1" for CDS

firm (column C): Clearing Member Firm number (any number you desire the portfolio to be associated with)

acctid (column D): Account Identifier

acctType (column E): Type of account, e.g. member (M), hedger (H) or speculator (S)

isCust (column F): Customer or clearing level calculation, always "1" for CDS

seg (column G): CUST or HOUS (for customer account or house account)

currency (column H): USD or EUR

ec (column I): Exchange complex acronym, always "CME" for CDS

cc (column J): Combined Commodity = CME CMD CDS ticker

exch (column K): Exchange acronym, always "CMD" for CDS

pfCode (column L): same as column J

pfType (column M): Product family type, always "CDS" for CDS

pe (column N): Maturity or Contract Expiration

undPe (column O): Underlying period code, keep blank for CDS

o (column P): Option right code (C,P), keep blank for CDS

k (column Q): Option strike price, keep blank for CDS

net (column R): Position size (for CDS 1= \$100,000 gross notional)

coupon (column S): Fixed coupon for CDS (usually .01 or .05)

Step 4: Inputting Portfolio Information (2 of 2)

testCDSport.csv - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Developer

Clipboard Font Alignment Number

Save file as a .CSV file not an Excel file

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	date	isSetl	firm	acctid	acctType	isCust	seg	currency	ec	cc	exch	pfCode	pfType	pe	undPe	o	k	net	coupon				
2	20090806	1	888	ECAccc	S	1	CUST	USD	CME	AABRME	CMD	AABRME	CDS	201006				50	0.05				
3	20090806	1	888	ECAccc	S	1	CUST	USD	CME	IBMRDU	CMD	IBMRDU	CDS	201006				-100	0.05				
4																							
5																							
6																							
7																							
8																							
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Note the directory folder in which you save your file (e.g., SpanPosConv)

Save As

Save in: SpanPosConv

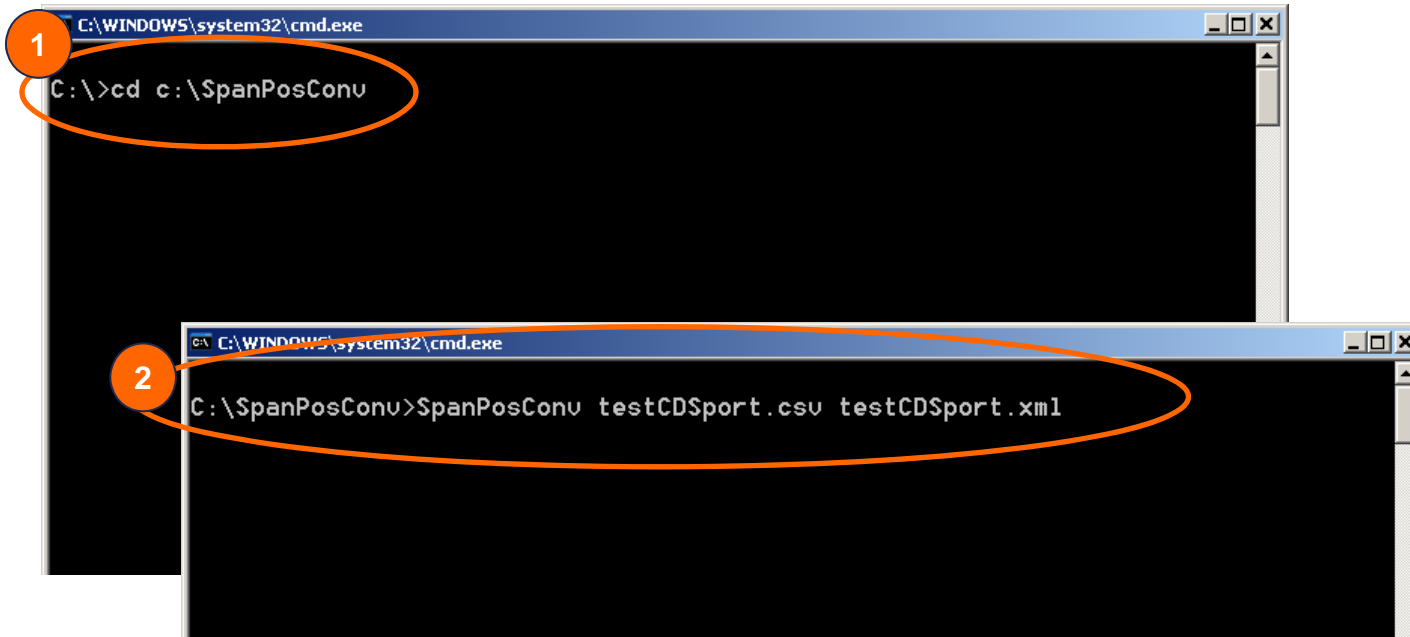
Name	Size	Date Modified
testCDSport.csv	1 KB	9/15/2009 3:55 PM

File name: testCDSport.csv

Save as type: CSV (Comma delimited) (*.csv)

Save Cancel

Step 5: Converting the Portfolio File to XML (1 of 2)



The image shows two screenshots of a Windows command prompt window. The first screenshot shows the command prompt with the command `cd c:\SpanPosConu` entered, which is circled in orange and labeled with a '1' in a circle. The second screenshot shows the command prompt with the command `SpanPosConu testCDSport.csv testCDSport.xml` entered, which is also circled in orange and labeled with a '2' in a circle.

