



SAP & ACL (Payroll)

Data Extraction & Analysis

GUIDELINES FOR



The Auditor General Of Pakistan

ACKNOWLEDGMENT

We express our sincere appreciation for the work of Mr. Khurram Khan, Audit Officer, Audit Component, PIFRA and Mr. Muhammad Yousof, Audit Officer, AATI, Karachi whose professional competence and dedication made these Guidelines possible. We acknowledge the hard work and commitment of our officers for producing this product which meets the requirements of the industry standards.

We are also indebted to the International practitioners of ACL for their input and feedback. Thanks are also due to Mr. Muhammad Azhar, Director, Audit Component, PIFRA for his continuous support, guidance and supervision for developing these guidelines.

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PREFACE

The Auditor General of Pakistan has initiated wide ranging reforms in Public Sector Auditing primarily through the implementation of Project to Improve Financial Reporting and Auditing (PIFRA). Under this project, SAP/R3 has been implemented in the Federal, Provincial and District Governments for budgeting, accounting and reporting. Moreover, a large number of commercial entities within the public sector have also implemented ERPs for data maintenance. In order to cater for the auditing requirements of such diverse clientele, use of the Computer Assisted Audit Tools & Techniques (CAATTS) cannot be over emphasized. The Audit Command Language (ACL) can greatly facilitate analysis of such large volumes of data which foster efficiency and effectiveness of the audit processes. Though Standard Manuals were available but there was an increasing demand from the field auditors for developing user friendly tailor-made guidelines for data extraction and analysis. Responding to the need, the officers of the DAGP have developed guidelines on Data Extraction and Analysis (Payroll) in line with the International Best Practices by using in-house expertise. These guidelines cover a very wide range of processes starting such as Planning, Data Access, Data Integrity Verification, Data Analysis and Reporting.

The hard work of our ACL Master Trainers in developing these guidelines is manifest in appreciation and validation received from significant practitioners of the ACL from USA, Canada, UK, and Australia. Recognizing their practical utility, these guidelines have been placed on the Global ACL Knowledge Base Center and are accessible to all licensed users of the ACL at www.acl.com.

I sincerely believe that the step by step guidance provided in these guidelines and the use of the extensive screen shots will go a long way in assisting the auditors even with no prior experience in using the SAP/R3 system.

(Tanweer Ahmed)
DAG (AP&SS)

PURPOSE OF THE MANUAL

The purpose of this manual is to guide the auditors in extraction of payroll related data from SAP/R3 HR Module and performance of audit procedures using the Audit Command Language (“ACL”). The guideline focuses on data extraction where the entity allows the auditor to extract payroll data by using customized reports of SAP R/3.

The manual follows the complete audit cycle from Planning, Data Access, Data Integrity, Data Analysis and Reporting. Planning and Data Access are covered in Section-I whereas, Managing Data, Analysis and Reporting are covered in Section-II.

The manual is specifically designed to provide step by step guidance from logging in the SAP R/3 System (“herein after referred to as System”), to extracting & importing data in the ACL and finally to analyzing and reporting the results. Sufficient and simple screen shots have been provided at each and every level to assist the field auditors for better understanding and effective use of this manual.

However, the auditors are encouraged to use the manual as a guideline and through their experience develop expertise in using the System in different scenarios and building different audit checks that could meet their audit needs.

SECTION 1

PLANNING AND DATA ACCESS

THE DATA ANALYSIS METHODOLOGY

Every data analysis project of ACL follows a regular cycle of activities. This helps ensuring that work is performed thoroughly, accurately, and efficiently. The data analysis cycle has five stages.

1. Planning
2. Data Access
3. Data Integrity
4. Data Analysis
5. Reporting

PLANNING

Planning is the main pillar of the Data Analysis Cycle. In planning first determine the scope of work to achieve the objectives. Objectives must be set before initiation of the Project in ACL. The scope of work includes:

1. Extract the SAP Payroll data of Federal employees working in the district for the year 2008-09.
2. Performance of analytical procedures.
3. Identification of trained resources to extract and analyze the payroll data.
4. Identification of possible audit checks on payroll data.
5. Assessment of resources needed to accomplish the task.
6. Estimating time required to obtain or extract the data from the platform like SAP/R3.

DATA ACCESS

Another important step in Data Analysis Methodology is Data Access. Careful attention is required to locate, acquire and access the data to achieve the objective.

Locating Data

While extracting the Reports e.g. Payroll data from SAP/R3, communication is required with the entity relating to the contents, location and extraction of data. Understanding of the entity is preliminary before carrying out the assignment. Meet with the Personnel of Information System Department and discuss the requirement e.g. System access, understand the database of the system, share/discuss what kind of data you need from the IS Department, List the required fields or columns of the data, Discuss the data format with the IS Department.

ACQUIRING DATA

After having the overview of the available data, the next step is acquiring the data. Acquiring data may be divided into three steps:

- i) Determining your specific analytical objectives
- ii) Data Requisition
- iii) Transfer the data

i) Determining your analytical objectives

Before requesting data, the analytical objectives must first be formulated. The objectives identify the data you require. The auditor must know the functionalities of SAP/R3 HR Module, what kind of terminologies it uses, who will provide the data, in which form data is provided (MS-Excel or text form) and what type of Reports are used in the ERP System.

ii) Data Requisition

Requesting data is a critical step in a data analysis project. Complications with data access can seriously compromise the timeline of your analysis. It is important that the auditor is very specific about the data required, where it comes from, and how it is delivered. To accomplish this, a data request letter with a summary report is sent to the entity.

DATA REQUISITION LETTER AND SUMMARY REPORT

Specify the required data in a formal request. The letter should contain all the information that SAP Competency Center needs to provide the data, including

- The date of your request
- The name of the system where the data resides.
- The file name, table name, or report name.
- Date bounds for the data. For example, you might specify from July 1, 2008, to June 30, 2009, inclusive of start and end dates.
- Any filter criteria. For example, you might specify to include only positive values in the total field.
- When you would like the data delivered.
- The file format in which you would like to receive the data.
- The medium on which you would like the data transferred.

The sample Data Requisition is explained on page 15.

Note:

This guideline focuses on data extraction where the entity or SAP Competency Centre allows the auditors to extract or download the Payroll data by using customized report of SAP/R3. To understand easily we developed some requisition letter for the guidance of the auditor to grasp the concept explained above.

SAMPLE: DATA REQUISITION LETTER

No. 100/Auditing/Cert_audit/08-09

Dated: 15-08-09

To

The Accountant General

Subject: **CERTIFICATION AUDIT ON PAYROLL OF FEDERAL EMPLOYEES OF PAKISTAN**

The provisions of the Auditor-General's (Functions, Powers and Terms and Conditions of Services) Ordinance, 2001 (The Auditor-General Ordinance), read with Articles 169 and 171 of the Constitution of the Islamic Republic of Pakistan, provide the Auditor-General of Pakistan with the mandate to audit the accounts of Accountant General's. As part of this mandate, we intend to perform the certification audit on payroll data of the Federal employees of districts for the financial year 2008-09. It is requested to please provide the following information on priority basis.

Please provide access to, or a copy of, the data specified below:

Host System SAP R/3

Filble Reque/Taested Payroll Data- This table contains the master listing of Personal Number, Employee Name, Personnel Area, Cost Center, Date of Birth, Date of Joining, Date of leaving, Net Salary and Wage Type etc. (Annexure-A: Possible Fields of Payroll data)

Time Period From July 1, 2008 to June 30, 2009, inclusive

Filter Criteria Include Payroll of Federal employees of District data.

Delivery Date 1st September, 2009

Data Format ODBC access is preferred. If that is not possible, a dBase, Excel, Access is preferred

Data Access Medium If ODBC is not available, please place the file in my public network folder, D:\Audit\SAP

Please provide a summary report that includes record layout information, control totals, and a printed sample from the file (50 records).

Director General Audit

To

The Director General Audit,

Subject: **CERTIFICATION AUDIT ON PAYROLL OF FEDERAL EMPLOYEES OF PAKISTAN**

Kindly refer to your letter no. No. 100/Auditing/Cert_audit/08-09 dated 15-08-09 on the above mentioned subject.

It is intimated that due to some accounting assignment this office is not able to provide the Payroll data of Federal employees of Pakistan but as a good relation with your office, this office will provide view only access to the auditor in the SAP/R3 HR Module. In this regard, please send us the name of the auditors to make their username and password in the SAP/R3 System. This will help your auditor to extract reports from the SAP/R3 System. The name of the auditors who will extract the data from the system may be sent to Director FABS (Financial Accounting Budget and System).

(Accountant General)

No. 101/Auditing/Cert_audit/08-09

Dated: 01-09-09

To

The Director (FABS)

Subject: **View only access to Reports of SAP/R3 HR Module**

Please provide the view or Read only access in all servers to the following officers in HR Module of SAP/R3.

1. Mr. ABCD, Audit Officer.
2. Mr. YZKL, Audit Officer.

Director General Audit

To

The Director General Audit

Subject: View only access to Reports of SAP/R3 HR Module

Kindly refer to your letter no. No. 101/Auditing/Cert_audit/08-09 dated: 01-09-09 on the above mentioned subject.

The login and username of the officers in all servers is as follows:

S.No	Name of the Officer	Login	Password	Server ID
1	Mr. ABCD	Acc.ABCD	*****	NWFP, Punjab, Sindh, Quetta
2	Mr. YZKL	Acc.YZKL	*****	NWFP, Punjab, Sindh, Quetta

(Director (FABS))

TRANSFER THE DATA

USER ACCESS TO THE DATA SOURCE

The auditor will be provided with a user name, password and instruction to access the host system. The user who has the knowledge of the system can extract the data. The Audit Competency Center, Islamabad has prepared this manual/Guideline which covers the data access phase of Data Analysis Methodology for the auditors who want to extract the customizable Payroll Report from the SAP/R3.

OVERVIEW OF SAP

SAP AG was founded in 1972 in Mannheim, Germany by a group of ex-IBM engineers. The five original engineers who developed the concepts ultimately embraced by SAP originally named their company Systemanalyse und Programmentwicklung. Their goal was to develop a software package that integrated a company's myriad business functions in a manner that reflected best practices. Their idea grew into what soon became System, Applications, and Products in Data Processing (SAP).

SAP AG is based in Waldorf, Germany and is the world's largest enterprise software company. SAP's foundation is built upon the concepts of specialization and integration. Each product can typically be broken down further into modules/ portions of functionality that are more discrete in nature, geared toward addressing a particular piece of the overall component pie. For instance, SAP R/3 and its successor, SAP ERP Central Component (ECC), are comprised of modules like HR, Financials, Sales & distribution, Material Managements, Warehouse Management, and so on. Individually, each of these modules effectively serves to manage a business area or functional area for which a particular company department is responsible.

FEATURES OF SAP/R3

CLIENT

Client is a self contained business entity or units within various SAP systems. In organizational term, a client is an independent unit in the system. Each client has its own data environment and therefore its own master data, transaction data, and assigned user master records.

SAP EASY ACCESS

SAP Easy Access is the standard entry screen in the system. The system can be navigated through a compact tree structure.

MENU BAR

The menus contain cascading menu options.

STANDARD TOOLBAR

The icons in the standard toolbar are available on all SAP-ERP screens. Any icons that you cannot use on a particular screen are grayed out.

TITLE BAR

Title Bar displays the function that is available.

THE APPLICATION TOOLBAR

The Application Toolbar displays icons which are available in the current application.

STATUS BAR

Status Bar displays information on the current system status, for example, warnings or errors.

TRANSACTION CODE IN THE COMMAND FIELD

Every function (not every screen) in the SAP system is a transaction code (T Code) which can be accessed through the assigned transaction code from any screen in the system. The transaction code for the function can be found by choosing Status under the System menu option.

COMPANY CODE

The company code is a self-contained unit in legal terms, for which complete set of accounts can be drawn up.

PERSONNEL AREA

A personnel area is assigned to a company code in Personnel Administration. The individual personnel areas in a company code have four-digit alphanumeric identifiers.

PERSONNEL SUB AREA

Personnel subareas represent a further subdivision of the personnel area. The principal organizational aspects of human resources are controlled at this level, namely the pay scale and wage type structures and the planning of work schedules. The personnel subarea is assigned a four-character alphanumeric identifier. The control features are stored according to the country.

