



FINCAD[®] Analytics Suite 2009 Release Notes

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FINCAD[®] Analytics Suite 2009 Release Notes

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Revisions

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1. Introduction

The primary purpose of the release notes are to provide information on *changes* that have been made to FINCAD Analytics Suite 2009 for Excel and for Developers compared to FINCAD XL and FINCAD Developer version 11. All items highlighted in grey are new to the FINCAD Analytics Suite 2009 maintenance release (February 2009).

Also included within the document are known issues with workarounds, workbook specific changes that will affect Analytics Suite for Excel and a section on issues affecting only Analytics Suite for Developers.

2. Analytics

The analytics section includes new analytics features added in the maintenance release as well as highlights changes that were made to functions based on issues that were found. Unless otherwise specified, the update to the function does not require a user to make any changes to their application or spreadsheet. The value may change when a recalculation is done. The changes listed here will affect FINCAD Analytics Suite for Excel and FINCAD Analytics Suite for Developers.

2.1 New Analytics Features

Altiplano Full Risk	A function was added that provides the user with all first order risk for the inputs used in pricing an Altiplano option.
Brazilian FRN	An additional interest payment type was added to the aaFRN_BRL* functions. This new method is based on ratio of principal payment over total principal remaining.
Snowrange	Functionality was added for a snowrange which is essentially a structured product where the current coupon depends on the previous coupon subject to the current coupon staying within a pre-specified range.
Trigger Swap	Allows for the pricing of a swap (vanilla or amortizing) where the current coupon can be knocked out if the floating rate reaches a barrier (pre-specified level). A cash flow function is also provided.

2.2 Fixed Income

aaFRN*	The FRN functions were returning a large convexity when no change of principal was specified. This has been fixed.
aaFRN*	In compounding cases the function would use the accrual method specified for the payments. This has been changed to use the accrual method for rates.
aaFRN*_cf	In aaFRN2_fs_cf, the <i>total cash flow</i> and <i>present value total cash flow</i> were actually outputting the interest payment. The label is updated.
aaFRN_CM_*	Error validation was improved to catch cases where the user did not

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aaSwap* = aaSwap, aaSwap2, aaSwap3, etc.

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	provide payment details after the value date.
aaFRN3_p	The convexity output would return an error in certain cases. This is fixed.
aaFRN_arrears	Improved the convexity adjustment. The adjustment is now done using a full exponential method rather than a first order Taylor approximation.
aaFRNAvg_fs_cf	When the notional is zero, the average reset rate output was also zero. This has been fixed to output the rate.
aaBond3_dgen_*	The number or days of accrued interest was incorrect when using 30/360 (SIA). This is fixed.
aaBond_IT_rval	aaBond_IT_rval paste example did not work. This is fixed.
aaBond_IT_rval	The error validation was improved for cases where the settlement date is before the value date.
aaBond_crv*	The function would output duplicate dates when two bonds shared the same maturity. A check was added to ensure duplicate dates do not appear.
aaFixlg*_dgen	The accrued interest would not switch from long to short when the corresponding switch was changed. The output table is updated.
aaSwap*	If the settlement date and effective date fall on a weekend combined with the <i>previous business day</i> adjustment, the accrued interest was not output. This is fixed.
aaSwap_p	In previous releases the function outputs different results when the stat list or holiday list were transposed. This is fixed.
aaSwap_BRL_*	If the swap had multiple payments and was forward starting, the calculated discount factors were not correct. Currently the swap function does not allow for multiple payments. This change was made to accommodate the Brazilian FRN function.
aaSwap_BRL_cf	In the output table the first row showed a reset date of zero in the case where the accrual start date is on or before the effective date. This is fixed.
aaSwap3_p	The function would fail when it was called hundreds of times. This is fixed.
aaSwap4_*	This function allows the user to specify different types of date tables. In some cases, the output values were different depending on the style of date table being used. The function values are now consistent regardless of table structure.
aaSwap4_*	The error validation of the floating leg table was improved for the accrual method and business day convention inputs.
aaSwapPort_*	The function now allows for swaps to be forward starting. Previously the function would #VALUE for these cases.
aaSwapPort_*	Function would #VALUE when more than 81 swaps were entered. The function was updated to allow more swaps.

