

A. Guidelines for using eCAAT

No.	Title	Description
1	Sample data	You can use the sample data files for learning eCAAT. Please note that the sample data is illustrative and not comprehensive.
2	First row is heading	Please ensure that the first row is column headings.
3	Column heading	Please note that the column headings have to be unique.
4	No sub totals/totals	Please ensure that the rows do not have sub totals/totals.
5	Empty Rows	eCAAT can process files with empty rows. You can also remove empty rows by using "Remove empty rows" function.
6	No empty columns	Please remove empty columns. Columns without header will titled F1, F2, etc...
7	Read only files/sheets	The excel file/sheets should not be read only. If you open a read only file, eCAAT gives a message and makes a copy on which you can perform eCAAT functions.
8	Null and Blank	Please note blank cells with spaces and Null (empty) cells are not same and are treated differently in eCAAT.
9	Date Format	Please verify the dates are in standard format and are recognised as such in excel for getting correct results in eCAAT.
10	Back up your files	Please ensure that you make back up of files when you are using the global find and replace function as undo is not possible.
11	Undo feature not available	Undo feature is not available in eCAAT. Hence, make a copy of the files when you perform any functions which involve change in data.
12	Disabled menus	eCAAT displays menus dynamically based on functions which are possible on the files. Hence, some of the menu options may be disabled. For example: if there are no date related column in the file, e-CAAT will disable MIS and other date related functions.
13	eCAAT functions are disabled	When you open a new file, some of the functions in eCAAT may be disabled, you can enable them by saving and re-opening the worksheet.
14	eCAAT functions are disabled	If eCAAT does not recognise data in your worksheet, it may be disabled. You can try to enable eCAAT functions by switching to another worksheet in the same workbook and then come back to the original worksheet to let eCAAT re-check your data.
15	Naming a worksheet	Please ensure that worksheet name does not have spaces or special character(s).
16	Scope of functions	Please note that most of the functions of eCAAT can be done on selected rows/columns or set of rows or columns or on input data.
17	Resources required	Speed of processing is dependent on specific functions and number of rows and columns.
18	First row excluded	When a function is executed on a column, the first is row is generally excluded from processing, therefore, it is advised to maintain the first row as a header row.
19	New sheet	eCAAT functions may not be enabled on a worksheet until it is saved.
20	eCAAT add-in not showing in MS Excel	If the eCAAT add-in is not displayed in MS Excel, it may have been disabled or may not have been loaded into Excel
21	MS Excel is not responding / eCAAT is taking too long	If MS Excel is unresponsive after running a function in eCAAT, it may be because eCAAT is trying to processing a large volume of data which might take some time.

B. Knowledge Map of eCAAT Functions: some examples

1. Stratify: Numeric

WHAT

Numeric Stratification groups records into strata based on value. The minimum and maximum values of the column are automatically detected by the function. An incremental value is also calculated by the function which can be modified by the user or user-defined intervals can also be entered.

Example:

Group Sales records by amounts.

WHY

- Gain an understanding of the structure of records contained in the worksheet.
- Analyse records by grouping them into different bands of defined range values.

WHO

- Statutory Auditors
- Internal Auditors
- IS Auditors
- Forensic Accountants
- Fraud Analysts
- Others

WHEN

- Analytical Procedures - Analyse a set of records by grouping them into defined strata.
- Sampling - Select stratified samples based on numeric stratification.
- Reporting - Produce reports on periodic variations in a given set of data.

WHERE

- Sales - Stratify sales by transaction value.
- Purchases - Stratify purchase by transactions value.

CRITERIA

- Range – Analyse data within a predetermined range of values.

HOW?

Analysis Menu → Stratify → Numeric

Sample sheet used in the example:

	A	B	C	D	E
1	Date	Sales	InvoiceNo	Name	ItemID
2	01-04-2014	999	1001	Ratnam K R	MM
3	01-05-2014	9999	1002	Sethuraman S	RA
4	31-05-2014	19500	1003	Mallikarjuna H S	SA
5	30-06-2014	19999	1004	Mukhopadhyay Gautam	RA
6	30-07-2014	18500	1005	Sundaram K V	RA
7	29-08-2014	17499	1006	Teli Prafullachandra Kakubhai	RA
8	28-09-2014	17500	1007	Jacob K	SA
9	28-10-2014	16599	1008	Suresh Ramchandra Basarkar	RA
10	27-11-2014	17500	1009	Ghosh Madhusudan	RA
11	27-12-2014	17500	1010	Gupta Vijay Kumar	RA
12	26-01-2015	17500	1011	Majumdar Pradip	RA
13	25-02-2015	17500	1012	Guha Asok	RA
14	27-03-2015	17500	1013	Gupta Vijay	RA
15	26-04-2015	12000	1014	Khandelwal Randhir	SA
16	26-05-2015	12000	1015	Sipayya Rattan Singh	SA
17	25-06-2015	12000	1016	Kommu Kiriti	SA
18	25-07-2015	12000	1017	Soorappa Geregal	SA
19	24-08-2015	12000	1018	Mohanan Nambiar C C	SA
20	23-09-2015	10000	1019	Anand Narayanan S	SA
21	23-10-2015	10000	1020	Sundarasatagopan K	SA

- **Step 1:**
 - Select a column to stratify.
 - Select a column to total.
- **Step 2:**
 - An increment value is automatically selected based on the minimum and maximum value in the column OR **(Optional)** set an interval value manually.
 - Click on “Auto fill” to automatically fill in an upper limit and lower limit for each stratum OR **(Optional)** Fill in the intervals manually by entering a value in the intervals box.