COST CENTERS:

Cost Centers are maintained in Controlling and can be linked to either organizational units or positions.

WAGE TYPES

All allowances and deductions are called wage types. Wage type can be represented by 4 digit code starting from 0001 to 9999. (Annexure-B)

VARIANT

Variant is a group of selection criteria values that has been saved to be used again and again and can be used to run a report using the same selection criteria each time.

INPUT FIELDS

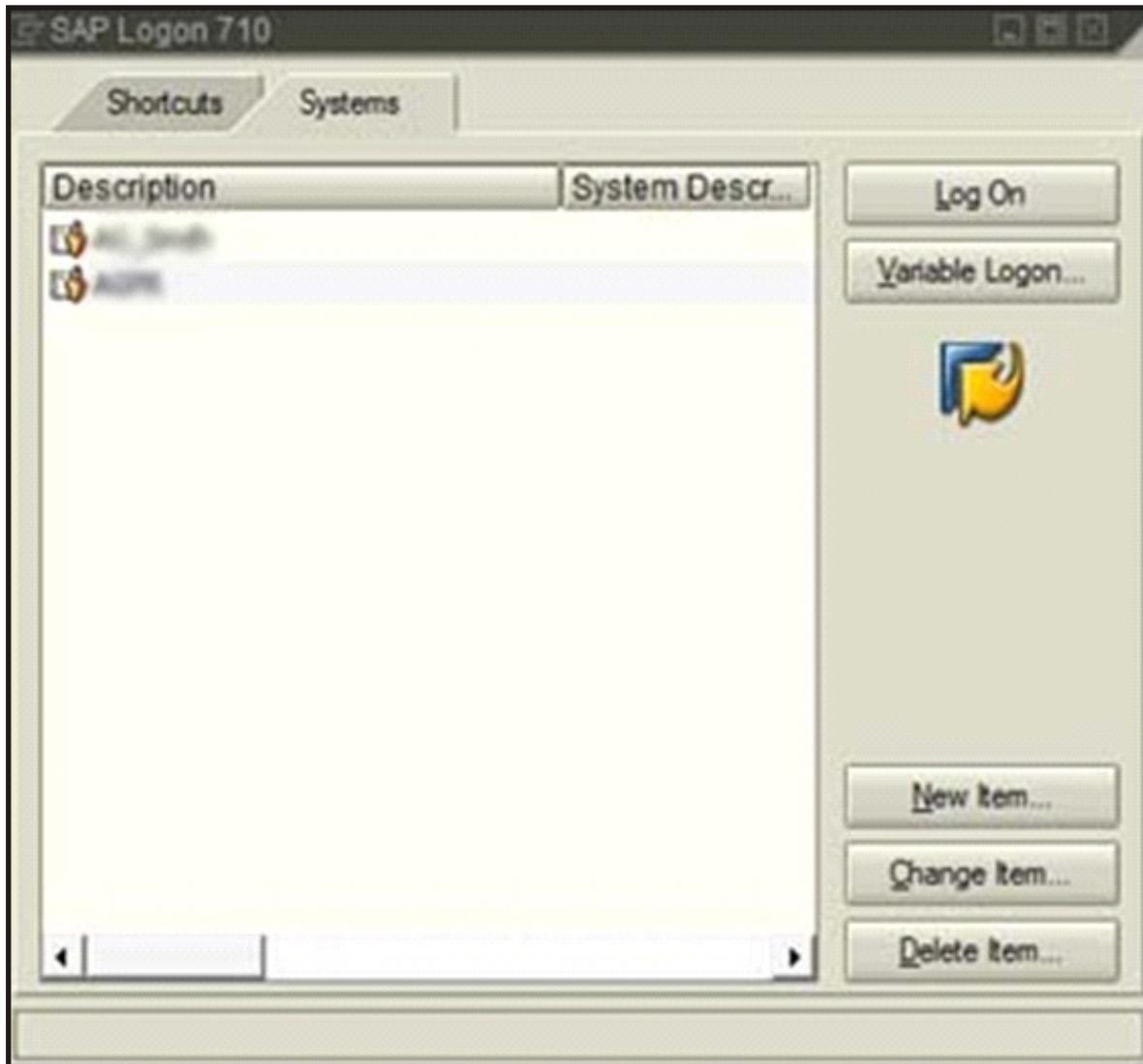
In SAP/R3 a series of fields that are linked to database tables in the system. Most screens in the SAP system contain fields in which you enter data. These types of fields are called input fields.

REPORTS

Reports/Lists are information that is derived from a source and presented to the user in some output type. You can generate reports directly from the online transactions or from the other sources of summarized data such as the Business Information Warehouse and Executive Information System.

EXTRACTING PAYROLL REPORTS (YPHRISN) FROM SAP/R3 HR-MODULE

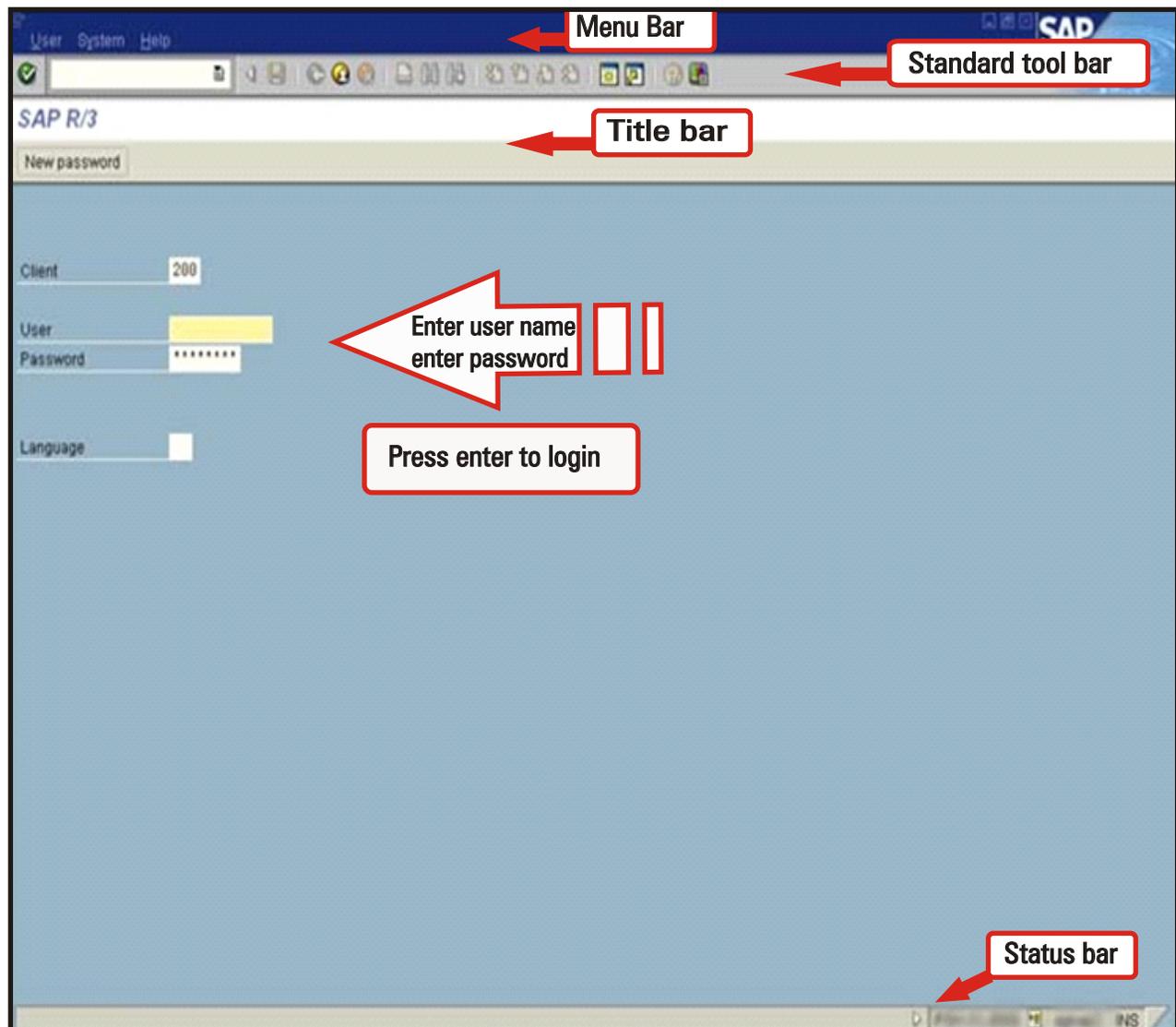
Screen shot 1 SAP Logon



Annotate

This is the main screen for login into different servers of SAP. You have to choose the right server to extract the data. If the server is not added, you may add new server by clicking on the "New Item" and entering the server id, description and system number. In order to do that you will have to consult SAP BASIS Consultant.

Screen Shot 2 Login Screen

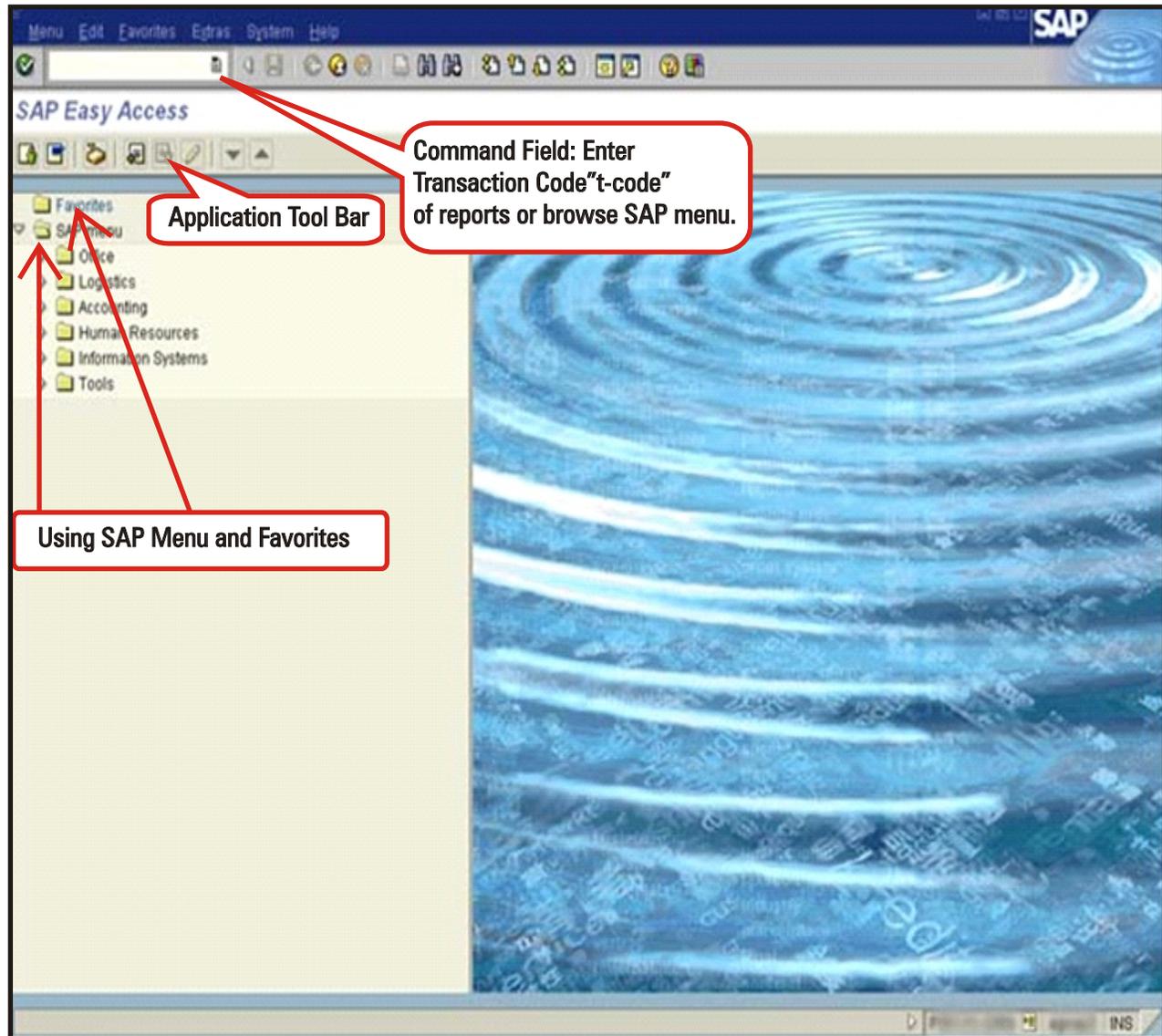


Annotate

This is the SAP Login Screen to a selected server which is displayed in the status bar. The default language is English. You may change your password by clicking on the “New Password” button before logging into the system.