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aaSwap* = aaSwap, aaSwap2, aaSwap3, etc.

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2.3 Interest Rate

aaCallCMSSprdRangeAcc_LMM_fs (IR)	In cases where there was only one exercise date, the put option value would be negative. Since the value should be positive, the bug causing this negative value was fixed.
aaSwaption2_dgen_cf	Output table descriptions updated for clarity
LMM Cash flows	The raw expectations of the cash flows (not discounted) are the expectation from the T-forward measure.

2.4 Credit

aaCDS_loan_*, aaCDS_abs_*	<p>New functions were added to price a loan CDS and an ABS CDS. In aaCDS_loan_*, the loan cancellation probability curve does not allow the user to enter the value date as the first date in the curve and set the probability to zero. A workaround is to add a date one day after the value date and enter in a zero to the probability column.</p> <p>The same type of workaround is required for the table 'cumulative prepayment fraction curve' in aaCDS_abs_*.</p>
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2.5 Equity, FX & Commodities

aaBSG_delta_smile_iv	The math reference was updated to include information on convergence condition that is used.
aaDigital_AON	The rho of rate and rho of cost assumed a continuous rate basis while the other Greeks and inputted rates assumed annual. These two outputs now also assume annual.
aaTRS_eqty_for	aaTRS_eqty_for the stub period (odd date) fields combined with the 3rd Wednesday business day convention led to a #VALUE. This is fixed.
_ix functions	The _ix functions were given nodes in the tree under Options, Equities, Foreign Exchange and Commodities.

2.6 Utilities

aaCorr_mat_h	In rare cases, due to bad inputs, the function would cause Microsoft Excel to #VALUE or crash. Internally this was due to a function call to aaEigen. This issue has been fixed.
aaDateCount	During performance testing, the speed with the function aaDateCount was found to be too slow. The performance issue was fixed and tested by running an example with a long holiday list parameter (2223 holiday entries). Test : v2009 = over 450ms; v2009.1 = 35ms.
aaAccrual_factor2	The function aaAccrual_Factor2 was not calculating the accrual correctly for act/365L. This has been fixed.
aaAccrual_factor2	Testing revealed that the function was slow in the v2009 release. The performance issue was fixed and tested by running an example with a

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	long holiday list parameter (2223 holiday entries). (v2009 = over 300ms; v2009.1 = 35ms)
aaAccrual_factor	Improved the function by truncating fractional dates that a user has entered.
Calibration	All calibration routines were reviewed. Updating the code led to a performance increase of approximately 30%. Also certain cases that were previously failing do not.
aaDateGen*	The date generation routines within FINCAD were re-written. These routines are used in most FINCAD functions except for _fs functions. The update has allowed for previously reported issues to be fixed and improve performance. A list of some of the resolved issues is below. In general, most of the issues revolved around cases that were not very common.
aaDategen*	The date generation gave inconsistent results when the settlement date was on a Saturday, the date of last coupon is on Sunday and next good business day convention is used.
aaDateGen*	Function would adjust the terminating date even though the user specified no adjustment
aaDateGen*	When the frequency was set to weekly using next good business day and a date of first coupon is given, the output would show an incorrect effective date in the first row of the output.
aaDateGen*	An extra cashflow was not being shown when using backward generation, settlement date (d_s) > unadjusted date of last coupon (d_l_cpn), but d_s < adjusted d_l_cpn to next business day
aaDateGen*	Using forward date generation and having the effective date (d_e) on an end of month non leap year setting (not February) gave the wrong last date of month in each cash flow period.
aaDateGen*	Using forward date generation with a given date of first coupon (d_f_cpn) and no date adjustment led to an incorrect cash flow.
aaDateGen*	Using forward date generation, the dates generated were incorrect. For example, the correct cycle should be May 30, Aug 30, Nov 30 and Feb 28 (or 29).
aaDateGen*	In certain forward generation cases, the function would return a #VALUE even though the input dates were valid.
aaDateGen*	In backward generation, there were rare cases with next business day adjustment where a cash flow date was missed.
aaDateGen*	In backward generation, there were rare cases with next business day adjustment where a cash flow date was missed.
aaDateGen*	Using forward date generation where the settlement date (d_s) > unadjusted date of last coupon (d_l_cpn) but the d_s < adjusted d_l_cpn under next good business date led to a cashflow period being missed.
aaDateGen*	Using backward or forward date generation, end of month - ignore leap years and date of first coupon and date of last coupon (d_l_cpn) fall on the end of month (d_l_cpn is Feb-28-2004) produced incorrect cash flow periods.
aaDateGen*	The date generation routine gave users a 3 day leeway in case they incorrectly entered in dates. As this leeway was causing problems and was not consistent, it has been removed.
aaDategen*	Issues with forward date generation caused the function to fail in certain cases. These cases were fixed.