Numeric Stratification

Input Group By Condition

Field to Stratify: Sales Min Value: 999

Field to Total: Sales Max Value: 19999

Increment Value: 2000

	Lower Limit	Upper Limit
▶	999	2998
	2999	4998
	4999	6998
	6999	8998
	8999	10998
	10999	12998
	12999	14998

☒ Auto Fill ☐ Free Interval

Fill **Clear**

Help **OK** **Cancel**

- **Step 3: (Optional)** Click on the “Group By” tab.
 - Select one/ multiple columns to group the results by.
- **Step 4: (Optional)** Set a condition using the ‘Condition’ tab.
 - Example on using the “Condition” tab are given at the end of this document
- **Step 5:** Click OK.

Numeric Stratification Results

File Help

Save As Excel Copy Select All Sampling Number Date Filter Options Print Preview Close

File Edit Sampling Setting Reports Close

Results

	Range	Count_Sales	%_Count_Sales	Sum_Sales	%_Sum_Sales	StrataNo
1	Strata 1 >=999 to <= 2998	1	5.00	999	0.35	1
2	Strata 5 >=8999 to <= 10998	3	15.00	29999	10.41	2
3	Strata 6 >=10999 to <= 12998	5	25.00	60000	20.83	3
4	Strata 8 >=14999 to <= 16998	1	5.00	16599	5.76	4
5	Strata 9 >=16999 to <= 18998	8	40.00	140999	48.94	5
6	Strata 10 >=18999 to <= 19999	2	10.00	39499	13.71	6

- **Step 6: (Optional)** Double click any stratum to drill down and view all records in that stratum.

Numeric Stratification- Drill Down Result

File Help

Save As Excel Copy Select All Number Date Filter Options Print Close

File Edit Setting Print Close

18-05-20

	Date	Sales	InvoiceNo	Name	ItemID
1	30-07-2014	18500	1005	Sundaram K V	RA
2	29-08-2014	17499	1006	Teli Prafullachandra Kakubhai	RA
3	28-09-2014	17500	1007	Jacob K	SA
4	27-11-2014	17500	1009	Ghosh Madhusudan	RA
5	27-12-2014	17500	1010	Gupta Vijay Kumar	RA
6	26-01-2015	17500	1011	Majumdar Pradip	RA
7	25-02-2015	17500	1012	Guha Asok	RA
8	27-03-2015	17500	1013	Gupta Vijay	RA

INFERENCE/ CONCLUSION

- Numeric stratification can quickly group data into different classes based on numeric values to get an overall view of the entire worksheet and also drill down into a specific stratum to analyse it further.
- After analysing the result box of the above example, it is found that:
 - Different stratum have been created based on the interval value entered.
 - Strata 9 in Row 5 has the most number of records at 40% and the largest total '**Sales**' amount at about 50%.
 - When Row 5 is drilled down, all the records that fall between '16999 to 18998' are now displayed.

This information can now be used for further analysis.

2. Classify

WHAT

Classify groups data in a worksheet based on a character column and then summarizes data based on a numeric column.

Example:

Classify Cash book as per account names and summarize based on amounts.

WHY

- Group records systematically.
- Maintain a summary of the worksheet.

WHO

- Statutory Auditors
- Internal Auditors
- IS Auditors
- Forensic Accountants
- Fraud Analysts
- Others

WHEN

- Analytical Procedures - Analyse as set of records by classifying them systematically.
- Reporting - Provide a summarized report based on appropriate classification.

WHERE

- Debtors - Classify customers based on region, product line, etc.
- Payroll - Classify employees based on departments, teams, etc.

CRITERIA

- Classification - Classify data systematically for better analysis.

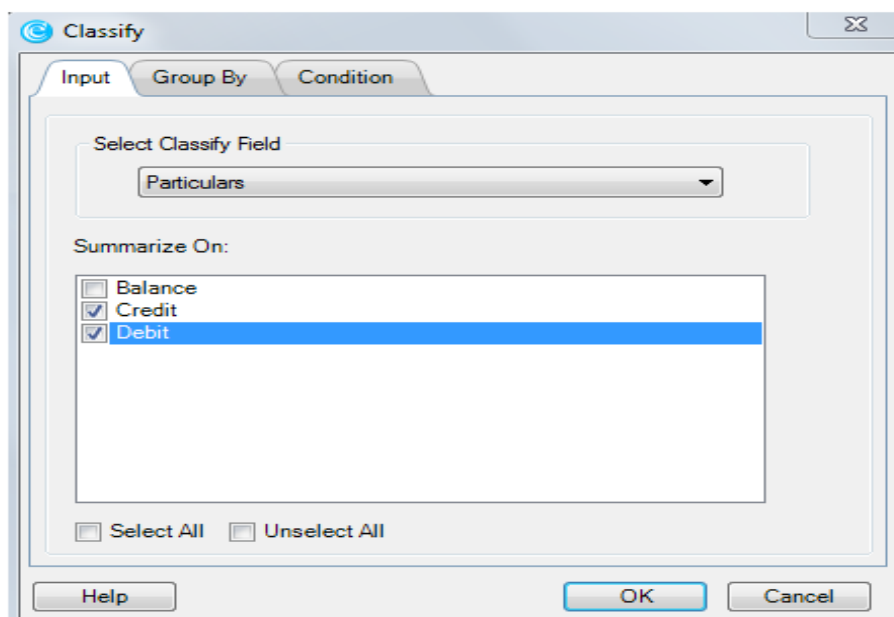
HOW?