Enter the user name/password on this screen, and then press “enter” from the keyboard to continue.

Screen shot 3 SAP Easy Access



Annotate

- 1 "SAP Easy Screen" is displayed.
- 2 Enter "T_Code or "Transaction Code" in the command field.
- 3 The "T_Code" for Payroll Employees is "YPHRISN".
- 4 Go to next screen shot.

Screen shot 4 SAP Easy Access Menu



Legends

1. Enter/Execute
2. History List (list of previously entered t-codes)
3. Save layout
4. Back to previous menu
5. Exit
6. Cancel
7. Find
8. Find Next
9. Create New Session

Annotate

1. Enter "YPHRISN Transaction_Code (T.Code)" in Command Field.
2. Click "P" to execute or F8.

Point to Remember (Apply when you need it)

Each time the user connects to SAP via the SAP GUI user interface, it begins a user session. A SAP session simply means the end user has started the SAP GUI and established a connection with a particular SAP system/server, the end user is connected, so to speak. By default the end user can open up to six sessions at the same time.

When you are already connected to a server and you are trying to connect from a different computer or from the same computer three options are displayed.

- i. Continue with the current logon and terminate all other logons, this would result in loss of unsaved data in those logons;
- ii. Continue with the current logon and also keep other logons (a list of all other logon are displayed Along with date and time since these were logged in); and
- iii. Terminate the current logon.

Screen shot 5 HR Information System Menu (YPHRISN)

Program Edit Goto System Help

HR Information System

Further selections Search helps Sort

Period

Today Current month Current year

Up to today From today

Other period

Person selection period To

Payroll period To

Selection

Personnel number

Employment status

Company code

Payroll area

Pers. area/subarea/cost center

Employee group/subgroup

Program selections

Wage type

Fiscal Year

Start of Month

End of Month

Output format

SAP List Viewer

Mandatory field

Annotate

"HR Information System" screen appears as shown on title bar of SAP/R3. Indicates mandatory fields which must be filled before the report is executed or further selections are made.

Screen shot 6 Description of Input Parameters

The screenshot shows the SAP HR Information System interface. Key sections and highlighted elements include:

- Period Section:** Radio buttons for 'Today', 'Current month', 'Current year', 'Up to today', and 'From today'. The 'Other period' option is selected. The 'Person selection period' is set to '01.07.2008' and the 'To' date is '30.5.2009'.
- Selection Section:** Fields for 'Personnel number', 'Employment status', 'Company code', 'Personnel subarea', 'Payroll area', 'Cost center', 'Pers. area/subarea/cost center', and 'Employee group/subgroup'. The 'Personnel subarea' field contains 'F' and 'KD'. A callout box points to this field with the text 'F4 Help: Display possible entries'.
- Program selections Section:** Fields for 'Wage type' (0001), 'Fiscal Year' (2008), 'Start of Month' (01), and 'End of Month' (12). The 'Wage type' field is circled, and a callout box explains that '0001' represents the full range.
- Output format Section:** The 'SAP List Viewer' option is selected.

Callout boxes provide additional instructions:

- Top right callout:** 'If you want to save the input parameters of the report you can save them as "variants" and use them in your next report. Process is explained in the following screen shot.'
- Middle right callout:** 'The variants help in reducing the time taken to generate the reports with similar fields and output. e.g. when monthly reporting is required only changing of posting date will be required and all other entries will be automatically entered.'
- Bottom right callout:** 'In the "Period" section, when entering the "other Period" enter dates in the "person selection period" and these dates should coincide with the Start of Month and End of Month in the "Program Selections".'
- Bottom right callout (A-C):** 'A. Give full range for wage typeb. B. Enter FY C. Start Month 01 represents July or first month of the Fiscal Year and full range i.e. July to June would be represented by 01 To 12 as indicated in the image.'
- Bottom center callout:** 'Use Further Selections to Display these Items. Refer to Screen Shots 7. Enter Mandatory Fields first before you can select further items.'

Annotate

1. Enter Input parameter on the screen. The Payroll of the employees of Pakistan is divided into three categories such as "F" for "Federal", "DN01" for "District" (District employees of NWFP) and "N" for "Provincial" (Provincial employees of NWFP). The end user must be careful while entering the input parameters in all mandatory fields. The above screen shots are taken from the Federal employees of District.
2. The end user is not required to enter all parameters. Some input parameters are mandatory and

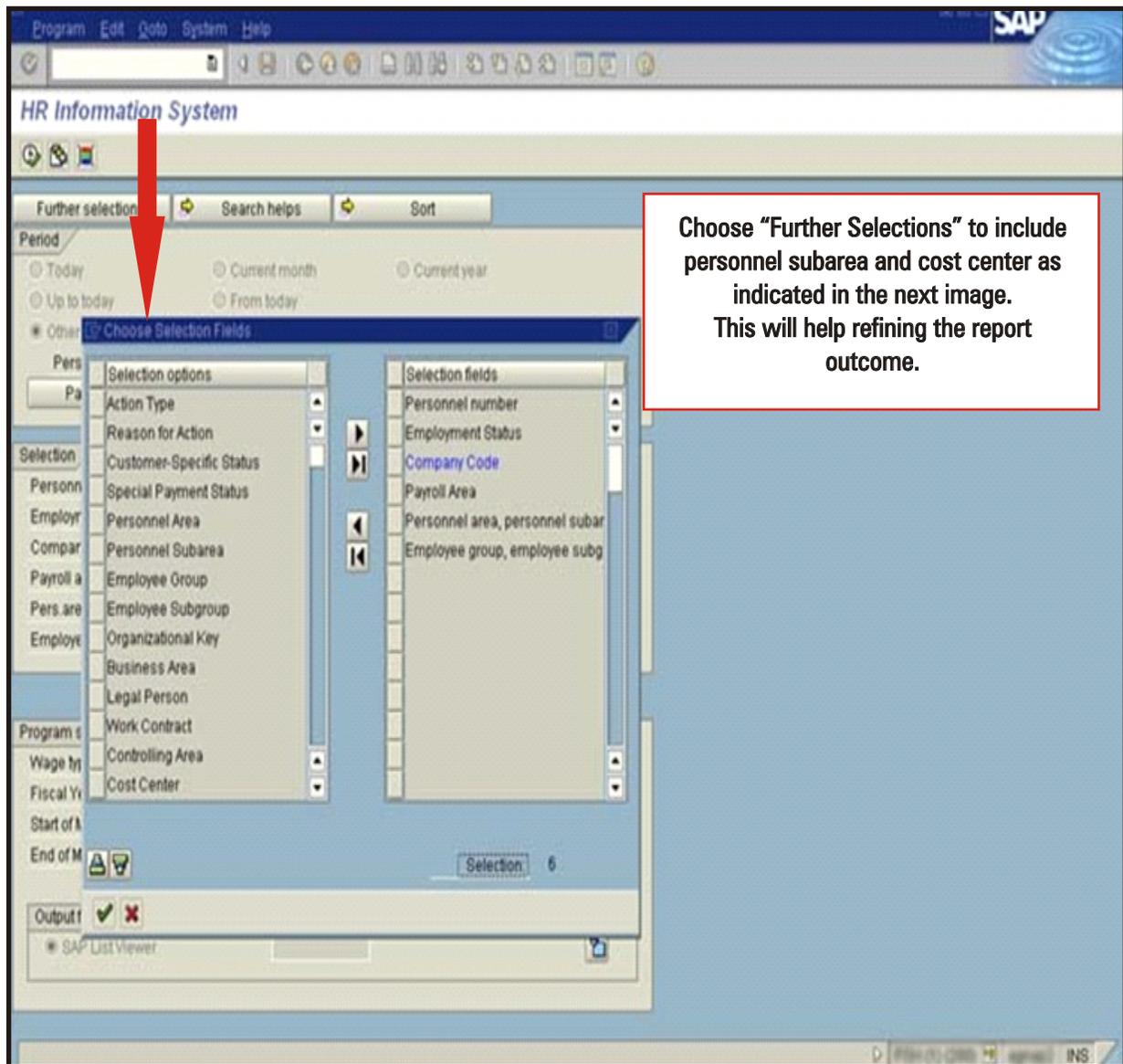
remaining input parameters are optional and these are used to refine the data according to requirements.

EXAMPLE:

Suppose you need to obtain the data of Federal employees of District for the fiscal year 2008-09. In this case you have to enter following input parameters in your HR Information System Screen.

- | | | | | |
|----|----------------------|------------|----|------------|
| a) | Company Code | F | | |
| b) | Person Selected Area | 01.07.2008 | to | 30.06.2009 |
| c) | Personal Sub Area | AD | | |
| d) | Cost Center | AD0001 | to | AD0500 |
| e) | Wage Type | 0001 | to | 9999 |
| f) | Fiscal Year | 2008 | | |
| g) | Start of Month | 01 | | |
| h) | End of Month | 12 | | |

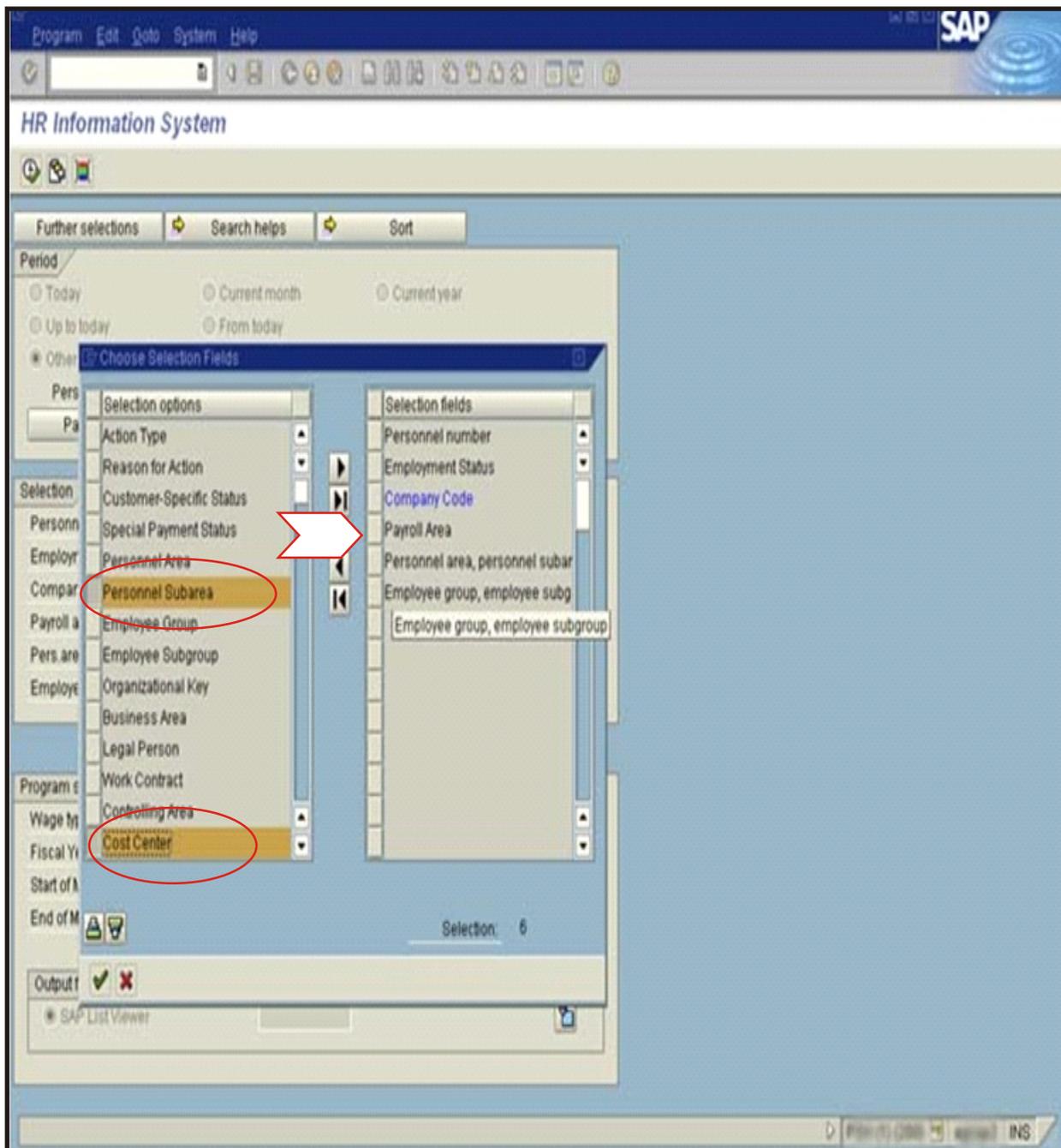
Screen shot 7 Further Selections



Annotate

"Further selections" helps the user to select additional fields which are not the part of the general format of the report. After entering all mandatory fields such as Period, Company Code, Fiscal Year, Start of Month and End of Month, the end user clicks on "Further Selections" button. "Further selections" help the user to further classify the report criteria.