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3. Documentation Changes

The section lists changes to documents affecting FINCAD Analytics Suite for Excel and FINCAD Analytics Suite for Developers.

Math – PVCF	In the PVCF math document the bpv entry is duplicated. The document was updated.
Brazilian Swap	Updated the 'Functions Used' section of the How-to-use document to include the aaSwap_BRL_crv function.

4. Usability Changes

The following list of issues / changes are only specific to FINCAD Analytics Suite 2009 for Excel.

Credit Default Swaps - Alternative Modeling Approaches	In math doc "Credit Default Swaps - Alternative Modeling Approaches" a footnote was missing. The document was updated to include the following: The rebased discount factor curve is obtained by scaling the discount factor curve so that it starts (has a value of \$1\$) on the value date.
PRDC notes	Spelling mistakes were corrected within the math references
Heston Volatility and Variance Swaps	In the Variance and Volatility Swaps functions (using Heston) math reference, under equation (18) the definition says they are the initial volatility and long term volatility. It should read initial variance and the long-term variance
FINCAD Option Models	A broken link within the FINCAD Option Models math reference was fixed.
Swaptions	A broken link within the Swaptions math reference was fixed.
Tranche Linked Notes	A broken link within the Tranche Linked Notes math reference was fixed.
Swap Portfolio Functions	The workbook examples for the Swap Portfolio functions were missing from the math reference. These have been added.
Brazilian FRN	The example within the math reference was not set-up correctly. The example has been updated.
CMS Caplets and Floorlets	The example within the CMS Caplets and Floorlets math reference was not set-up correctly. The example has been updated.
CMS Spread Range Accrual Note Example	The example within the math reference was not set-up correctly. The example has been updated.
PRDC Math reference	The example within the math reference was not set-up correctly. The example has been updated.
Treasury Lock Math Reference	The example within the math reference was not set-up correctly. The example has been updated.
Math Docs Missing in the Analytics Finder	Some math references were not displayed in the Analytics Finder. This has been updated.
Double Barrier Exotic Options Math Reference	Within the double barrier math reference, there was a link to a function that does not exist. This link was removed.
Spread option math	The spread options document contained reference to a formula that

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reference	was incorrect. The correct payoff is $\{\text{Max}(S_2-S_1-K,0)\}$ and the math reference has been updated.
Company / users with accented characters fail web activation with FINCAD licensing	The FINCAD licensing file had issues when accented characters were used in the user or company name. The FINCAD licensing service was updated.
Function Wizard	If a user had v11 and installed v2009, the Function Wizard would not launch in v11 if the user chose not to proceed with v2009. The reason was that files were being re-named that should not have been. This has been fixed.
Analytics Finder	The Function Finder was completely re-designed. Along with new features, the name was changed to Analytics Finder. You may notice that the first launch of the Analytics Finder is slow. However, subsequent launches are very quick.
Working directory	When launching the FINCAD add-in, the current working directory was changed to FINCAD. This behavior was changed. The working directory does not change.
Cash flow Reports	New tool for creating reports. Please refer to the Analytics Suite for Excel User Guide.