1 Start, Run, enter “cmd” hit enter
Load directory/folder where .csv file was saved (add detail here)

2 Convert .csv file to .xml file which can be read by PC credit

Step 5: Converting Portfolio File to XML (2 of 2)

File Edit View Favorites Tools Help

Back Search Folders

Address C:\SpanPosConv

Name	Size	Type	Date Modified
SpanPosConv.exe	18 KB	Application	9/15/2009
testCDSport.csv	1 KB	Microsoft Office Excel Comm...	9/15/2009
testCDSport.xml	2 KB	XML Document	9/17/2009

File and Folder Tasks

- Rename this file
- Move this file
- Copy this file
- Publish this file to the Web
- E-mail this file
- Delete this file

Other Places

- Local Disk (C:)
- My Documents
- My Computer
- My Network Places

Details

testCDSport.xml
XML Document
Date Modified: Today, September 17, 2009, 2:21 PM
Size: 1.17 KB

Newly created .xml file should be located in previously created directory folder (in the same folder as the .csv file)

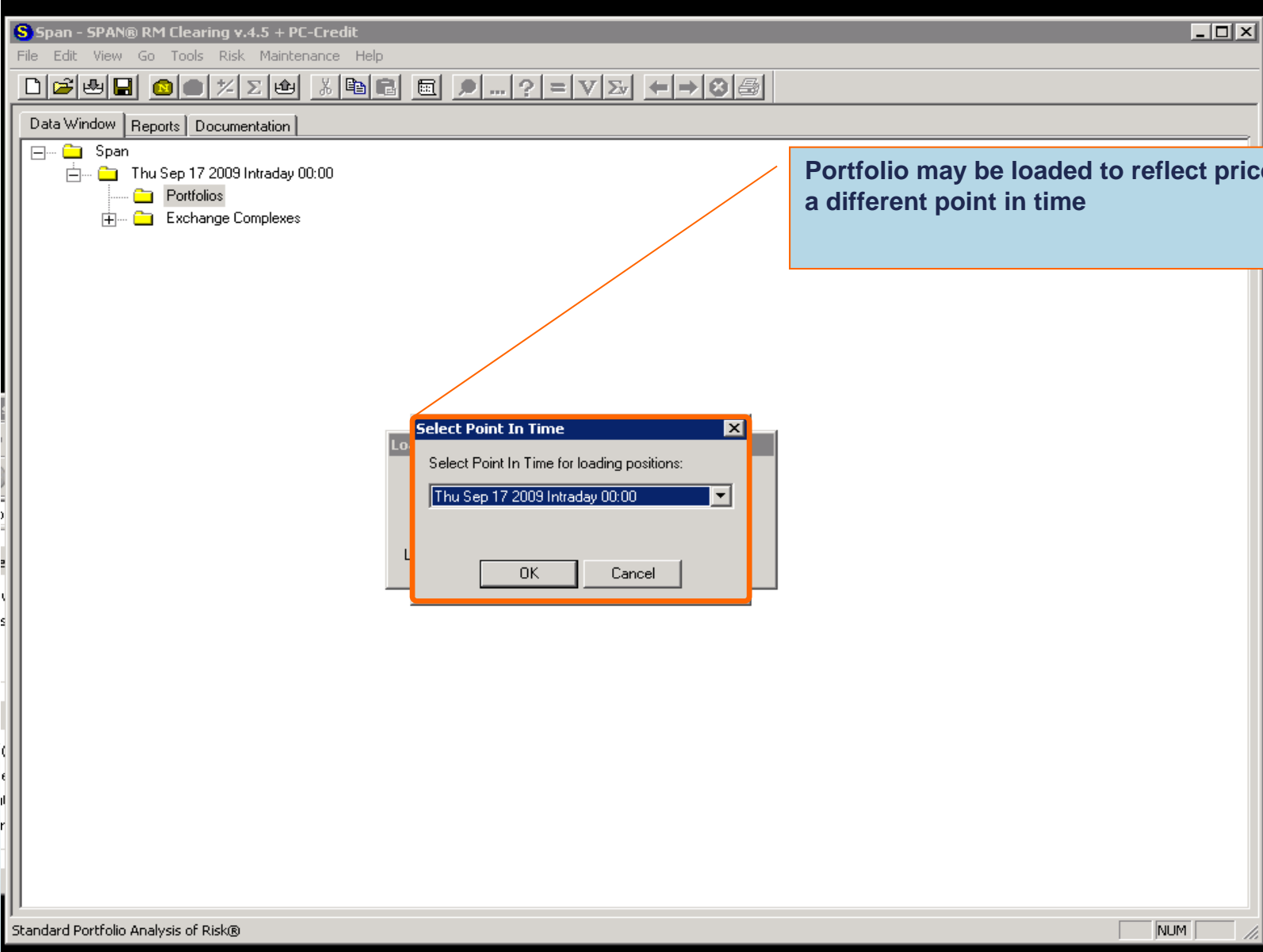
Step 6: Upload Created Portfolio into PC Credit

The screenshot shows the SPAN software interface. The 'File' menu is open, and the 'Load File(s)...' option is highlighted with an orange circle. Below the main window, a 'Load File(s)' dialog box is open, showing the file 'testCDSport.xml' selected in the file list. The dialog box also shows the file name 'testCDSport.xml' in the 'File name' field and 'Files of type: DVA History XML Files (*.xml)'. A blue callout box with the text 'Load .xml file in PC Credit' points to the 'Load File(s)...' menu option.

Load .xml file in PC Credit

Standard Portfolio Analysis of Risk®

Step 6: Pop-Up: Select Point In Time



Step 6: NOTE: Smaller Portfolios can be Created Using “New Portfolio” Option in PC Credit (1/2)

Create portfolio

The screenshot displays the PC Credit software interface. The menu bar includes File, Edit, View, Go, Tools, Risk, and Help. The toolbar contains various icons, with the 'New Portfolio' icon (a green circle with a white 'P') highlighted by an orange box. Below the toolbar, the 'Data Window' tab is active, showing a folder tree structure: Span > Thu Jan 22 2009 Settle Final > Portfolios. The 'Portfolios' folder is highlighted with a blue selection box. A callout box with a blue background and orange border points to the 'New Portfolio' icon and contains the text: '1a. Click on icon to create a new portfolio to enter contracts'.

Step 6: Small Portfolios: Populate with Data

1b. Populate data.