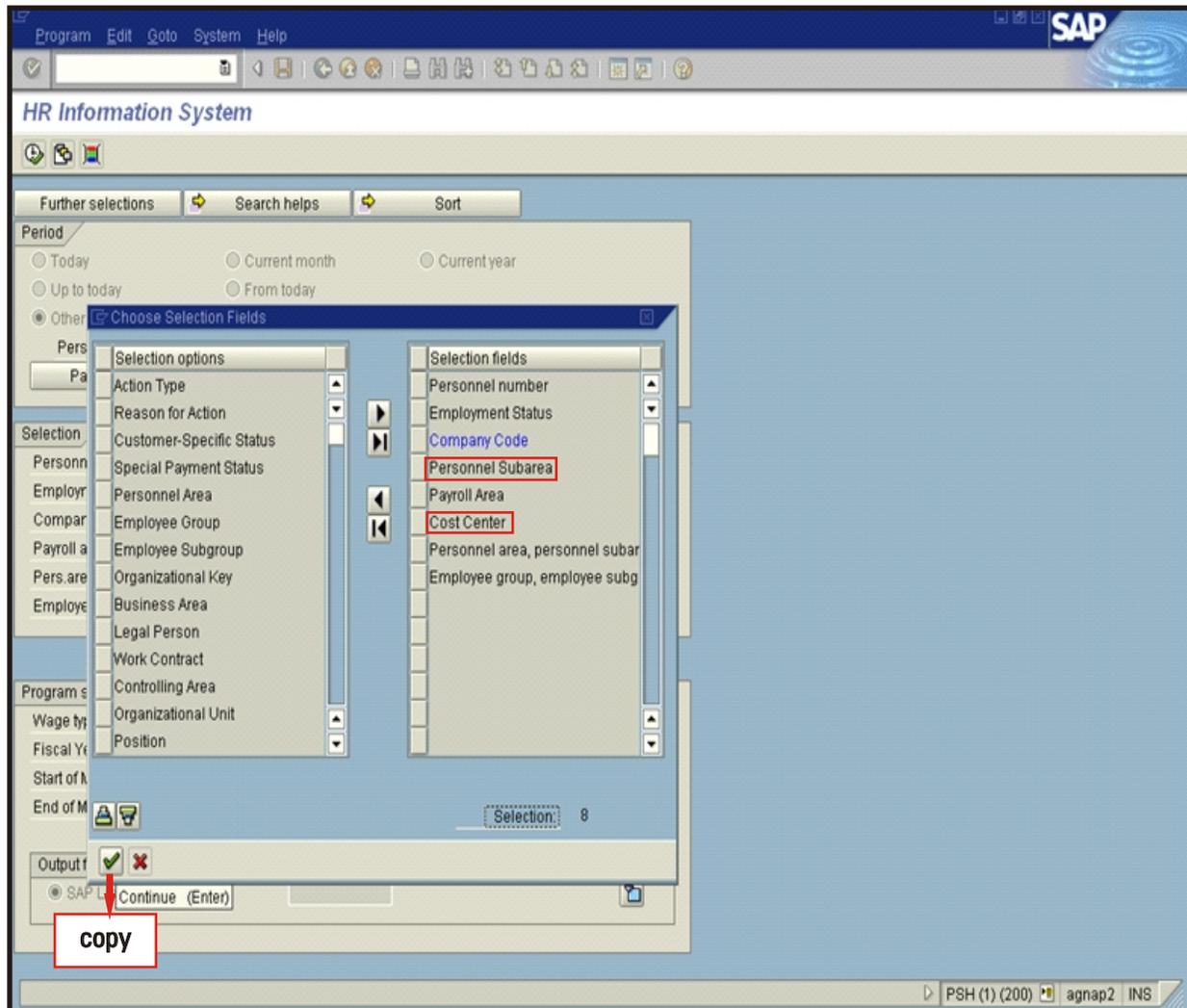
Screen shot 8 Field Selection



Annotate

1. "Choose selection Fields" dialog box is opened.
2. "Choose selection Fields" is subdivided into two categories (i) "Selection Options" and ii) "Selection Fields"
3. Select those fields which are most commonly used such as "Personnel Subarea" and "Cost Center".
4. Move "Personnel Subarea" and "Cost Center" from "Selection option" to "Selection Fields".

Screen shot 9 Selection Fields

**Annotate**

The red-lined boxes on the screen show that the fields "Personnel Area" and "Cost Centers" are in "Selection Fields" area. Press "✓" to continue.

Screen shot 10 Multiple Selections

The screenshot displays the SAP HR Information System interface. The main window is titled "HR Information System" and contains several sections for data selection:

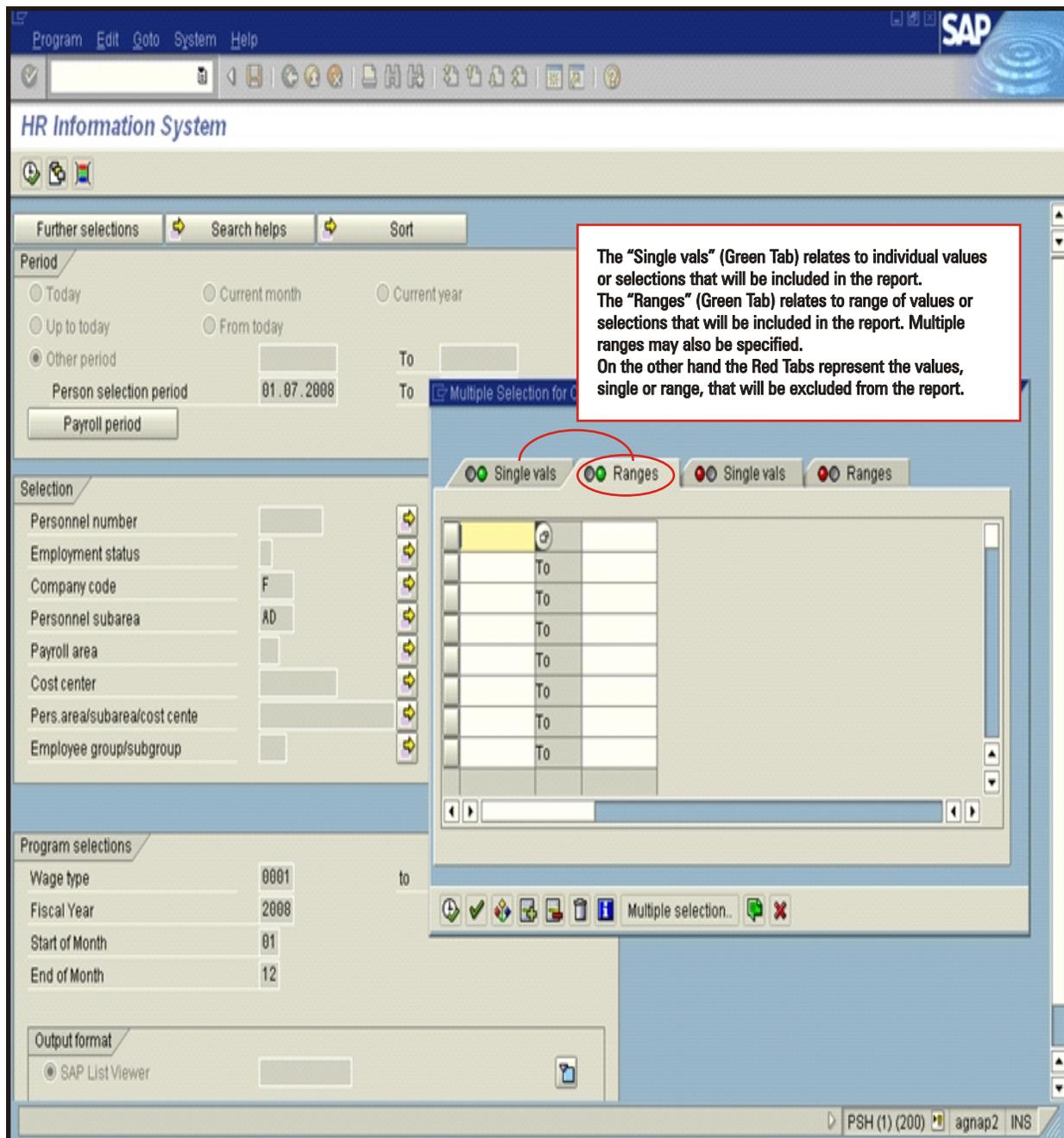
- Further selections:** Includes "Search helps" and "Sort" buttons.
- Period:** Contains radio buttons for "Today", "Current month", "Current year", "Up to today", and "From today". The "Other period" option is selected, with a date range from "01.07.2008" to "31.07.2008". A "Payroll period" button is also present.
- Selection:** A list of criteria with input fields and selection arrows:
 - Personnel number
 - Employment status
 - Company code: F
 - Personnel subarea: AD (highlighted with a red box)
 - Payroll area
 - Cost center (highlighted with a red box)
 - Pers. area/subarea/cost center
 - Employee group/subgroup
 A "Multiple selection" dropdown menu is visible next to the "Cost center" field.
- Program selections:** Includes fields for "Wage type" (0001 to 9999), "Fiscal Year" (2008), "Start of Month" (01), and "End of Month" (12).
- Output format:** The "SAP List Viewer" option is selected.

The status bar at the bottom right shows "PSH (1) (200) | agnap2 | INS".