Analysis Menu → Classify

Sample sheet used in the example:

	A	B	C	D	E	F	G
1	Date	VoucherNo	Particulars	Debit	Credit	Balance	narration
2	4-Jan-15	OB	Balance B/F	8,479.50		8,479.50	opening balance b/f
3	4-Jan-15	RCT-1	District 6	2,22,374.00		2,30,853.50	being cash received from district
4	5-Jan-15	PMT-67	Staff Welfare		50,000.00	1,80,853.50	tea expenses
5	6-Jan-15	PMT-67	Electricity Charges		3,350.00	1,77,503.50	electricity charges for the month of march 2015
6	7-Jan-15	PMT-67	Menon-Advance		20,000.00	1,57,503.50	as advance
7	4-Jan-15	PMT-4	Conveyance		25,250.00	1,32,253.50	conveyance to mani from DI office
8	4-Feb-15	CNT-1	Icici Bank - 987342343	60,000.00		1,92,253.50	cash from bank
9	4-Feb-15	PMT-2	Computer Maintenance		33,350.00	1,58,903.50	being cash paid for repair prasads lap top
10	5-Feb-15	PMT-85	Furniture & Fixtures		3,34,740.00	-1,75,836.50	re-furnishing of office interiors including flooring/painting
11	5-Feb-15	PMT-85	Staff Welfare		5,560.00	-1,81,396.50	expense of staff meeting
12	5-Mar-15	CNT-12	Icici Bank - 987342343	3,00,000.00		1,18,603.50	being cash withdrawn
13	4-Mar-15	PMT-3	Salary Payable		27,850.00	90,753.50	salary paid to raj march 2015
14	4-Mar-15	PMT-3	Staff Welfare		574	90,179.50	tea expenses
15	4-Mar-15	PMT-3	Menon-Advance		10,000.00	80,179.50	advance paid to menon
16	4-Mar-15	PMT-3	Salary Payable		24,300.00	55,879.50	salary of raghu march 2015

- **Step 1:**
 - Select a character column to classify on.
 - Select one/ multiple numeric columns to summarize on.



- **Step 2: (Optional)** Click on the “Group By” tab.
 - Select one/ multiple columns to group the results by.
- **Step 3: (Optional)** Set a condition using the ‘Condition’ tab.
 - Example on using the “Condition” tab are given at the end of this document
- **Step 4:** Click OK.

Classify Results

File Help

Save As Excel Copy Select All Sampling Number Date Filter Options Print Preview Close

Results

	ClassifyOn_Particulars	CountOfParticulars	%_Particulars	SumOfCredit	%_Credit	SumOfDebit	%_Debit
1	Balance B/F	1	6.67			8480	1.44
2	Computer Maintenance	1	6.67	33350	6.23		
3	Conveyance	1	6.67	25250	4.72		
4	District 6	1	6.67			222374	37.64
5	Electricity Charges	1	6.67	3350	0.63		
6	Furniture & Fixtures	1	6.67	334740	62.57		
7	Icici Bank - 987342343	2	13.33			360000	60.93
8	Menon-Advance	2	13.33	30000	5.61		
9	Salary Payable	2	13.33	52150	9.75		
10	Staff Welfare	3	20.00	56134	10.49		

- **Step 5: (Optional)** Double click any stratum to drill down and view all records in that stratum.

Classify- Drill Down Result

File Help

Save As Excel Copy Select All Number Date Filter Options Print Close

19-05-20

	Date	VoucherNo	Particulars	Debit	Credit	Balance	narration
1	05-01-2015	PMT-67	Staff Welfare		50000	180854	tea expenses
2	05-02-2015	PMT-85	Staff Welfare		5560	-181397	expense of staff
3	04-03-2015	PMT-3	Staff Welfare		574	90180	tea expenses

INFERENCE/ CONCLUSION

- Classify is a useful function for analysis and reporting as it can group and summarize all the data in the worksheet.
- After analysing the result box of the above example, it is found that:
 - **"Staff Welfare"** has the most number of records in the worksheet at 20%.
 - **"Furniture & Fixtures"** has the largest total credit sum in the worksheet at about 63%.
 - **"Bank a/c"** has the largest total debit sum in the worksheet at about 61%.
 - When **"Staff Welfare"** is double-clicked to drill down, all records in that stratum are now displayed.

This information can now be used for further analysis.

3. Outliers

WHAT

Outliers finds all records whose value deviates significantly from the average (mean) or standard deviation of the sum of all records. It is an observation that displays records that are numerically distant from the rest of the data. They may occur by chance, but can also be an indicator of fraud or error.

Example:

Find transactions with unusually large amounts.

WHY

- Find the records whose value differs significantly from the average (mean) or standard deviation of all the records.
- Investigate the reason for their occurrence, whether it may be due to an error or fraud.

WHO

- Internal Auditors
- IS Auditors
- Forensic Accountants
- Fraud Analysts
- Others

WHEN

- Analytical Procedures - Analyse records to discover significant outliers.
- Risk Assessment - Assess the probability of outliers being indicator to fraud.

WHERE

- Payments – Identify transactions that differ significantly from the average (mean) or standard deviation of all the transactions.
- Payroll - Identify any employee claims that differ significantly from the average and investigate whether these are legitimate.

CRITERIA

- Accuracy - Check whether transactions were recorded at the appropriate amounts.