Test 1 - *** New Portfolio *** - N/A - (USD)

Portfolio Data | Positions | Performance Bond Requirements | Values | Settlements

Parent Account: (None) Qualified Institutional Buyer

Normal for GSCIER

Clearing Firm: Test 1 Portfolio Currency: USD - US DOLLARS

Account: *** New Portfolio *** Ledger Balance: 0.00

Account Type: S - Speculator - Custome Open Trade Equity: 0.00

Seg Type: N/A Securities On Deposit: 0.00

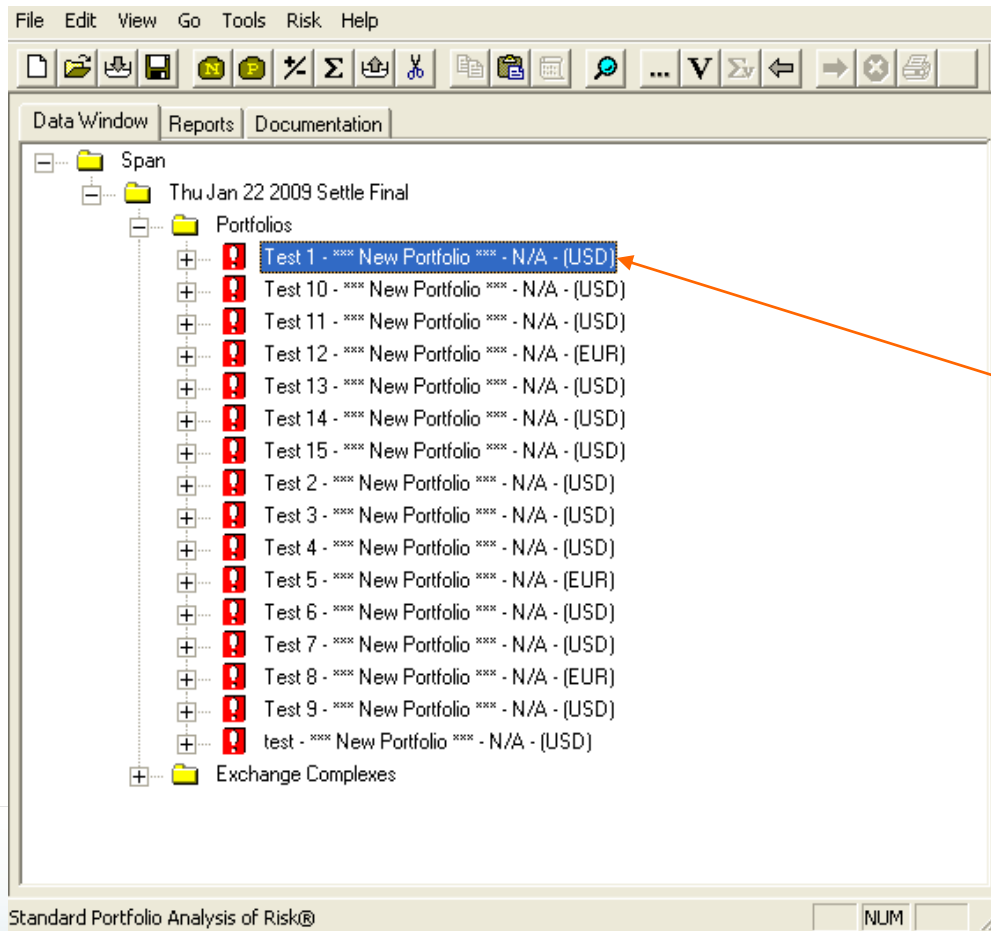
Locked-Up Equity: 0.00

OK Cancel Apply

2b. In the Portfolio Data tab – Enter portfolio name under “Clearing Firm” and select currency of the portfolio from a drop down option. Click OK to finish.

Step 6: Small Portfolios: Enter contracts and data into the portfolio (1/2)

3a. Select portfolio.



3a. In the data window, double click on the portfolio where contracts are to be entered

Step 6: Small Portfolios: Enter contracts and data into the portfolio (2/2)

3b. Enter contract information.

Test 1 - *** New Portfolio *** - N/A - (USD)

Portfolio Data **Positions** Performance Bond Requirements Values Settlements

Contracts With Positions All Positions for Selected Exchange Complex

Exchange: CME - CMD Product Type: Credit Default Swap

Product: AABBME - AAB-BANK. Option Series: [Empty]

Contract	Net	Trades
200903 at 0.01		+
200906 at 0.01		+
200909 at 0.01		+
200912 at 0.01		+
201003 at 0.01		+
201006 at 0.01		+
201009 at 0.01		+
201012 at 0.01		+
201103 at 0.01		+

OK Cancel Apply

3b. Click on position tab. Exchange field should default to CME-CMD; Product Type to Credit Default Swap

3c. Go to product field – select reference entity to be included; select the tenor and coupon rate under “Contract” column and enter contract value in multiples of \$100 K (+ for long CDS position [buying protection]); - for short CDS position [selling protection])

3d. Click ok to return to “data window screen” and repeat above steps to enter another contract

Step 6: Smaller Portfolios: Update notional values of existing contracts (same tenor and same coupon) in a portfolio

Test 1 - *** New Portfolio *** - N/A - (USD)

Portfolio Data | Positions | Performance Bond Requirements | Values | Settlements

Contracts With Positions All Positions for Selected Exchange Complex

Exchange: CME - CMD Product Type: Credit Default Swap

Product: AABBM - AAB-BANK Option Series:

Contract	Net	Trades
CMD ABXRDU Credit Default Swap 200903 at 0.01	2	+
CMD ABXRDU Credit Default Swap 201812 at 0.01	-2	+
CMD ABXRDU Credit Default Swap 201812 at 0.05	3	+
CMD ADORME Credit Default Swap 201109 at 0.01	-2	+
CMD AWRXU Credit Default Swap 201312 at 0.01	-2	+
CMD BMYRDU Credit Default Swap 200903 at 0.01	-5	+
CMD BMYRDU Credit Default Swap 201703 at 0.01	4	+
CMD CHKR XU Credit Default Swap 201209 at 0.01	3	+
CMD CHKR XU Credit Default Swap 201812 at 0.05	-4	+