Annotate:

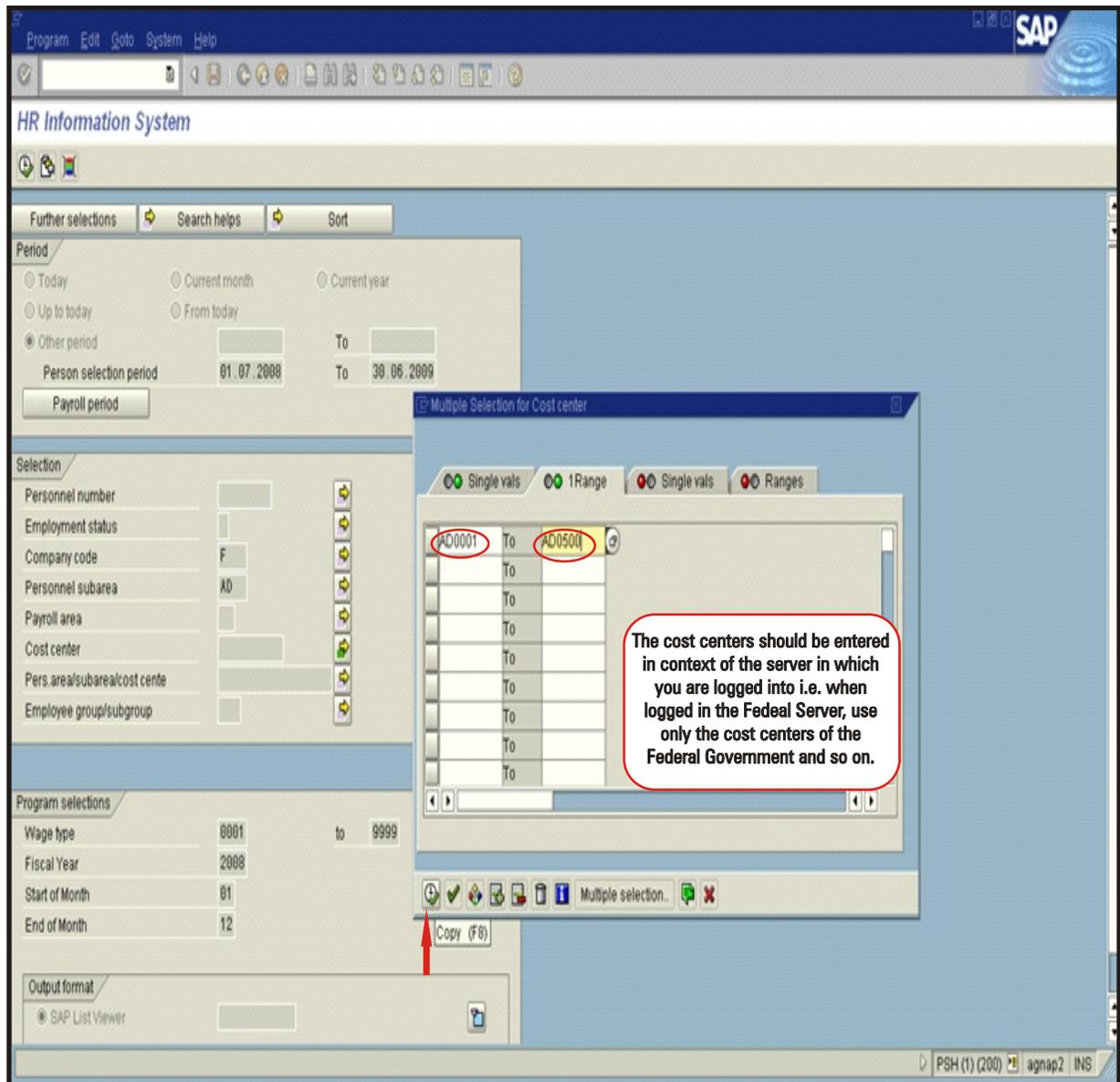
As mentioned earlier the employees of Pakistan are divided into three categories such as Federal, Provincial and District. Cost Centers or DDOs are represented by four (4) digit codes by giving the IDs of Personal Subarea. For example the user may extract the Payroll of the Federal employees, Provincial Employees or District Employees. The cost center ranges starts from 0001 to 9999.

Screen shot 11 Multiple Selection for Cost Center

**Annotate:**

1. "Multiple selection for Cost Center" dialog box is opened
2. Select the "Ranges" (Green Tab) if the user wants to enter cost center in Ranges.

Screen shot 12 Multiple Selections for Cost Center

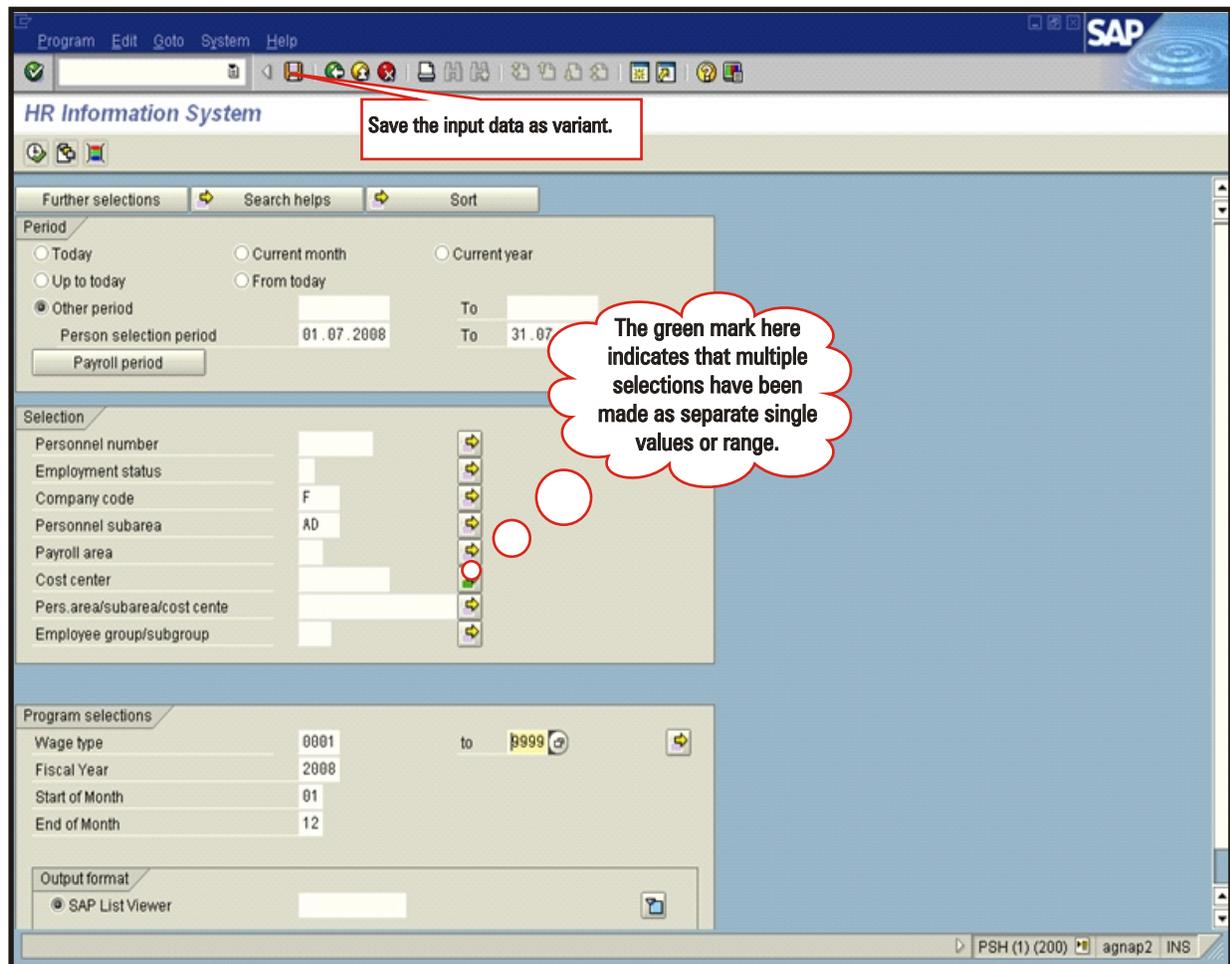
**Annotate**

1. Enter in "Ranges" (Green Tab) "AD0001 to AD0500".
2. Press "F8" or Click "Copy" on "Multiple Selection for Cost Center"

Note:

The YPHRISN Report is too heavy to run if we enter the cost center ranges from AD0001 to AD3999 then it takes too much time to extract the data. Sometimes the report generates errors or Link is down and it will automatically terminate the login of the user. To avoid all these hurdles we can extract the data by dividing cost centers into small ranges e.g. AD0001 to AD0500.

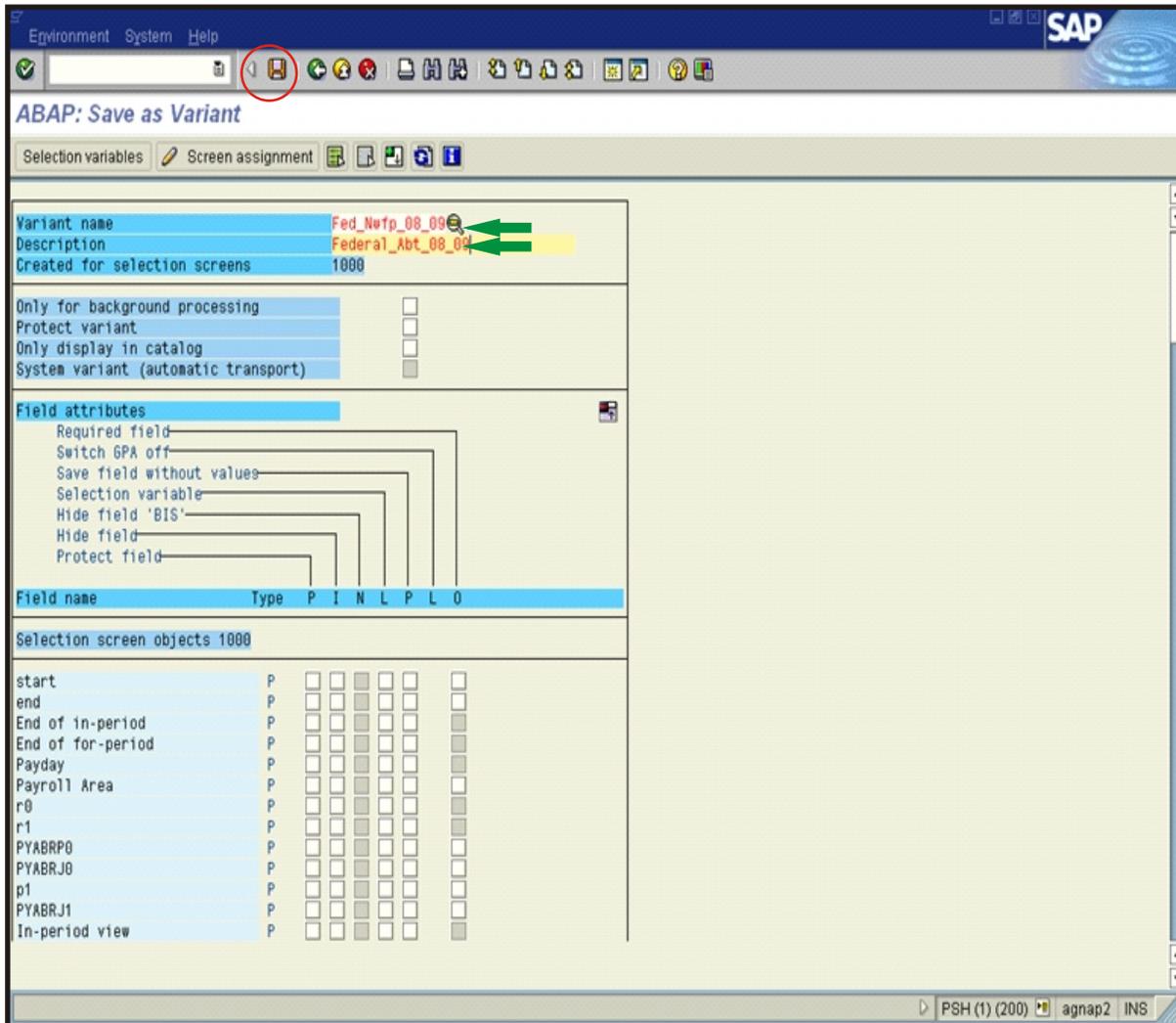
Screen shot 13 Save Data as Variant



Annotate

1. A “variant” is a group of selection criteria values that has been saved to be used again. If you want to run a report using the same selection criteria each time, you can create a variant to save the data that you filled in on your selection screen.
2. Click the “Save” button to save the input parameter or data as a “Variant”.