5. Workbooks

A number of new workbooks were added to FINCAD Analytics Suite 2009 maintenance release (February 2009) for Excel which are not in FINCAD Analytics Suite 2009 (November 2008).

Asset-Backed CDS Load-Only CDS	Calculate the fair value, cash flows and risk factors of a loan-only or asset backed CDS.
Altiplano Option	Calculates, by Monte Carlo simulation, the fair value, the precision of the fair value and the risk statistics for an Altiplano option. Allows free-style sampling points
Swaption (European – SABR Model)	Calculate the fair value and risk statistics of a European swaption on a custom structured swap using the SABR model. Calibration worksheets enclosed.
Calibration – Auto (BK & HW – using Swaptions) (BLP(R))	Calculate the rate volatility and mean reversion constant for the Hull-White or Black-Karasinski model given swaption data. Allows for automatic (Bermudan style) and manual selection of swaptions. Uses Bloomberg data feed for curve and swaption rates.
Calibration – Auto (BK & HW – using Swaptions) (FMD)	Calculate the rate volatility and mean reversion constant for the Hull-White or Black-Karasinski model given swaption data. Allows for automatic (Bermudan style) and manual selection of swaptions. Retrieves interest rate curve, holiday list and swaption volatilities from FINCAD Market Data.
CapFloor Interest Rate Volatility (FMD)	Added a matrix to better display the data and make it

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	easier for the user to integrate the data with other FINCAD functions.
Swaption Interest Rate Volatility (FMD)	Added a matrix to better display the data and make it easier for the user to integrate the data with other FINCAD functions.

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Auto_open	The auto_open code within the workbooks was failing on some machines. This has been fixed.
User settings for workbooks	An issue was detected in rare cases when using FINCAD workbooks. In case an error is encountered it might require the following change. The Error Trapping level in VBA should set to "Break on Unhandled Errors". Setting the error trapping level to "Break on All Errors" will result the code to add curve worksheets to fail.
Microsoft Excel crash when launching the same workbook twice	In rare cases, opening up the bond workbooks multiple times caused Excel to crash. This issue was fixed by making an installer change
Muni Swap (Vanilla or Amortizing)	A formula for determining reset status in the reset table was missing the OFFSET function. This has been added.
Compounding Swap	The workbook would #VALUE when a swap is in its last coupon period (payment frequency = reset frequency). This has been fixed by adding an IF statement before aaColumneCombine and removed aaDisplayArray in ROWS function.
FMD Swap curve formula error with Italian Excel	The data being downloaded from via the FINCAD Market Data connector was formatted for US. This caused problems for jurisdictions where a comma is used versus the period to separate information. This issue has been resolved.
Bond Portfolio (BLP)	The workbook was not downloading historical data. It was updated to use the appropriate function to download the data.
"Vanilla Interest Rate Swap"	The Vanilla Interest Rate Swap workbook (FMD) was removed. The workbook is now available by selecting FINCAD Market Data from the Curve Settings selection and then accessing the workbooks from the Swaps section.
Vanilla Interest Rate Swap Workbook	We recommend that if you are using the vanilla IR swap workbook that is located within the FINCAD Market Data section, to use the workbook located under: Workbooks - > Swaps. Remember to change the curve settings to "FINCAD Market Data."
Variance and Volatility Swap	The workbook would #VALUE when opened. The problem has been fixed.
Variance and Volatility Swap	The underlying price on the "Dividend" sheet was not

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	linked to the main sheet. The link is now there.
Variance and Volatility Swap	The realized variance calculation was updated to output zero when the value date is equal to the effective date
Quanto Option	The workbook was updated to use the new variance swap functions.
CMS Spread Cap or Floor	Output stat #6 (option price) instead of stat #1
Asian option: aaGeo_Asian	aaGeo_Asian function #Values when sampling frequency is set to "continuous". The sampling frequency switch was updated in the Asian option workbook as "continuous" caused the geometric Asian option function to fail.
Quanto option	Domestic FX rate volatility should be 0, but incorrect dummy value appears. Removed the FX rate volatility for the domestic currency.
User data swap curve	Updated. For Bloomberg curve workbooks, the BDP function is now used (versus BLP).
Microsoft Excel 2007 macros	Users had problems with the macros when using Microsoft Excel 2007. The macros have been updated.