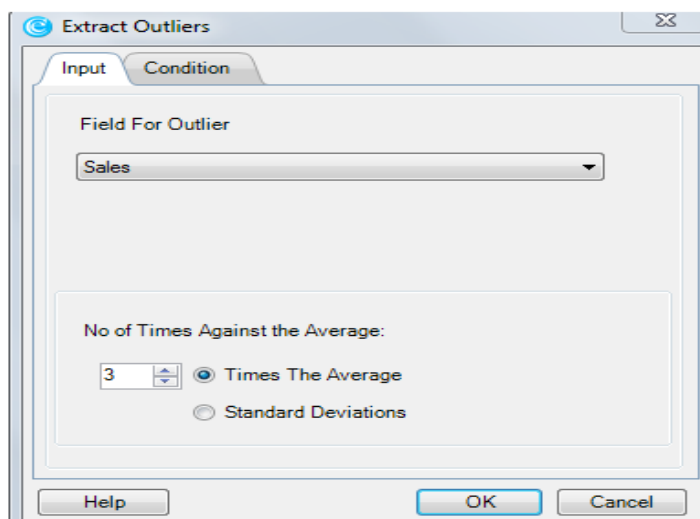
HOW?

Analysis Menu → Outliers

Sample sheet used in the example:

	A	B	C	D	E
1	Date	Sales	InvoiceNo	Name	ItemID
2	01-04-2014	999	1001	Ratnam K R	MM
3	01-05-2014	190000	1002	Sethuraman S	PA
4	31-05-2014	13000	1003	Mallikarjuna H S	SA
5	30-06-2014	19999	1004	Mukhopadhyay Gautam	RA
6	30-07-2014	18500	1005	Sundaram K V	RA
7	29-08-2014	17499	1006	Teli Prafullachandra Kakubhai	RA
8	28-09-2014	17500	1007	Jacob K	SA
9	28-10-2014	18000	1008	Suresh Ramchandra Basarkar	RA
10	27-11-2014	19500	1009	Ghosh Madhusudan	RA
11	27-12-2014	190000	1010	Gupta Vijay Kumar	PA
12	26-01-2015	180000	1011	Majumdar Pradip	PA
13	25-02-2015	200000	1012	Guha Asok	PA
14	27-03-2015	200000	1013	Gupta Vijay	PA
15	26-04-2015	999	1014	Khandelwal Randhir	MM
16	26-05-2015	12000	1015	Sipayya Rattan Singh	SA
17	25-06-2015	12000	1016	Kommu Kiriti	SA
18	25-07-2015	200000	1017	Soorappa Geregal	PA
19	24-08-2015	12000	1018	Mohanan Nambiar C C	SA
20	23-09-2015	999	1019	Anand Narayanan S	MM
21	23-10-2015	10000	1020	Sundarasatagopan K	SA

- **Step 1:**
 - Select a numeric column to check for outliers on.
 - Select either “Times the average” or “Standard deviation”.
 - Set the “Number of times against the average”.



- **Step 2: (Optional)** Set a condition using the ‘Condition’ tab.
 - Example on using the “Condition” tab are given at the end of this document
- **Step 3:** Click OK.

	No_Of_Times	Difference	Date	Sales	InvoiceNo	Name	ItemID
1	3	51	25-02-2015	200000	1012	Guha Asok	PA
2	3	51	27-03-2015	200000	1013	Gupta Vijay	PA
3	3	51	25-07-2015	200000	1017	Soorappa Geregal	PA

INFERENCE/ CONCLUSION

- Outliers is an effective function in identifying values that significantly differ from the average.
- After analysing the result box of the above example, it is found that:
 - 3 records in the worksheet are more than 3 times the average.
 - The difference between the outliers results records and 3 times the average is 51.

This information can now be used for further analysis.

4. Aging

WHAT

Aging function stratifies records by their age taking the oldest date in the record or a specified cut-off date as the reference date. It is pre-loaded with common aging intervals and users can also add and delete their own aging intervals. For example: Compute the difference between cut-off date & invoice date and classify based on a specified age band.

Example:

Age debtors and creditors by days.

WHY

- Age inventory currently in stock.
- Age debtors.
- Ensure that values of inventory and debtors are correctly reported in the books.

WHO

- Statutory AudITors
- Internal AudITors
- IS AudITors
- Management
- Accountants
- Others

WHEN

- Analytical Procedures - Stratify records by age.

WHERE

- Debtors - Aging analysis of debtors appearing in the books.
- Inventory - Aging analysis of inventory currently in stock.

CRITERIA

- Valuation - Whether assets or liabilities are valued properly.

HOW?

Analysis Menu → Aging

Sample sheet used in the example:

	A	B	C	D	E
1	Date	Sales	InvoiceNo	Name	ItemID
2	01-04-2014	999	1001	Ratnam K R	MM
3	01-04-2014	9999	1002	Sethuraman S	RA
4	01-04-2014	19500	1003	Mallikarjuna H S	SA
5	30-06-2014	19999	1004	Mukhopadhyay Gautam	RA
6	30-06-2014	18500	1005	Sundaram K V	RA
7	30-06-2014	17499	1006	Teli Prafullachandra Kakubhai	RA
8	30-06-2014	17500	1007	Jacob K	SA
9	28-09-2014	16599	1008	Suresh Ramchandra Basarkar	RA
10	28-09-2014	17500	1009	Ghosh Madhusudan	RA
11	27-12-2014	17500	1010	Gupta Vijay Kumar	RA
12	27-03-2015	17500	1011	Majumdar Pradip	RA
13	27-03-2015	17500	1012	Guha Asok	RA
14	27-03-2015	17500	1013	Gupta Vijay	RA
15	27-03-2015	12000	1014	Khandelwal Randhir	SA
16	27-03-2015	12000	1015	Sipayya Rattan Singh	SA
17	27-03-2015	12000	1016	Kommu Kiriti	SA
18	27-03-2015	12000	1017	Soorappa Geregal	SA
19	27-03-2015	12000	1018	Mohanam Nambiar C C	SA
20	27-03-2015	10000	1019	Anand Narayanan S	SA
21	27-03-2015	10000	1020	Sundarasatagopan K	SA