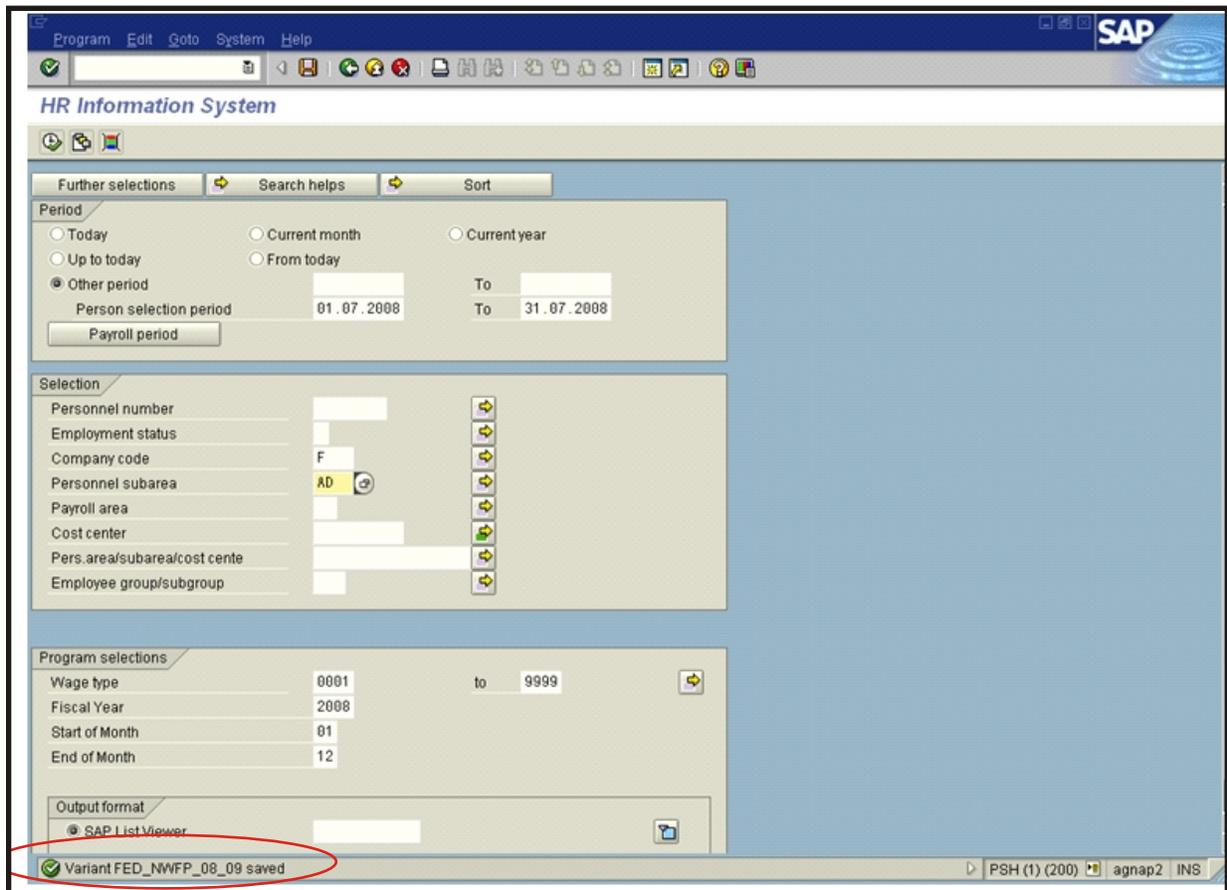
Screen shot 14 ABAP: Save as Variant



Save Variant

1. Screen with the name "ABAP: Save as Variant" appear.
2. Enter the following information in the screen and leave all other fields blank
 - a. "Variant Name: Fed_NWFP_08_09"
 - B. "Description: Fed_Abbattabad_08_09"
3. "Save" the variant.

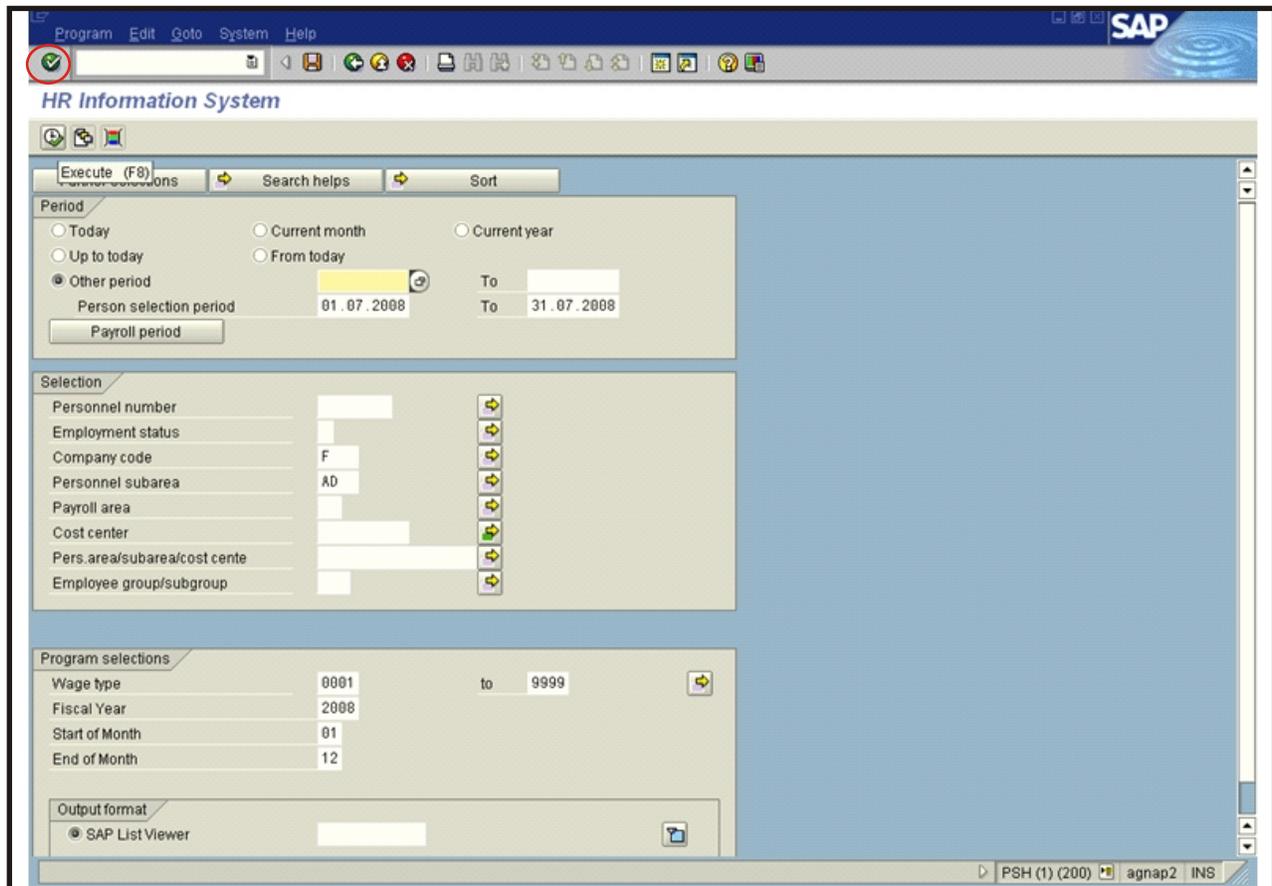
Screen shot 15 Variant Saved



Annotate

In the status bar you will see the message "Variant Fed_NWFP_08_09 saved".

Screen shot 16 Execute YPHRISN Report



Annotate

1. Before Executing the YPHRISN Report check all required Input parameters.
2. Execute or Run (Press F8 from the keyboard) the Report.

Screen shot 17 Payroll Data Reported

Personnel Subarea Desc	Z Sno	Cost Center	Cost Center Description	LNo	Pers. no.	Name of Employee	Wage type
otabad	0.00	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD	0	00000001	M. HANMAD SHAFIQUE	1864
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3007
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3009
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3501
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	6158
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1831
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	0001
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1000
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1300
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1770
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1830
otabad	1.00		D.E.C HAZARA DIVISION ABBOTTABAD	0	00000001	M. HANMAD SHAFIQUE	1864
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3015
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3501
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	6158
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1831
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	0001
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1300
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1576
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1830
otabad	1.00		D.E.C HAZARA DIVISION ABBOTTABAD	0	00000001	M. HANMAD SHAFIQUE	1831
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	1864
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3007
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	3501
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	6158
otabad	0.00		D.E.C HAZARA DIVISION ABBOTTABAD	0		M. HANMAD SHAFIQUE	0001

Annotate

Certain reports are run with default filters & sort criteria and for the purpose of analyzing the data in ACL these are not required and the data is most suitable for analysis when it is in database form without any filters & sort criteria.

Follow the next screen shot to add/remove columns, clear filters and remove sort criteria.

Screen shot 18 Change layout

The screenshot shows the SAP HR Information System interface. The 'Change layout' dialog box is open, displaying a list of columns on the left and a 'Column set' on the right. A red arrow points to the 'Change layout' button in the standard toolbar. A red callout box contains the text: "In order to select all columns press and hold 'Shift' key and move the cursor to the end and click, all fields will be selected." A white callout box with a red arrow points to the 'Column set' list with the text: "Add columns to display in report".

Annotate

1. Click "change layout" button from "Standard toolbar" of HR Information System
2. The user wants all the fields or columns of the YPHRISN Report. Select the "column set" (Right) by using the "Shift key & press downward arrow key" and move the columns to the Left side of "column" by using arrow (Left).

Screen shot 19 Change Layout (Columns Selection)

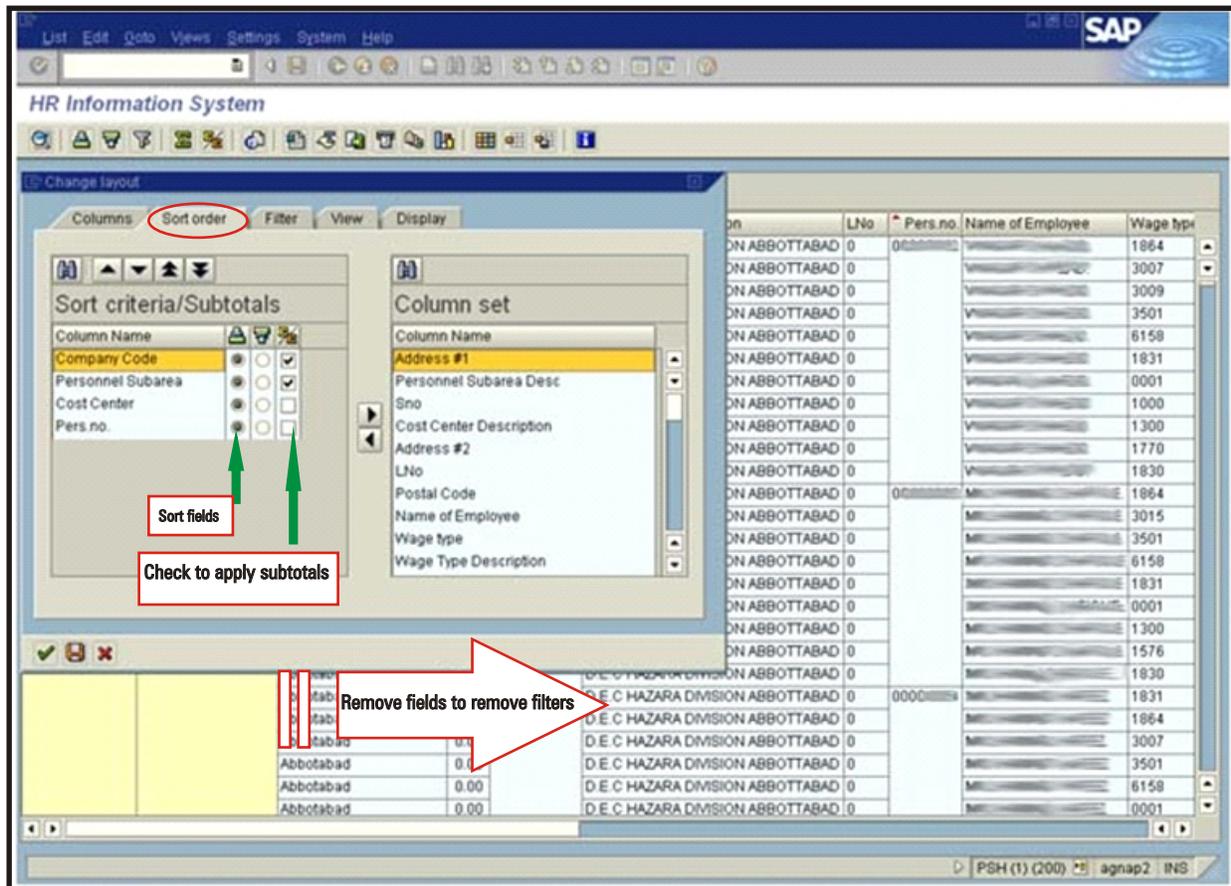
Layout is used to view/change fields, sort data, apply subtotals and filters.

LNNo	Pers.no	Name of Employee	Wage type
0	00000000		1864
0			3007
0			3009
0			3501
0			6158
0			1831
0			0001
0			1000
0			1300
0			1770
0			1830
0			1864
0			3015
0			3501
0			6158
0			1831
0			0001
0			1300
0			1576
0			1830
0	00000000		1831
0			1864
0			3007
0			3501
0			6158
0			0001

Annotate

Move all Fields from “Column set” to “Columns”. This will include all columns in your report. You may then move or keep unwanted columns to the “Column set” tab.