6. Known Issues with Workarounds

aaCE_SwapPort_dgen*	The function will #VALUE when a measurement date is entered beyond the longest maturity date of the swap. The workaround is to ensure that the last measurement date does not go beyond the maturity date of the longest dated swap.
Opening a workbook for the first time	When you first open a workbook, auto calculation is set. In v2009, we introduced the ability to change the curve that is used to either be user data, FINCAD Market Data or Bloomberg. Since a workbook is stored without any curve and initially automatic calculation is on, the workbook calculates but #VALUE's. Subsequent openings of workbooks will not calc as we force a change to manual.
dll names	In some cases, the dll name may appear as FINCAD_tkf3_xx_1.dll. It should read: FINCAD_tkf3_xx_2.dll
FMD Login menu is still disabled after timed-out session	User must refresh the curve and login from the prompt window
FINCAD license file not removed on uninstall	To manually remove from command line, run: sc delete lmservice2 and then delete the folder
Co-existence of two Analytics Suite versions	<p>If a user has both FINCAD Analytics Suite 2009 for Excel and for Developers, both version numbers need to be the same. If a user upgrades one, the Analytics Finder may stop working in the older version. A workaround to this issue other than upgrading both products to the same version are:</p> <ul style="list-style-type: none"> • Copy the <i>localization.xml</i> from <i>Program Files\FINCAD\Suite 2009 for Excel\Spec</i> from the

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	upgraded version to the same directory in the prior version
FINCAD Market Data Connector (FMDC)	There is an issue with the FMDC when a user installs the latest version to replace v11. If the user would like to revert back to v11, please contact Client Services for assistance in getting the FMDC working.
aaSwaptionCMSSprd_LMM_LV_f, aaCallCMSSprdNote_LMM_LV_fs, aaCDS_loan_full_risk	The sample application in VB6 cannot be compiled / pasted due to a limit on the size of the paste. To review the function, please use FINCAD Analytics Suite for Excel
Windows font setting	Text may be truncated in the License Manager if Windows display settings are set to a larger scale (120 dpi). The standard setting should be 96 dpi.
Opening FINCAD XL / FINCAD Analytics Suite for Excel with Excel 2003 fails when you have both Excel 2007 & 2003 installed	Run the product in one version of Microsoft Excel.
FINCAD Market Data Enabled Workbooks	There is a conflict when a user has installed both FINCAD XL v11.1 with FINCAD Market Data and FINCAD Analytics Suite 2009 for Excel. The market data connector will fail to download data in the application that was installed first. If after trialing FINCAD Analytics Suite 2009 for Excel you choose not to purchase, FINCAD XL v11.1 needs to be reinstalled.
Running two versions simultaneously	Two versions of FINCAD XL and/or FINCAD Analytics Suite 2009 for Excel will not work. The workaround is to open up one version and then switch to the other version by closing the first. An alternative is to open two different instances of Microsoft Excel and launch FINCAD directly by launching the .xla directly from the folder where the product is installed. In general, please ensure you exit from one version before launching another version.
Product does not load in Microsoft Excel 2007	This could be due to: 1) having an older version as an add-in which will need to be removed. 2) The user is trying to launch the add-in as if they were on an older version of Microsoft Excel. In Microsoft Excel 2007, FINCAD has a new ribbon interface which needs to be loaded. More information on both cases can be found in the FINCAD Analytics Suite 2009 for Excel user guide (http://fincad.com/support/reference_xl.aspx)
.msi Installers	The MSI installers require .Net Framework 2.0 to be installed as a prerequisite. http://www.microsoft.com/downloads/details.aspx?FamilyID=0856EACB-4362-4B0D-8EDD-AAB15C5E04F5&displaylang=en