- **Step 1:**
 - Select a date column to age.
 - Set a minimum date.
 - Set a maximum date.
 - Set an aging date.
 - Select a numeric column to sum.
- **Step 2:**
 - An increment value is automatically selected based on the minimum and maximum value in the column OR **(Optional)** Set an interval value manually.
 - Click on “Auto fill” to automatically fill in an upper limit and lower limit for each stratum OR **(Optional)** Fill in the intervals manually by entering a value in the intervals box.
 - Select either “Aging summary” or “Aging details”

- **Step 3: (Optional)** Click on the “Group By” tab.
 - Select one/ multiple columns to group the results by.
- **Step 4: (Optional)** Set a condition using the ‘Condition’ tab.
 - Example on using the “Condition” tab are given at the end of this document
- **Step 5:** Click OK.

Aging Results

File Help

Save As Excel Copy Select All Sampling Number Date Filter Options

File Edit Sampling Setting

Results

Age_Period Cnt_Sales Sum_Sales %_Sales

1	Period 1 >= 0 and < 90	10	132500	45.99
2	Period 2 >= 90 and < 180	1	17500	6.07
3	Period 3 >= 180 and < 270	2	34099	11.84
4	Period 4 >= 270 and < 360	4	73498	25.51
5	Lower Bound < 0	0		
6	Upper Bound >= 360	3	30498	10.59

- **Step 6: (Optional)** Double click any stratum to drill down and view all records in that stratum.

Aging- Drill Down Result

File Help

Save As Excel Copy Select All Number Date Filter Options Print Close

File Edit Setting Print Close

19-05-20

	Date	Sales	InvoiceNo	Name	ItemID
1	27-03-2015	17500	1011	Majumdar Pradip	RA
2	27-03-2015	17500	1012	Guha Asok	RA
3	27-03-2015	17500	1013	Gupta Vijay	RA
4	27-03-2015	12000	1014	Khandelwal Randhir	SA
5	27-03-2015	12000	1015	Sipayya Rattan Singh	SA
6	27-03-2015	12000	1016	Kommu Kirti	SA
7	27-03-2015	12000	1017	Soorappa Geregal	SA
8	27-03-2015	12000	1018	Mohanan Nambiar C C	SA
9	27-03-2015	10000	1019	Anand Narayanan S	SA
10	27-03-2015	10000	1020	Sundarasatagopan K	SA

INFERENCE/ CONCLUSION

- Aging facilitates aging analysis of assets & liabilities and also in verifying their valuation.
- After analysing the result box of the above example, it is found that:
 - “Period 1 - >=0 and < 90 days” in Row 1 has the most number of records and also the sum total at about 46%.
 - When “Period 1 - >=0 and < 90 days” is double-clicked to drill down, all records in that stratum are now displayed.

This information can now be used for further analysis.

5. MIS

WHAT

MIS is the analysis of a date column by grouping data based on periods - days, day of week, month, quarter or year. This grouping can be used to calculate sum, average, minimum, maximum and count of one/multiple numeric column(s).

Example:

Group Debtors by month

WHY

- Periodic analysis on a set of records and generate reports on the same.

WHO

- Statutory AudITors
- Internal AudITors
- IS AudITors
- Management
- Others

WHEN

- Analytical Procedures - Group records into periodic bands and use them for performing analysis like trend analysis & time series analysis.
- Reporting - Produce reports with attributes such as Sum, Average, Minimum, Maximum and Count.

WHERE

- Sales - Generate a periodic report on Sales and identify the most profitable period, highest price, lowest price, average sales, count, etc.
- Payments - Analyse the periods during which the maximum payments are made and find out reasons for the same.

CRITERIA

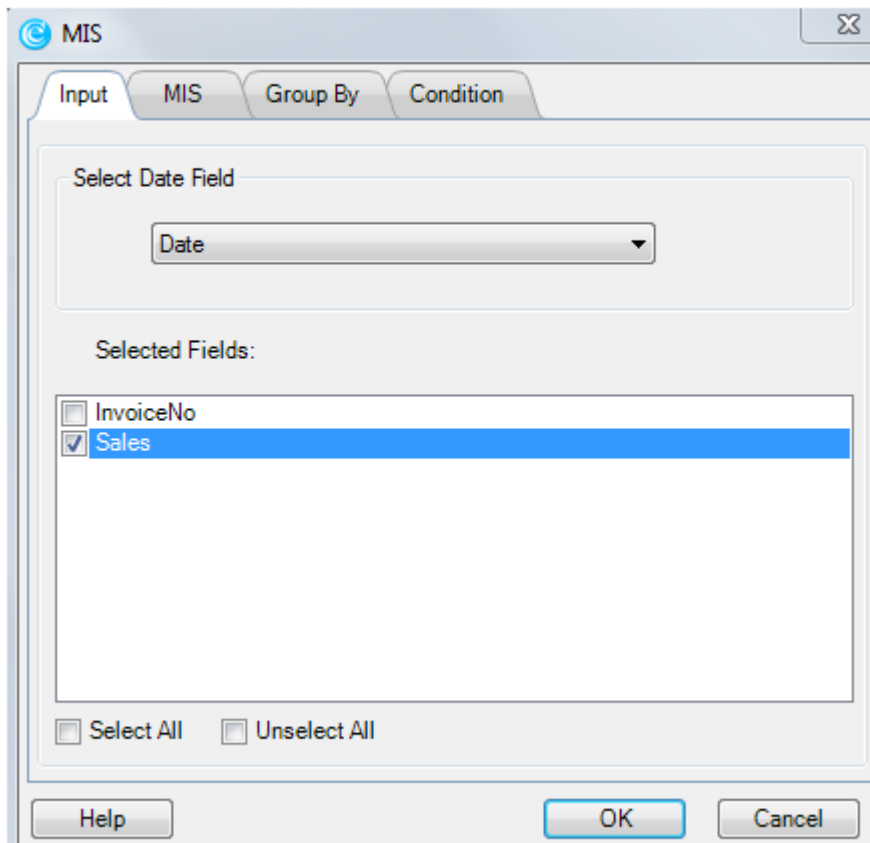
- Presentation – Produce periodic analysis reports that would help in decision making.