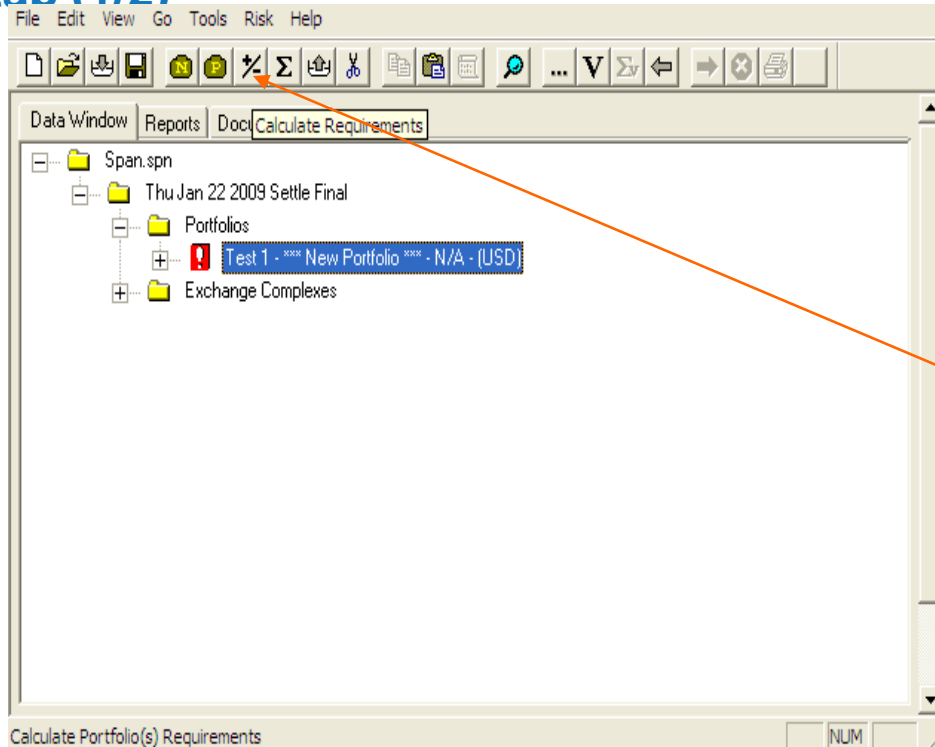
OK Cancel Apply

4a. Repeat Steps 3a
 4b. Click on position tab
 4c. Check "Contracts with positions" and "All Positions for Selected Exchange complex"



4d. Table will be populated with all contracts in the portfolio; update column "net" value based on revised notional

Working Draft - Last Modified 9/23/2009 3:37:18 PM Printed

Step 6: Smaller Portfolios: Calculate margin requirements for a given contract. Once contracts are entered, hit OK to close the dialog box. To calculate margins, select the newly entered portfolio and click on the “+/-“ button. Margin requirements will be displayed in “Performance Bond Requirements” tab (1/2)



5a. Select the newly created portfolio and hit the “+/-“ button to calculate margin requirements

-  Indicates margin has been calculated
-  Indicates margin has not been calculated

Step 6: Smaller Portfolios: Calculate margin requirements for a given contract. Once contracts are entered, hit OK to close the dialog box. To calculate margins, select the newly entered portfolio and click on the “+/-“ button. Margin requirements will be displayed in “Performance Bond Requirements” tab (2/2)

Test 1 - *** New Portfolio *** - N/A - (USD)

Portfolio Data | Positions | Performance Bond Requirements | Values | Settlements

