

## **DS Lab README.WRI file**

**This file contains the following sections:**

1. The manual addenda
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2. The index of DS Lab sample files
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**We urge users of DS Lab to make use of the extensive help file provided. It will guide you through all aspect of DS Lab and contains everything found in the manual. It can be opened and kept handy by using the ALT TAB keys pressed together to switch back and forth between DS Lab and its Help. To learn more about ATL TAB, please look up "Switching" in the index of your Windows manual.**

### **1.1. Changes to the manual and help file**

In Section 3.9.3. "**Error Values**" of Chapter 3 and Appendix C "**Error Values**" the following are error values not documented:

<b>[#EVERY]</b>	Error in the arguments of the Every function.
<b>[#EVERYDAY]</b>	Error in the arguments of the EveryDay function.
<b>[#EVERYMONTH]</b>	Error in the arguments of the EveryMonth function.
<b>[#EVERYWEEK]</b>	Error in the arguments of the EveryWeek function.
<b>[#EVERYYEAR]</b>	Error in the arguments of the EveryYear function.

In Chapter 6 the following sections have been modified:

#### **6.48. Every - Function**

##### **Description**

Assumes the value 1 (**TRUE**) for steps separated by increment intervals, starting from a given step (start\_step). Counts steps based on the **CURRENTSTEP** value if the Step Unit is **Unit**, counts steps based on the **SIMSTEP** if the Step Unit is anything other than **Unit**.

##### **Syntax**

return = Every(start\_step, increment)

##### **Returns**

1 (**TRUE**) or 0 (**FALSE**).

The presence of errors in the arguments will cause the function to return the error value **#EVERY**.

##### **Comments**

Used to determine steps separated by fixed intervals. It is important to understand the distinction between **CURRENTSTEP** (the label for the current step) and **SIMSTEP** (the sequence of the current) to use this function effectively.

When the parameter Step Unit is set to **Unit**, the function refers to the number of the Current Step (**TIME** or **CURRENTSTEP** variables), and counts starting with the function argument start\_step and the given interval.

For example, when the Step Unit is **Unit** the script Every(1, 3) has the value 1 (**TRUE**) when the variable **CURRENTSTEP** (that is the label displayed in the simulation step window) assumes the values 1, 4, 7, 10, etc. Which step this refers to in the sequence of steps will depend on the parameter **Starting step**. If the parameter **Starting step** is 5 (**CURRENTSTEP** 1,4 will not show), the third step **SIMSTEP** 3 (**CURRENTSTEP** value 7), will be the first step for which the condition is true and for each third step thereafter.

When the parameter Step Unit is set to a measure other than Unit, the function refers to the period number (**PERIOD** or **SIMSTEP** variables). It cannot use **CURRENTSTEP** to count because this is now contains a label (a month for example) rather than a number.

For example, when the Step Unit is set to **Month**, the script Every(1, 3) has the value 1(**TRUE**) when the variable **SIMSTEP** assumes the values 1, 4, 7, 10, etc. That is, beginning at the first step in the sequence, regardless of which month of the year it may be, and each third step thereafter. If the parameter **Starting Step** is February, Every(1,3) will be true for February, May, August etc.

#### **6.49. EveryDay - Function**

##### **Returns**

1 (**TRUE**) or 0 (**FALSE**).

The presence of errors in the arguments will cause the function to return the error value **#EVERYDAY**.

#### **6.50. EveryMonth - Function**

##### **Returns**

1 (**TRUE**) or 0 (**FALSE**).

The presence of errors in the arguments will cause the function to return the error value **#EVERYMONTH**.

#### **6.51. EveryWeek - Function**

##### **Returns**

1 (**TRUE**) or 0 (**FALSE**).

The presence of errors in the arguments will cause the function to return the error value **#EVERYWEEK**.

#### **6.52. EveryYear - Function**

##### **Returns**

1 (**TRUE**) or 0 (**FALSE**).

The presence of errors in the arguments will cause the function to return the error value **#EVERYYEAR**.

## **2.1. Samples from Chapter 6**

*	AFV.LAB	Shows examples of the Advanced
	Future Value functions	
*	APV.LAB	Shows examples of the Advanced
	Present Value functions	
*	BOND.LAB	Shows examples of the Bond functions
*	CALCFROM.LAB	Shows examples of the CalcFrom
	function	
*	FV.LAB	Shows examples of the Future Value
	functions	
*	GETSTEP.LAB	Shows examples of the GetStep
	function	
*	GOALSEEK.LAB	Shows examples of the LoopTime
	instruction	
*	INSTR.LAB	Shows examples of the Script
	Language instructions	
*	INVENTOR.LAB	Shows examples of the Inventory
	functions	
*	MATH.LAB	Shows examples of the Mathematical

	and trigonometrical functions	
*	POKE.LAB	Shows examples and explains the use of the Poke function
*	PV.LAB	Shows examples of the Present Value functions
*	REQUEST.LAB	Shows examples and explains the use of the Request function
*	SP.LAB	Shows examples of the Stock Portfolio functions
*	ST.LAB	Shows examples of the Short Term Note functions
*	STAT.LAB	Shows examples of the Statistical functions
*	TREND.LAB	Shows examples of the three Trend functions

## 2.2. Samples Models

*	800PHONE.LAB	Shows comparison of 800 number calling plans
*	AFVINCCF.LAB	Shows an example of the AFVFutureValueIncreasingCashFlows function
*	BNDFNCT1.LAB	Shows an example of some of the Bond functions
*	CALLOPTN.LAB	Shows an example of the SPEquityCallOption function
*	CASHACNT.LAB	Shows an example of an account with interest calculation
*	FIN_STAT.LAB	Shows an example of financial statements
*	FXRTMRTG.LAB	Shows a fixed rate mortgage calculator
*	HM_BDGT.LAB	Shows an example of a home budget
*	INVENTORY.LAB	Shows an example of an inventory management model
*	MAILING.LAB	Shows an example of a mailing model
*	MORTCOMP.LAB	Compares values from FXRTMRTG.LAB and VRRTMRTG.LAB
*	MUNIBDGT.LAB	Shows a model that generates potential tender pricing for the re-purchase of outstanding municipal bonds
*	MUNISENS.LAB	Shows an example of sensitivity of the present value of cash flows from MUNIBDGT.LAB to changes in interest rates
*	PENSION.LAB	Shows an example of a pension plan disbursement decision
*	PV&IRR.LAB	Shows examples of the use of the Present Value and Advanced Present Value functions
*	REVMARG2.LAB	Shows an example of a Revenue and Gross Margin Model
*	TRNDFNCT.LAB	Shows an example of the Trend functions
*	VRRTMRTG.LAB	Shows a Variable Rate Mortgage calculator
*	YTDEXMPL.LAB	Shows examples of how to use scripts to calculate cummulative, year to date, annual, average and quarterly values.