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Function Wizard does not work in a previous version after installing FINCAD Analytics Suite for Excel	Please re-install the prior version you would like to run.
Uninstalling FINCAD Analytics Suite 2009 for Excel does not remove all files	On an uninstall, some files are left in the folder install directory: FINCAD.ExcelConnector.ClientXL.dll FINCAD.ExcelConnector.ClientXL.tlb and there are dll files remaining in: C:\Program Files\Common Files\FINCAD To remove, manually go to the directory's and delete.
aaFRN3_fs_cf	Given the flexibility of this function, it is possible to enter compounding periods that are not contained within the relevant interest calculation period. This causes the function to not return a value if the interest calculation periods all start after the value date, but at least one compounding period starts prior to the value date. The workaround is to not have a non-zero margin above the compounded rate specified.
aaSwapAvgdgen_cf	The first cash flow date does not match aaSwap4_cf when the discount factor curve starts prior to the value (settlement) date. The workaround is to use a discount curve that starts on the value date.
After maximizing the Analytics Finder it cannot be minimized or closed	To close the Analytics Finder hit ESC. Once it has been closed, restart Microsoft Excel to restore the Analytics Finder. If this does not work, please contact FINCAD.
Credit Contingent Interest Rate swaps	The math reference appears with a lock and grayed out indicating that it is unavailable. This is not the case. There was an issue with the math reference with respect to the title that caused it to be grayed out. However, the reference is readable and is fully available from the functions
Pricing Interest Rate Derivatives with the SABR Model of Stochastic Volatility	The math reference appears with a lock and grayed out indicating that it is unavailable. This is not the case. There was an issue with the math reference with respect to the title that caused it to be grayed out. However, the reference is readable and is fully available from the functions
PRDC Math Reference	The two cash flow examples #VALUE. The reason is that the function was modified to allow the user to see additional outputs. To view the cash flow, directly paste the _cf functions.
CMS Spread Range Accrual Note	The example within the Math Reference #VALUE's due to missing historical rates. Please use the workbook accessible through the Workbooks menu -> Exotic IR Derivatives.

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Treasury Lock math reference	<p>The path going to the example within the math reference is not correct. The correct path is: file:///C:/Program%20Files/FINCAD/Suite%202009%20for%20Excel/hlp/samples/TreasuryLocksExample1.xlt</p> <p>Alternatively, you can view the treasury lock workbook by going to: Workbooks -> Fixed Income Derivatives.</p>
Swap Portfolio	<p>The Math Reference examples link does not work. You can:</p> <ol style="list-style-type: none"> 1) Open the workbook by following this path: Workbooks -> Swaps -> Vanilla Interest Rate Swap Portfolio. 2) Go to the direct location of the stored examples and open: C:\Program Files\FINCAD\Suite 2009 for Excel\hlp\samples\SwapPortfolioExample2.xlt

7. FINCAD Analytics Suite for Developers

The following list of issues are only specific to Analytics Suite 2009 for Developers.

"Show Example" button	The Show Example button was updated to default to the user's last action.
Analytics Finder	The Function Reference now updates and includes details based on the user selected programming language.
aaFRN2_fs	The function aaFRN2_fs failed to calculate (protected memory error) in VB.Net and C#. This issue has been fixed.
DEMOEXE.vbp (running sample app in VB6/COM)	The Demoexe.vbp sample application would not run properly in FINCAD Analytics Suite 2009 for Developer in VB6 and COM. This is now fixed.
aaSwap_crv3	The Java interface for aaSwap_crv3 was changed to allow users to pass in a NULL pointer for the futures curve.
aaCallBond_dgen_OAS	The function would fail when called for the first few times. The function has been fixed to calculate properly.
C sample in Visual Studio 2005	<p>When compiling the C sample in VS 2005, the following warnings are shown:</p> <pre>c:\program files\fincad\suite 2009 for developers\samples\c\implicit\fcexampl.c(92) : warning C4996: 'strcpy': This function or variable may be unsafe. Consider using strcpy_s instead. To disable deprecation, use _CRT_SECURE_NO_WARNINGS. See online help for details. c:\program files\microsoft visual studio 8\vc\include\string.h(74) : see declaration of 'strcpy'</pre>