Performance Bond Class: Core

Maintenance Requirements

SPAN Risk:	51,418.00
- Available Net Option:	0.00
= Total Requirement:	51,418.00

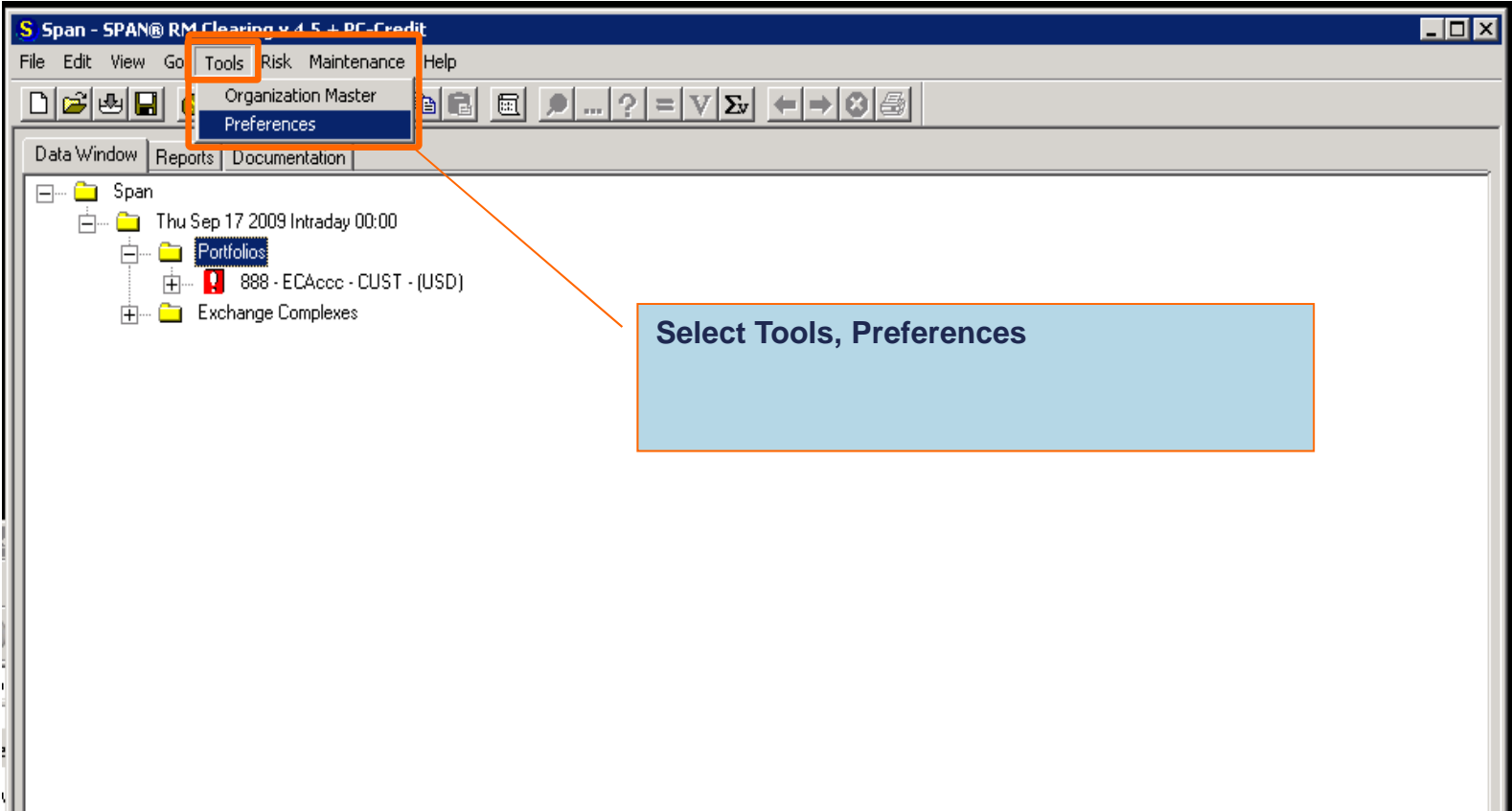
Initial Requirements

SPAN Risk:	51,418.00
- Available Net Option:	0.00
= Total Requirement:	51,418.00

OK Cancel Apply

Maintenance and initial requirements displayed

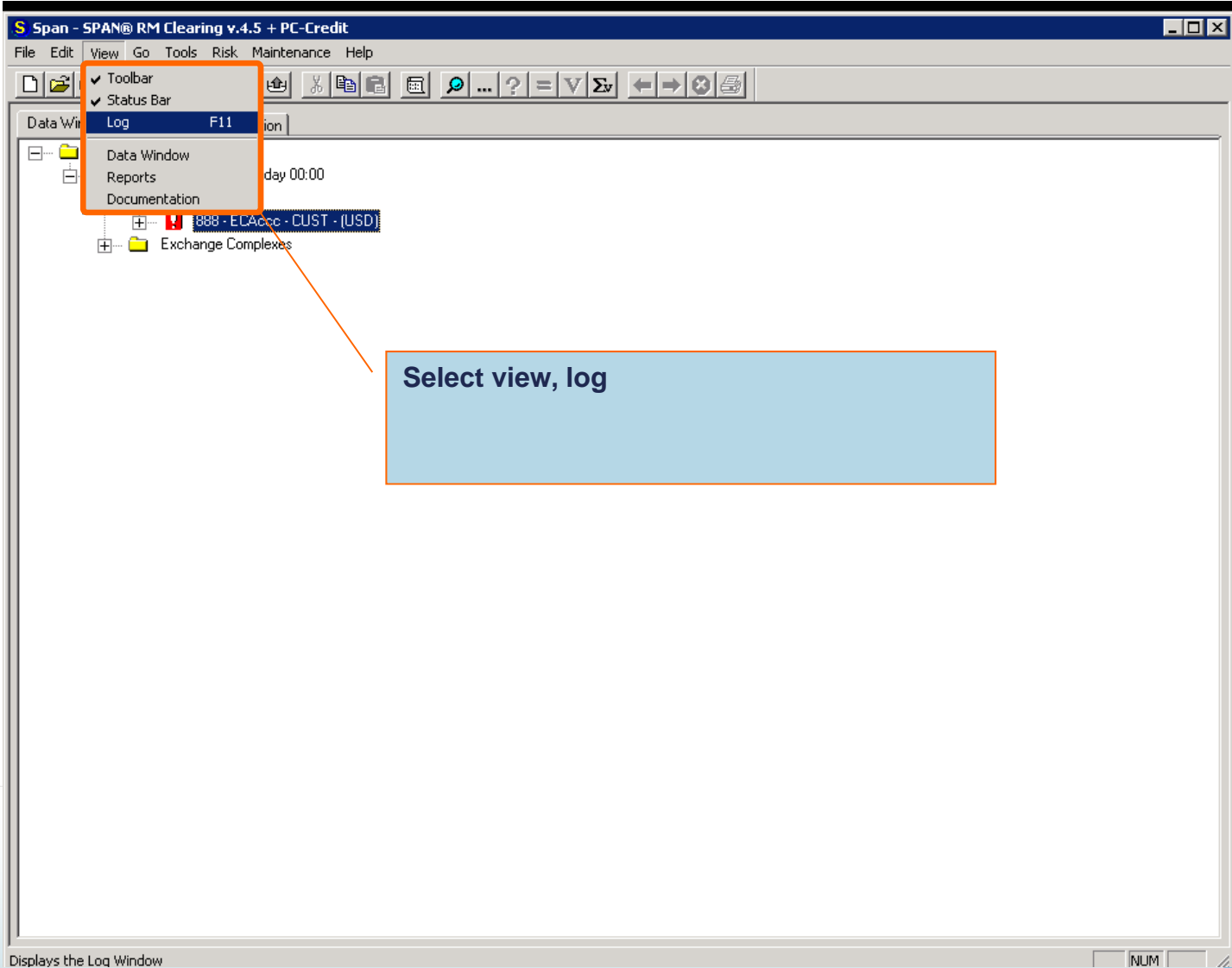
Step 6: Log File Loading For Risk Reporter



Step 6: Log File Loading For Risk Reporter

The screenshot shows the SPAN software interface with the 'Preferences' dialog box open. The dialog has three tabs: 'General Parameters', 'Calculation Parameters', and 'Caps & Floors'. The 'Logging' section is expanded, showing options for 'Severity' and 'Log What'. The 'Log What' section has three radio button options: 'All except calculations', 'Include calculations - no details', and 'Include calculations - all details (slow)'. The 'Include calculations - all details (slow)' option is selected and highlighted with a red box. A callout box with an orange border and blue background points to this option, containing the text: 'Ensure "Include calculations – all details (slow)" is selected'. The 'OK', 'Cancel', and 'Apply' buttons are visible at the bottom of the dialog.