HOW?

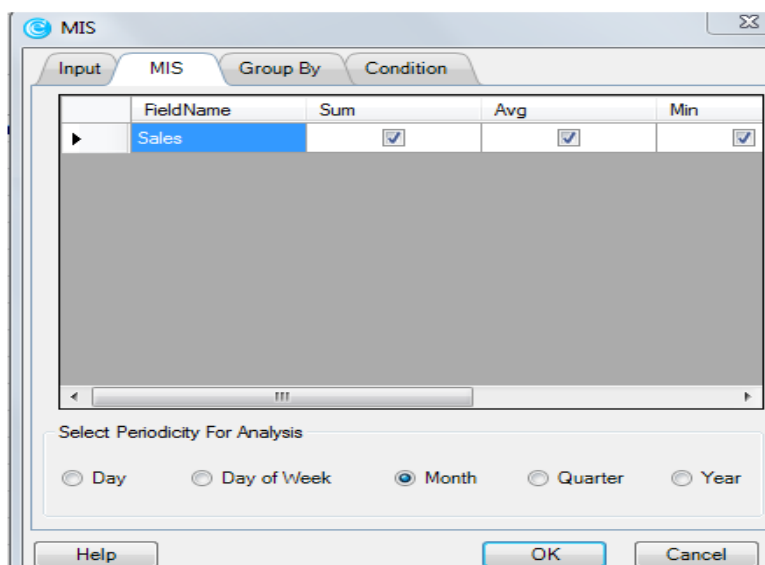
Analysis Menu → MIS

Sample sheet used in the example:

- Step 1:
 - Select a date column to group into periods.
 - Select one/ multiple numeric columns to perform MIS on.

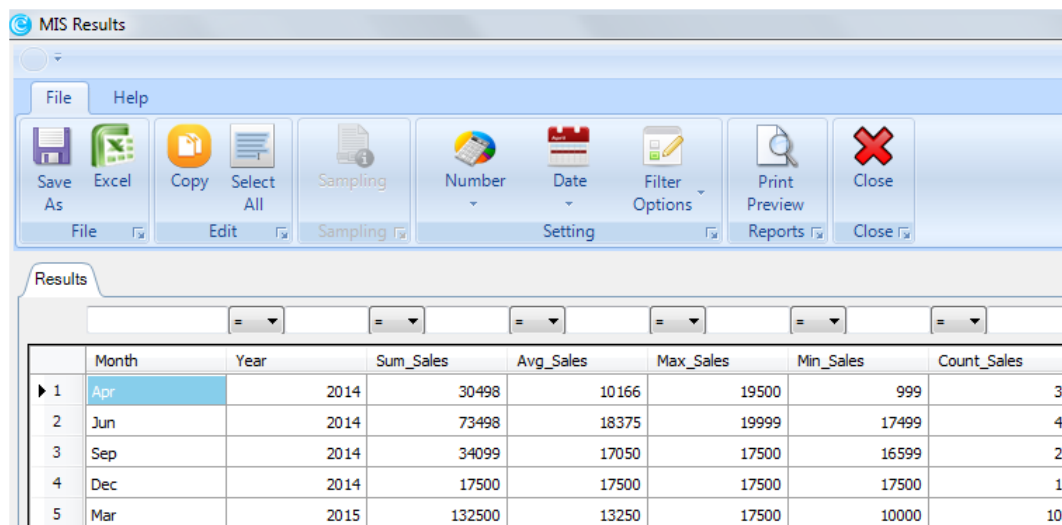


- **Step 2:** Click on the 'MIS' tab
 - Check one/ multiple boxes.
 - Select a period for analysis.



- **Step 3: (Optional)** Click on the "Group By" tab.
 - Select one/ multiple columns to group the results by.

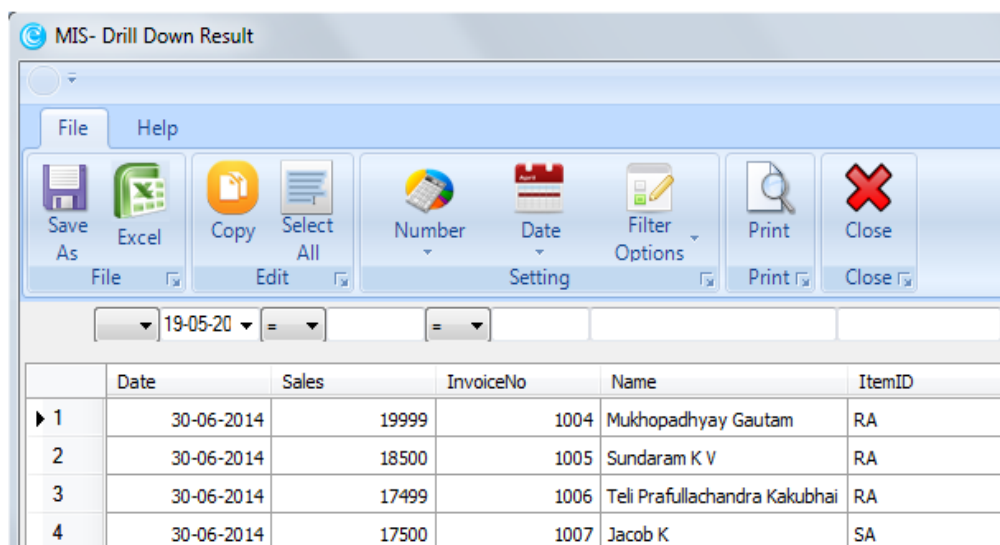
- **Step 4: (Optional)** Set a condition using the 'Condition' tab.
 - Example on using the "Condition" tab are given at the end of this document
- **Step 5:** Click OK.