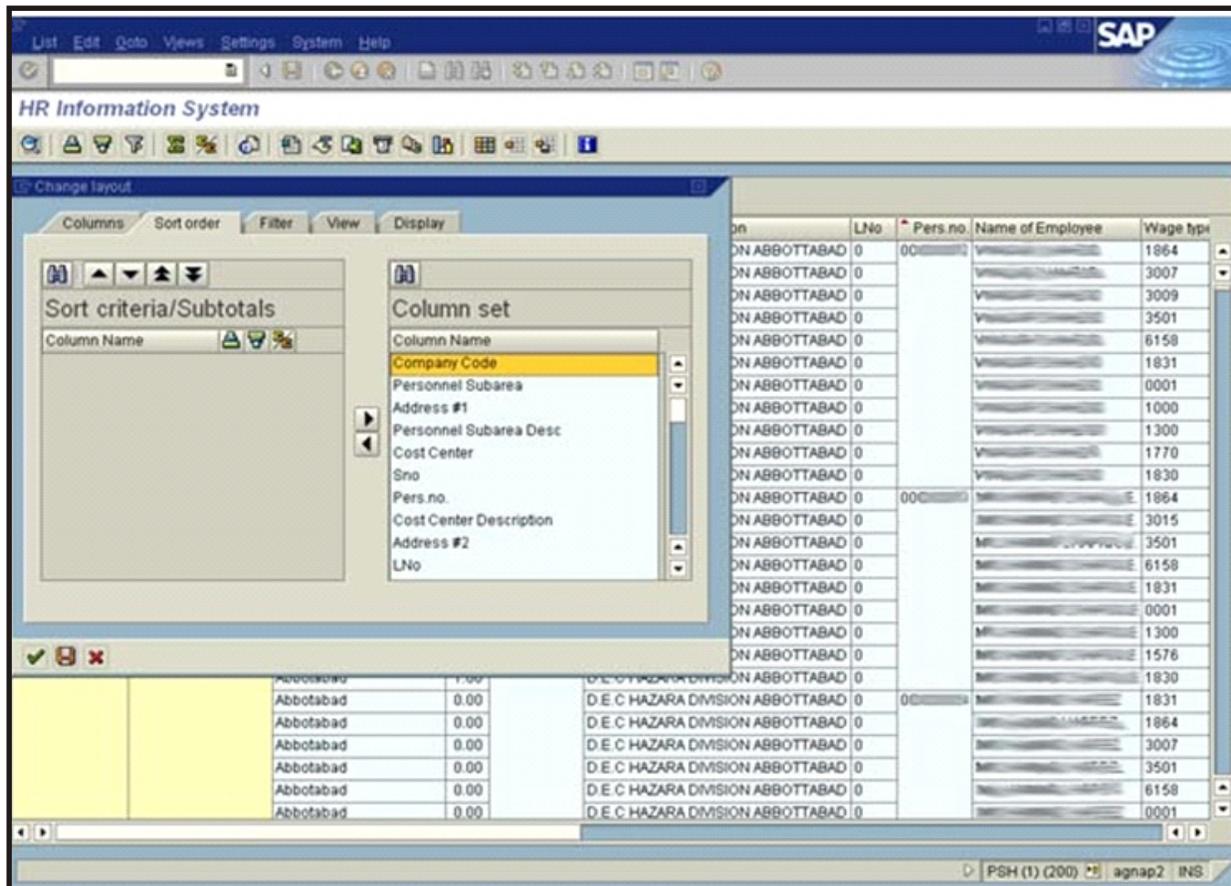
Screen shot 20 Change Layout (Sort Order)



Annotate

Go to "Sort Order" tab and deselect all check boxes of Company Code and Personal Subarea.

Screen shot 21 Change Layout (Sort order removed)



Annotate

1. In the "Sort Order" tab Deselect "Sort Criteria/Subtotals" and move Fields to "column set".
2. Click "✓".

Screen shot 22 Hide Columns

The screenshot displays the SAP HR Information System interface. A table with multiple columns is shown, with several columns highlighted in yellow. A context menu is open over the 'L.No' column, with the 'Hide' option selected. A callout box with a lightbulb icon contains the text: "In order to hide multiple columns at once, you can select each column by pressing and holding 'Ctrl' key and clicking on the header of the column you want to hide." Another callout box points to the context menu with the text: "Right click and hide un-necessary".

Company Code	Personnel Subarea	Personnel Subarea De...	S.No	Cost Center	Cost Center Description	L.No
F	AD	Abbotabad	0.00	Copy	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Hide	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Show...	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Optimize width	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Ereeze to column	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Sort in ascend. order	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Sort in descnd order	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Find	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Get Filter...	SION ABBOTTABAD	0
F	AD	Abbotabad	1.00	Total	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	Subtotals	SION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	1.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0
F	AD	Abbotabad	0.00	AD0001	D.E.C HAZARA DVISION ABBOTTABAD	0

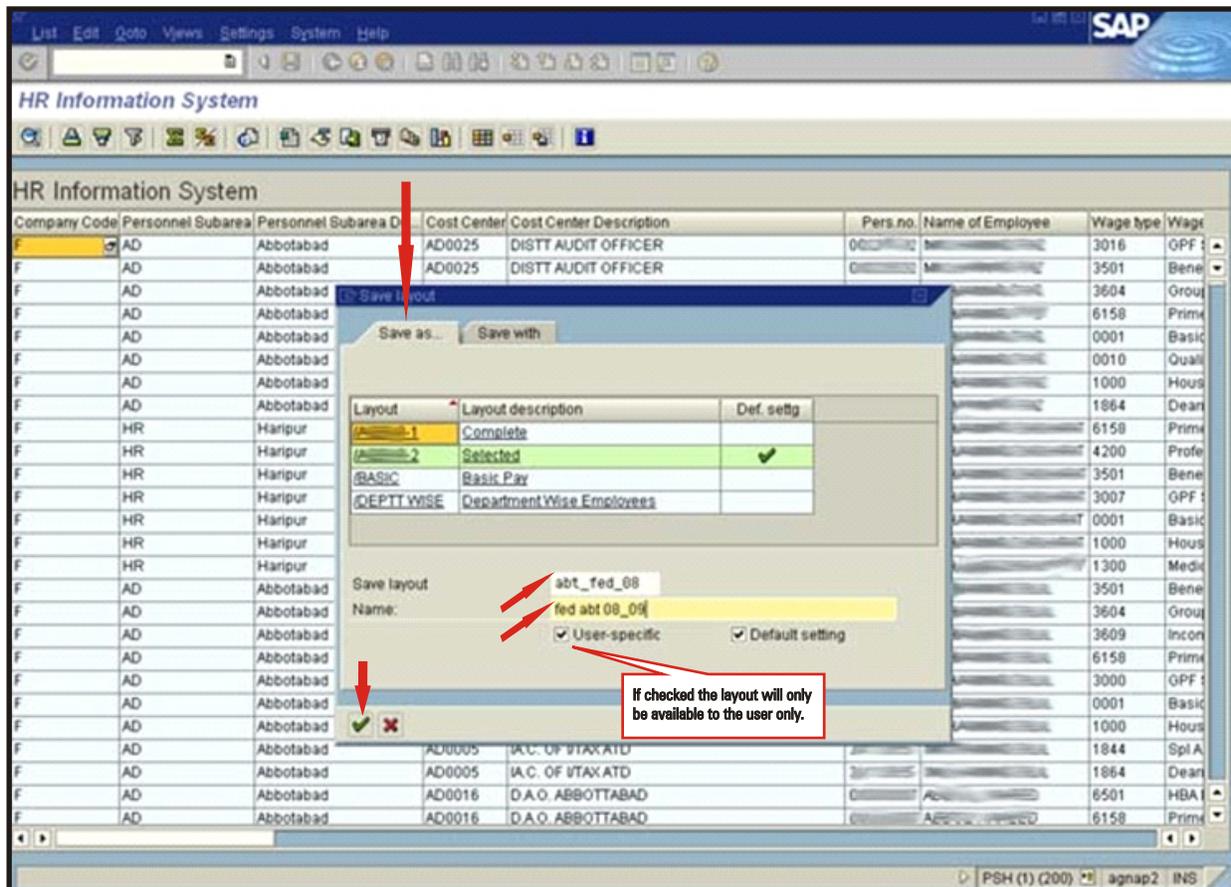
Annotate

SAP gives the user the facility to "hide" unwanted Fields or Columns which are not required during the analysis or those fields are meaningless for user.

Steps

- Select the "column" by Left click on the mouse such as S.NO, L.No (Yellow selected columns)
- Right Click on mouse and opt for the second option i.e. "Hide"
- Both "selected hide columns" are not the part of the report.

Screen shot 23 Save Layout



Annotate

1. When you have arranged the data i.e. by including all "Fields", "Hiding" the Fields, "un-filter" the Fields and "un-sort" the Fields then you should save the layout.
2. In order to save the layout following steps are followed.

Steps:

- a) "Save Layout: Abt_fed_08"
- b) "Name: Fed_abt_08_09"
- c) The "Save Layout" provides the facility to the user that the other users in the system will not see or change the "save layout criteria" then he/she simply mark the check box of "user specific" and also select the checkbox of "default setting".
- d) Select continue "green tick mark (✓)" option.

Screen shot 24 Layout Saved confirmation

The screenshot shows the SAP HR Information System interface. The main window displays a table with the following columns: Company Code, Personnel Subarea, Personnel Subarea Desc, Cost Center, Cost Center Description, Pers no., Name of Employee, Wage type, and Wage. The table contains multiple rows of data, including employees from Abbotabad and Haripur. At the bottom left of the window, a status bar displays the message "Layout saved" in a green box.

Company Code	Personnel Subarea	Personnel Subarea Desc	Cost Center	Cost Center Description	Pers no.	Name of Employee	Wage type	Wage
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	3016	GPF S
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	3501	Benev
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	3604	Group
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	6158	Prime
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	0001	Basic
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	0010	Qualif
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	1000	House
AD	Abbotabad	Abbotabad	AD0025	DISTT AUDIT OFFICER	00000000	M...	1864	Dearm
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	6158	Prime
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	4200	Profes
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	3501	Benev
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	3007	GPF S
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	0001	Basic
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	1000	House
HR	Haripur	Haripur	HR0007	ASSISTANT ELECTION COMMISSIONER HARIPUR	00000000	M...	1300	Medic
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	3501	Benev
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	3604	Group
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	3609	Incom
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	6158	Prime
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	3000	GPF S
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	0001	Basic
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	1000	House
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	1844	Spl All
AD	Abbotabad	Abbotabad	AD0005	IA.C. OF VTAX.ATD	00000000	M...	1864	Dearm
AD	Abbotabad	Abbotabad	AD0016	D.A.O. ABBOTTABAD	00000000	M...	6501	HBA L
AD	Abbotabad	Abbotabad	AD0016	D.A.O. ABBOTTABAD	00000000	M...	6158	Prime

Annotate

In status bar of SAP GUI, the message "Layout Saved" is displayed.

Screen shot 25 Save Data to Local Files

The screenshot shows the SAP HR Information System interface. The main window displays a table of employee data. The table has the following columns: Personnel Subarea, De, z Sno, Cost Center, Cost Center Description, LNNo, Pers.no, Name of Employee, Wage type, Wage Type Description, and z Amount in T. The data rows show various wage types such as Dearnes Allowance (2006), GPF Subscription - Rs 320, GPF Subscription - Rs 365, Benevolent Fund, Prime Minister's Spl Fund, Adhoc Relief (2005), Basic Pay, House Rent Allowance, Medical Allowance, Spt Additional allowance, Special Relief All(2005), and Spt Additional Moveover. A red arrow points to the 'Local file...' button in the toolbar, which is labeled '(Ctrl+Shift+F9)'. The SAP logo is visible in the top right corner of the window.