Step 7: Log File Loading For Risk Reporter (1/3)



Step 7: SPAN Log Example (2/3)

Log should populate

Message	Process	Priority	Date	Time
Calculating PB Requirements for 888 - ECAccc - CUST - (USD) - Regular	60	10	9/17/2...	2:34:37 PM
Calculating PB Requirements for CME Portfolio Exchange Complex (USD) - Regular	60	10	9/17/2...	2:34:37 PM
Calculating PB Requirements for AABRME - ABN AMRO BANK NV Portfolio Com...	60	10	9/17/2...	2:34:37 PM
Processing position for Core Maintenance Inter requirement	130	10	9/17/2...	2:34:37 PM
Marginable net positions number for contract CMD AABRME Credit Default Swap ...	130	10	9/17/2...	2:34:37 PM
Finish scan for Core Maintenance Inter requirement	110	10	9/17/2...	2:34:37 PM
For 200909 period delta is 0.0000	110	10	9/17/2...	2:34:37 PM

Step 7: Save Log for Risk Reporter (3/3)

The screenshot shows the SPAN@ RM Clearing v.4.5 + PC-Credit application window. The 'Data Window' tab is active, displaying a tree view of data folders. A 'Save As' dialog box is open, showing the 'My Documents' folder. The 'Save as type' is set to 'Log Files (*.log)'. The 'Save Log' button in the bottom right corner of the application window is highlighted with an orange box. A blue callout box with the text 'Save log for later use' is positioned above the dialog box, with an orange arrow pointing to the 'Save Log' button.

Save log for later use

Save As

Save in: My Documents

- SQL Server Management Studio
- MATLAB
- Visual Studio 2005
- Integration Services Script Component
- Integration Services Script Task
- Visual Studio 2008
- backup_old_multicore
- multicore_2009-01-28
- My Data Sources
- Snagit Catalog
- My Pictures
- My Music

File name:

Save as type: Log Files (*.log)

Save Cancel

Message	Process	Priority	Date	Time
Calculating PB Requirements for 888 - ECAccc - CUST - (USD) - Regular	60	10	9/17/2...	2:34:37 PM
Calculating PB Requirements for CME Portfolio Exchange Complex (USD) - Regular	60	10	9/17/2...	2:34:37 PM
Calculating PB Requirements for AABRME - ABN AMRO BANK NV Portfolio Com...	60	10	9/17/2...	2:34:37 PM
Processing position for Core Maintenance Inter requirement	130	10	9/17/2...	2:34:37 PM
Marginable net positions number for contract CMD AABRME Credit Default Swap ...	130	10	9/17/2...	2:34:37 PM
Finish scan for Core Maintenance Inter requirement	110	10	9/17/2...	2:34:37 PM
For 200909 period delta is 0.0000	110	10	9/17/2...	2:34:37 PM
For 200909 period delta is 0.0000	110	10	9/17/2...	2:34:37 PM

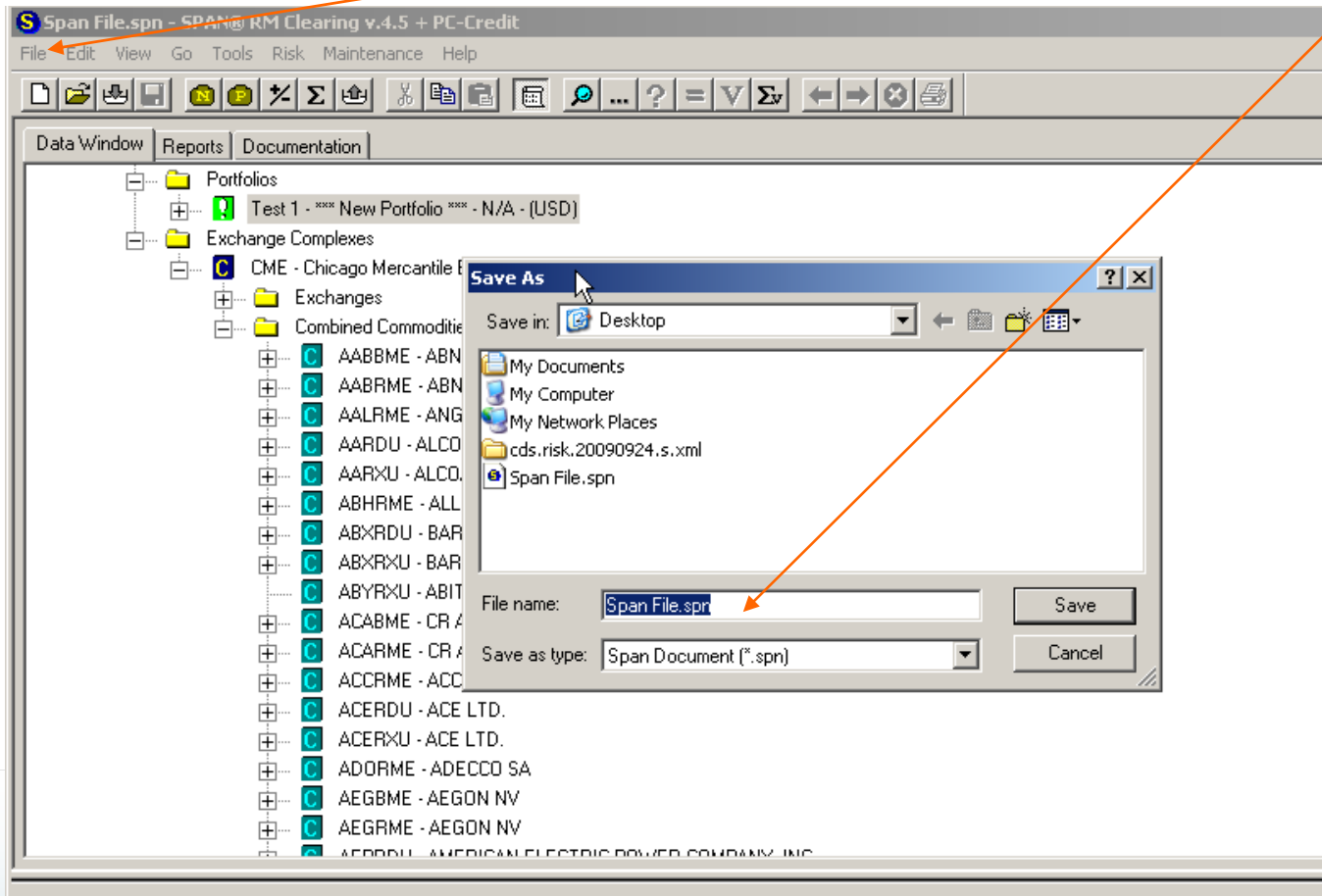
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PgUp PgDn Set Filter Clear Log **Save Log** Details