The screenshot shows the 'MIS Results' window with a menu bar (File, Help) and a toolbar with icons for Save As, Excel, Copy, Select All, Sampling, Number, Date, Filter Options, Print Preview, and Close. Below the toolbar is a 'Results' section with a table of sales data grouped by month.

	Month	Year	Sum_Sales	Avg_Sales	Max_Sales	Min_Sales	Count_Sales
▶ 1	Apr	2014	30498	10166	19500	999	3
2	Jun	2014	73498	18375	19999	17499	4
3	Sep	2014	34099	17050	17500	16599	2
4	Dec	2014	17500	17500	17500	17500	1
5	Mar	2015	132500	13250	17500	10000	10

- **Step 6: (Optional)** Double click any stratum to drill down and view all records in that stratum.



The screenshot shows the 'MIS- Drill Down Result' window with a menu bar (File, Help) and a toolbar with icons for Save As, Excel, Copy, Select All, Number, Date, Filter Options, Print, and Close. Below the toolbar is a 'Results' section with a table of detailed sales records for June 2014.

	Date	Sales	InvoiceNo	Name	ItemID
▶ 1	30-06-2014	19999	1004	Mukhopadhyay Gautam	RA
2	30-06-2014	18500	1005	Sundaram K V	RA
3	30-06-2014	17499	1006	Teli Prafullachandra Kakubhai	RA
4	30-06-2014	17500	1007	Jacob K	SA

INFERENCE/ CONCLUSION

- MIS helps in generating periodic reports about data which helps the management in decision making.
- After analysing the result box of the above example, it is found that:
 - Data in the worksheet has been grouped by **month**.
 - The sum, average, maximum, minimum and count of each month is displayed.
 - When "**June**" is double-clicked to drill down, all records in that stratum are now displayed.

This information can now be used for further analysis.

6. Summarize: Quick

WHAT

Quick Summarize enables the user to summarize one or more numeric columns in a worksheet by performing multiple mathematical functions such as first, last, minimum, maximum, average, total and count.

Example:

Summarize Sales by amount.

WHY

- Generate summarized reports on numeric columns.
- Improve understanding of data by re-arranging it in different ways.
- Make it easier to draw insights from data and use the inferences in decision making.

WHO

- Statutory AudITors
- Internal AudITors
- IS AudITors
- Forensic Accountants
- Fraud Analysts
- Management
- Others

WHEN

- Analytical Procedures - Analyse the data by summarizing it in different ways to understand it in different perspectives.

WHERE

- Inventory - Summarize by stock items to show the count of number of purchases, sum of quantity purchased, sum of total price, lowest and highest unit price paid during a period.
- Payroll - Summarize by employees to show the count of the number of claims, sum of total claims. Lowest and highest claims during a period.

CRITERIA

- Classification - Classify data systematically for better analysis.

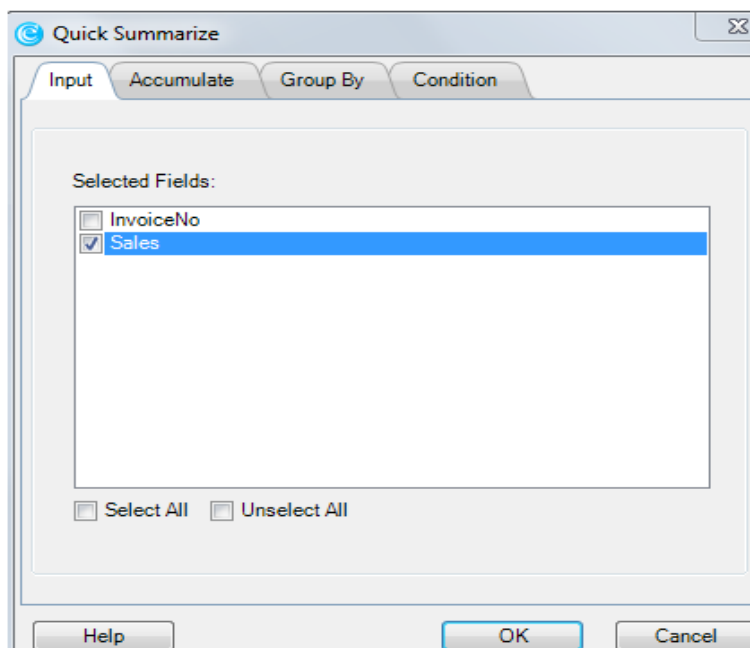
HOW?