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	<p>The sample does compile and run successfully.</p> <p>Note: the fix is to us strcpy_s, as suggested by the compiler. However this is a Microsoft specific function and is not standard C.</p>
Enabling Visual Studio Add-in (2005) in FINCAD Analytics Suite 2009 for Developers	<p>The FINCAD Analytics Suite 2009 for Developers Visual Studio add-in will install correctly but will not run if FINCAD Developer v11 is installed. To run v2009, the v11 addin needs to be renamed. The steps are as follows:</p> <p>XP Rename "My Documents\Visual Studio 2005\Addins\FCAddInVS.AddIn.orig"</p> <p>Vista: Rename c:\Users\<user_name>\Documents\Visual Studio 2005\AddIns\FCAddInVS.AddIn.orig</user_name></p> <p>The files have to be renamed to something other than ".AddIn" extension</p> <p>There are no known issues with Visual Studio 2008.</p>
Add to sample app (Excel VBA) launches an Excel worksheet but the sample does not get added	<p>This may be due to a trust issue. In cases where the sample is not added, "Trust access to Visual Basic Project" needs to be checked in order for the paste to work.</p>
Functions with more than 65535 characters cannot be seen in the sample applications in VB6	<p>This problem is generally present in functions that contain a large covariance matrix. To review the function, please use FINCAD Analytics Suite for Excel</p>
Application not working when upgrading to FINCAD Analytics Suite 2009 for Developers	<p>When upgrading to FINCAD Analytics Suite 2009 for Developers, you will need to re-link your application to the FINCAD libraries. The reason is that the libraries have been re-named for this release.</p>
The "open with" button does not work in Microsoft Vista when adding to sample app through the Analytics Finder.	<p>Click on the <i>sample application</i> link, locate the sample file and open directly.</p>
Creating a multi-threaded application	<p>We recommend that when creating a multi-threaded application, you should make use of a thread pool of worker threads. There is a start-up cost for a thread that can be higher than running the calculation. Creating individual threads for a small number of calls can degrade the efficiency of the application you create.</p>
VB COM	<p>After building the VBCOM wrapper, the VBCOM DemoEXE reference needs . Please Click on Project -> References... -> Browse... and select the FINCAD_Suite_COM_32_2009.dll file that you just created. This will allow the DemoEXE application to work correctly.</p>

*Note: * means that the note and the fix applies to all numbered versions of the function. For example, 12 aaSwap* = aaSwap, aaSwap2, aaSwap3, etc.

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8. FINCAD Market Data

The following list of changes or improvements which are only specific to FINCAD Market data.

Usability	Added Proxy Connection Fix to allow Default Credentials for networks with Proxy Servers.
Usability	Added "(FMD)" to the name of all workbooks to make them more easily identifiable and for searching functionality.
Usability	Improved formatting when data is downloaded from the FINCAD Market Data Server
Usability	Added extra error handling support to help trap connection issues. Will now return the WebException and HttpException descriptions when an error occurs allowing FINCAD to help trap the error more quickly.
Workbook	Added Min Years support to Interest Rate Curve Worksheet. This optional field will allow the curves to be extended to a minimum number of years.
Workbook	Delete Vanilla Swap workbook. No longer needed as FMDC is integrated with all other workbooks.
Workbook	An automated calibration workbook has been added. The workbook will download the appropriate data from FINCAD Market Data and automatically calibrate based on the instrument details.
Workbook	Swaption Interest Rate Volatility(FMD).xlt" added a worksheet to transform downloaded data into a matrix
Workbook	"CapFloor Interest Rate Volatility(FMD).xlt" added a worksheet to transform downloaded data into a matrix

*Note: * means that the note and the fix applies to all numbered versions of the function. For example, 13 aaSwap* = aaSwap, aaSwap2, aaSwap3, etc.

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