NUM

Step 7: Save SPAN File for Risk Reporter

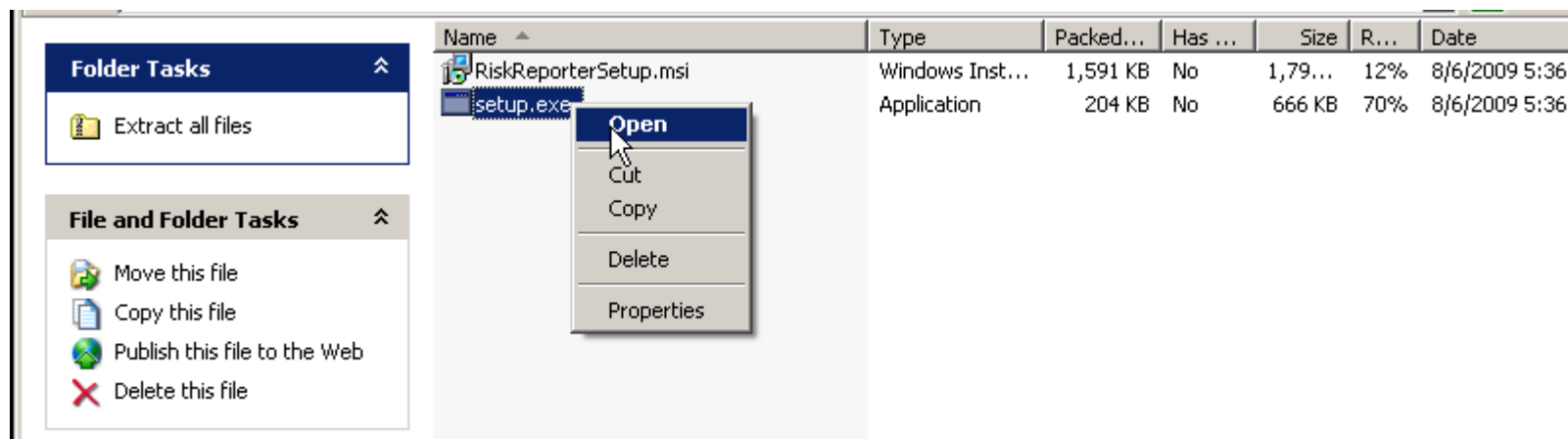
Save SPAN File. File → Save As → Select File Name and location.



xxx.spn

Step 8: Risk Reporter: Set Up

1. Open RiskReporter Zip File on PC Credit CD-ROM
2. Select Setup.exe and follow installation wizard

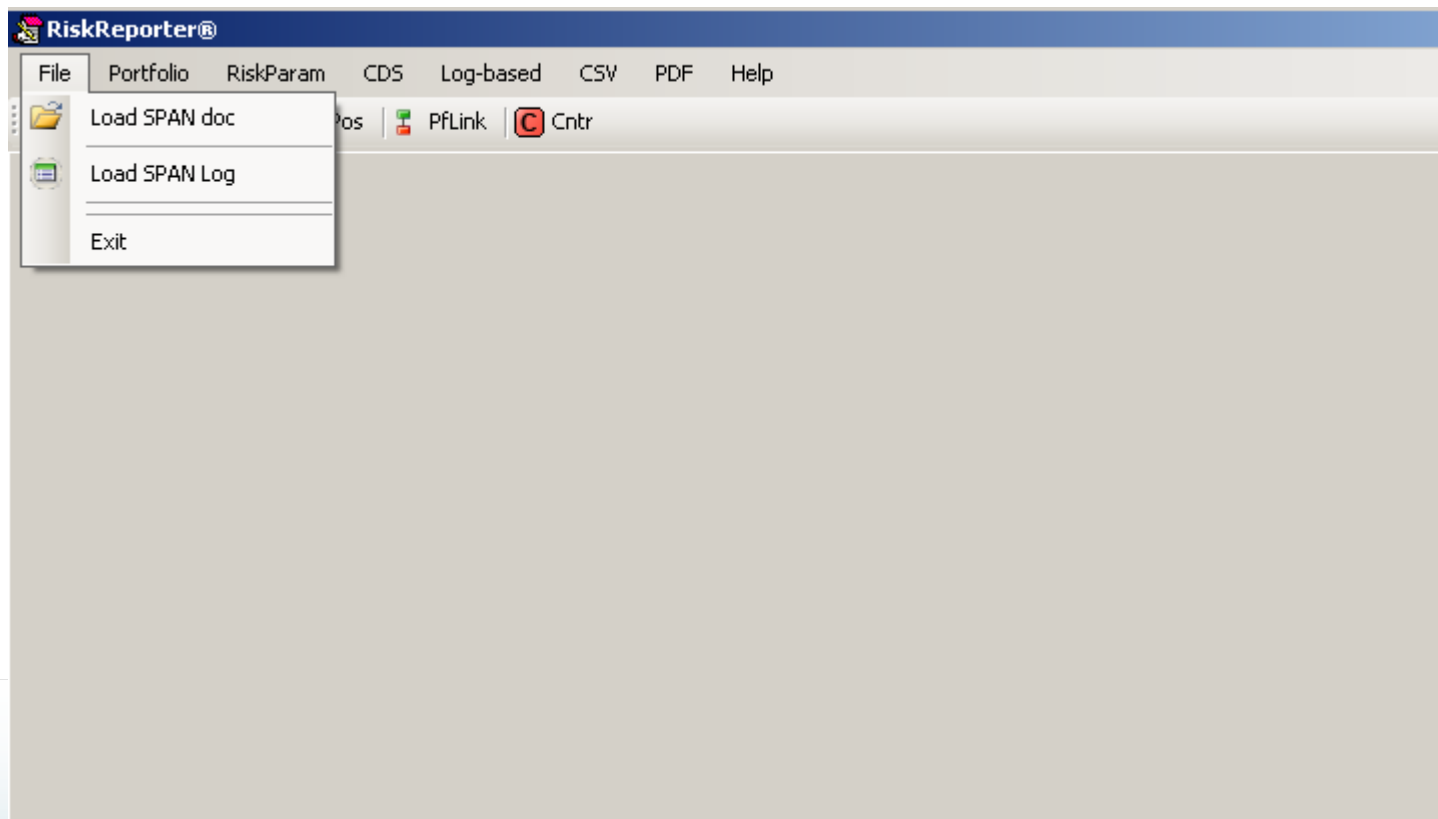


Step 8: Risk Reporter: Load Files

Once Risk Reporter application is open on desktop:

File →

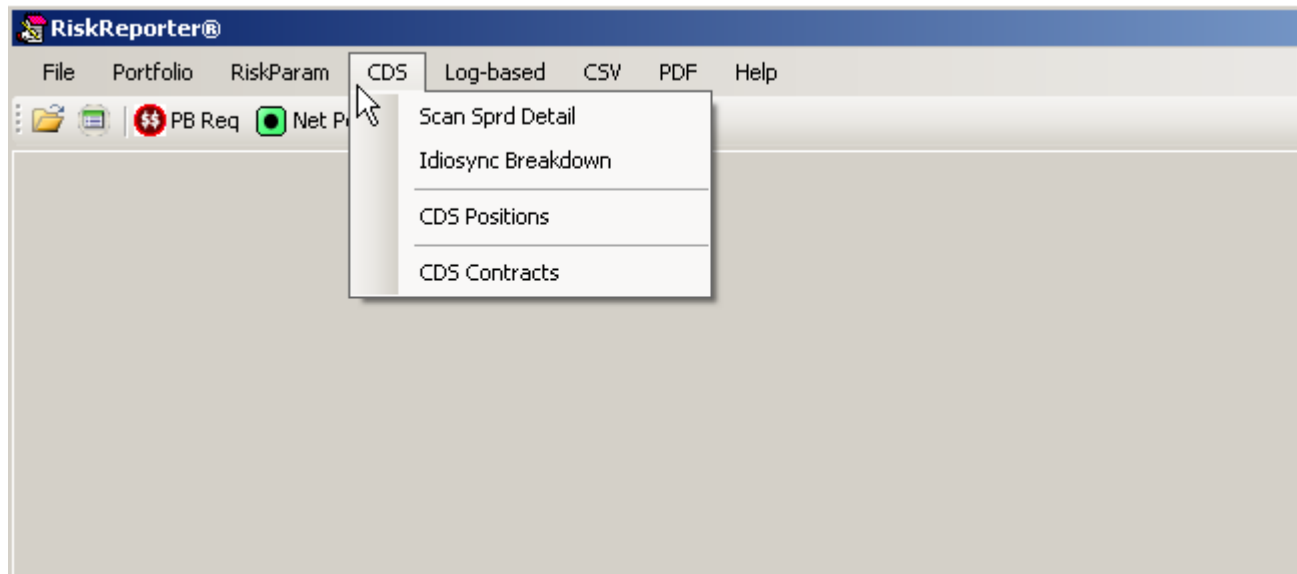
1. Load SPAN doc (xxx.spn file previously saved)
2. Load SPAN Log (xxx.log file previously saved)



Step 8: Risk Reporter: Reports (1/2)

CDS Reports:

1. Scan Sprd Detail
2. Idiosync Breakdown
3. CDS Positions
4. CDS Contracts



Step 8: Risk Reporter: Reports (2/2)

Risk Reporter allows the user to save reports as PDFs as well as export reports to Excel.

The screenshot shows the RiskReporter application window. The title bar reads 'RiskReporter®'. The menu bar includes 'File', 'Portfolio', 'RiskParam', 'CDS', 'Log-based', 'CSV', 'PDF', and 'Help'. The toolbar contains icons for 'PB Req', 'Net Pos', 'PFLink', and 'Cntr'. The active window is titled 'ScanSpreadDetailCDS'. Below the toolbar, there are navigation controls (back, forward, home, refresh, print, save, help) and a zoom level of '100%'. The main content area displays the following information:

PC-Credit
CDS Scanning-based Spreads Detail
Log File: C:\Documents and Settings\E13511\Desktop\LOC...
Date: 9/28/2009 9:46:26 AM

Firm: Test - *** New Portfolio ***

Scen Desc		System Up	System Down	Converge	Diverge	Curve Up	Curve Down	Sector Up	Sector Down	Idiosync	Minimu
Ref	Curr	1	2	3	4	5	6	7	8	9	11
ABHRME	EUR	24,012.70	-24,012.70	7,203.78	-7,203.78	-4,852.46	4,852.46	20,810.96	-20,810.96	10,000.00	4,560
NCYC		35,185.40	-35,185.40	10,555.58	-10,555.58	-7,110.23	7,110.23	30,493.95	-30,493.95	14,652.83	6,68
OVPT		35,185.40	-35,185.40	10,555.58	-10,555.58	-7,110.23	7,110.23	30,493.95	-30,493.95	14,652.83	6,68

Step 8: Risk Reporter: Reports (2/2)

Risk Reporter allows the user to save reports as PDFs as well as export reports to Excel.

Working Draft - Last Modified 9/23/2009 3:37:18 PM Printed

PC-Credit
Log File: C:\Documents and Settings\E13511\Desktop\LOG.log
Date: 9/28/2009 9:46:26 AM

Firm: Test - *** New Portfolio ***

Scen Desc	System Up	System Down	Converge	Diverge	Curve Up	Curve Down	Sector Up	Sector Down	Idiosync	Minimum	Liquid/Basic	Buyer Margin	Seller Margin	JTD
Ref BFCC	1	2	3	4	5	6	7	8	9	11	12	13	14	15
ABHRME EUR	24,012.70	-24,012.70	7,203.78	-7,203.78	-4,852.46	4,852.46	20,810.96	-20,810.96	10,000.00	4,560.00	0.00	66,879.90	66,879.90	-277,760.00
NCYC	35,185.40	-35,185.40	10,555.58	-10,555.58	-7,110.23	7,110.23	30,493.95	-30,493.95	14,652.83	6,681.69	0.00	97,997.99	97,997.99	-406,997.02
OVPT	35,185.40	-35,185.40	10,555.58	-10,555.58	-7,110.23	7,110.23	30,493.95	-30,493.95	14,652.83	6,681.69	0.00	97,997.99	97,997.99	-406,997.02

Represents total margin requirement