Analysis Menu → Summarize → Quick

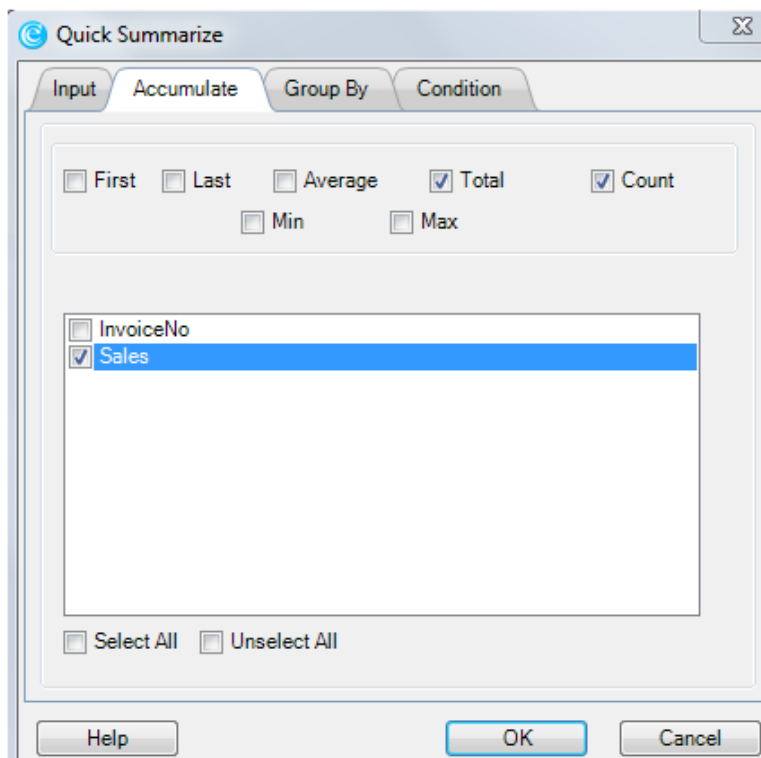
Sample sheet used in the example:

	A	B	C	D	E
1	Date	Sales	InvoiceNo	Name	ItemID
2	01-04-2014	999	1001	Ratnam K R	MM
3	01-04-2014	9999	1002	Sethuraman S	RA
4	01-04-2014	19500	1003	Mallikarjuna H S	SA
5	30-06-2014	19999	1004	Mukhopadhyay Gautam	RA
6	30-06-2014	18500	1005	Sundaram K V	RA
7	30-06-2014	17499	1006	Teli Prafullachandra Kakubhai	RA
8	30-06-2014	17500	1007	Jacob K	SA
9	28-09-2014	16599	1008	Suresh Ramchandra Basarkar	RA
10	28-09-2014	17500	1009	Ghosh Madhusudan	RA
11	27-12-2014	17500	1010	Gupta Vijay Kumar	RA
12	27-03-2015	17500	1011	Majumdar Pradip	RA
13	27-03-2015	17500	1012	Guha Asok	RA
14	27-03-2015	17500	1013	Gupta Vijay	RA
15	27-03-2015	12000	1014	Khandelwal Randhir	SA
16	27-03-2015	12000	1015	Sipayya Rattan Singh	SA
17	27-03-2015	12000	1016	Kommu Kiriti	SA
18	27-03-2015	12000	1017	Soorappa Geregal	SA
19	27-03-2015	12000	1018	Mohanan Nambiar C C	SA
20	27-03-2015	10000	1019	Anand Narayanan S	SA
21	27-03-2015	10000	1020	Sundarasatagopan K	SA

- **Step 1:**
 - Select one/ multiple numeric columns to summarize on.



- **Step 2:** Click on the 'Accumulate' tab
 - Select one/ multiple numeric columns to accumulate on.
 - Select one/ multiple mathematical functions by checking the box beside it.



- **Step 3: (Optional)** Click on the “Group By” tab.
 - Select one/ multiple columns to group the results by.
- **Step 4: (Optional)** Set a condition using the ‘Condition’ tab.
 - Example on using the “Condition” tab are given at the end of this document
- **Step 5:** Click OK.

	Sales	Count_Sales	Total_Sales
1	999	1	999
2	9999	1	9999
3	10000	2	20000
4	12000	5	60000
5	16599	1	16599
6	17499	1	17499
7	17500	6	105000
8	18500	1	18500
9	19500	1	19500
10	19999	1	19999

- **Step 6: (Optional)** Double click any stratum to drill down and view all records in that stratum.

Quick Summarize- Drill Down Result

	Date	Sales	InvoiceNo	Name	ItemID
1	30-06-2014	17500	1007	Jacob K	SA
2	28-09-2014	17500	1009	Ghosh Madhusudan	RA
3	27-12-2014	17500	1010	Gupta Vijay Kumar	RA
4	27-03-2015	17500	1011	Majumdar Pradip	RA
5	27-03-2015	17500	1012	Guha Asok	RA
6	27-03-2015	17500	1013	Gupta Vijay	RA

INFERENCE/ CONCLUSION

- Summarize is a quick and easy function that can be used to summarize and draw inferences from data by using various mathematical functions.
- After analysing the result box of the above example, it is found that:
 - Data has been summarized by “Sales”.
 - A count of each sale amount is displayed.
 - The sum total of each sale amount is displayed.
 - When “17500” in Row 7 is drilled-down, all records in that group are displayed.

This information can now be used for further analysis.

I hope the above knowledge map was useful in providing examples on how to use eCAAT. Please note that the above examples are samples and you can do specific data analysis by using relevant functions as per your exact requirements.

Please remember that eCAAT is only a tool and the power of the tool is in your knowledge of the business process, functional expertise and understanding of how to use specific eCAAT functions as relevant.

Please email us at info@wincaat.com for any queries/clarifications or suggestions. Please visit our website www.wincaat.com for more details.