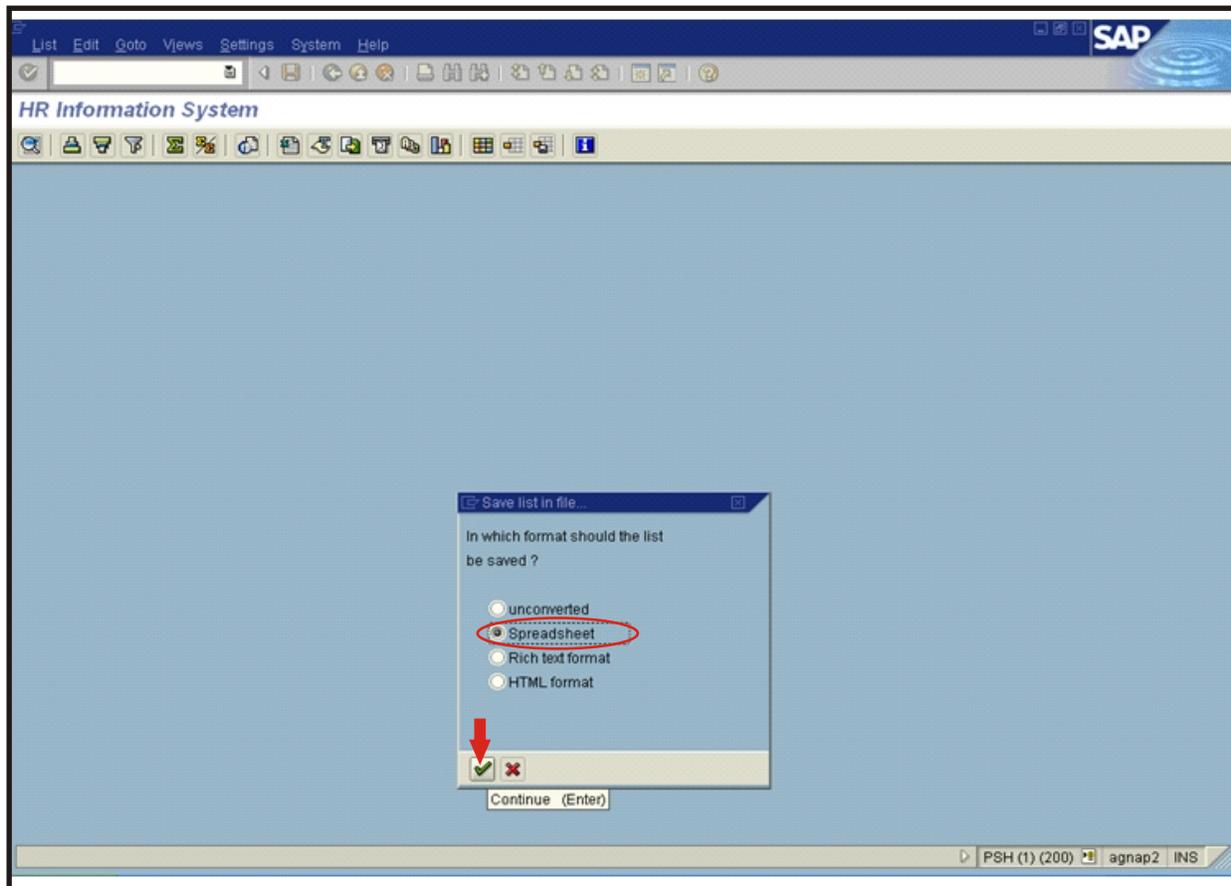
Personnel Subarea	De	z Sno	Cost Center	Cost Center Description	LNNo	Pers.no	Name of Employee	Wage type	Wage Type Description	z Amount in T
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1864	Dearnes Allowance (2006)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3007	GPF Subscription - Rs 320	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3009	GPF Subscription - Rs 365	0.1
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3501	Benevolent Fund	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			6158	Prime Minister's Spl Fund	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1831	Adhoc Relief (2005)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			0001	Basic Pay	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1000	House Rent Allowance	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1300	Medical Allowance	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1770	Spt Additional allowance	
Abbotabad	1.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1830	Special Relief All(2005)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1864	Dearnes Allowance (2006)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3015	GPF Subscription - Rs 925	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3501	Benevolent Fund	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			6158	Prime Minister's Spl Fund	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1831	Adhoc Relief (2005)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			0001	Basic Pay	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1300	Medical Allowance	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1576	Spt Additional Moveover	
Abbotabad	1.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1830	Special Relief All(2005)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1831	Adhoc Relief (2005)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			1864	Dearnes Allowance (2006)	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3007	GPF Subscription - Rs 320	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			3501	Benevolent Fund	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			6158	Prime Minister's Spl Fund	
Abbotabad	0.00	AD0001	D E C HAZARA DMSION ABBOTTABAD		0			0001	Basic Pay	

Annotate

Saving Data to Local File

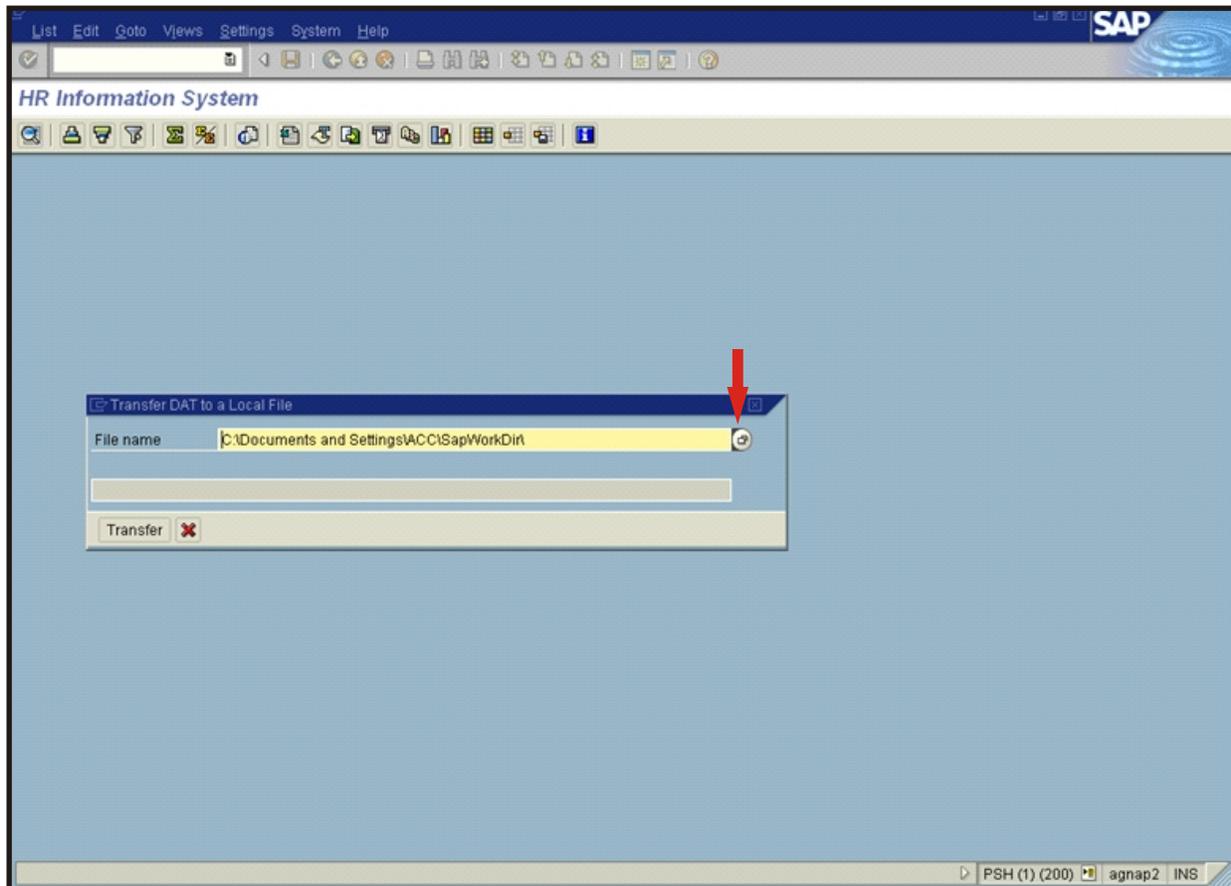
1. Now the data is in "raw" form i.e. no filters and no sum.
2. Press the "Local File" button as shown above to save the data to a local file. Continue to the next screen shot for more details on saving the data.

Screen shot 26 Save Data in Spreadsheet Format



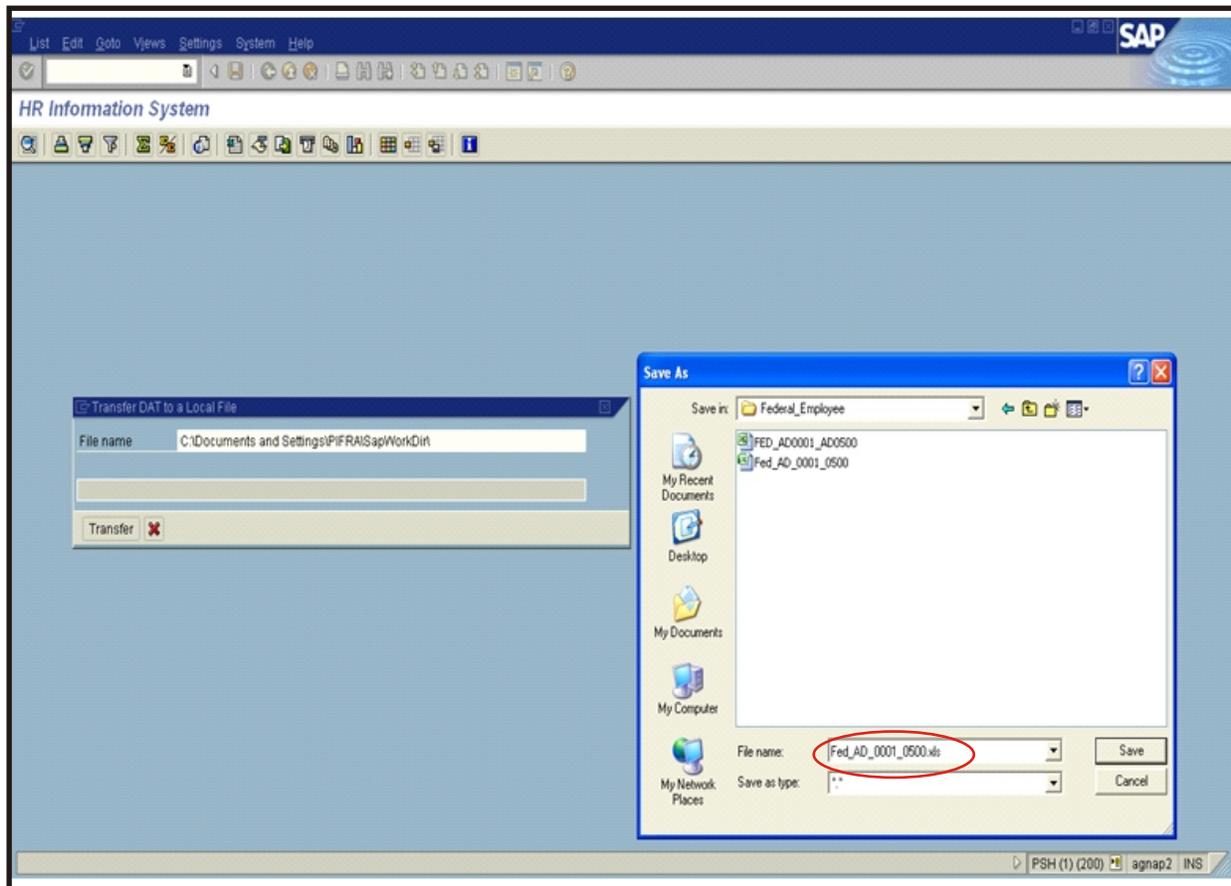
Annotate

1. Four options appear on screen such as:
 - a. Unconverted
 - b. Spreadsheet
 - c. Rich text Format
 - d. HTML Format
2. Select your required format. The spreadsheet format is most widely used as it transfers the data which then can be opened in MS Excel and for later importing into ACL. Select the "spreadsheet" radio button option.
3. Press "✓".

Screen shot 27 Transfer Data to Local File**Annotate**

1. Select a path to "transfer DAT (Data Allocation Table) to a local file".
2. Press button to go-to "Save as" dialog box.

Screen shot 28 Save Local File

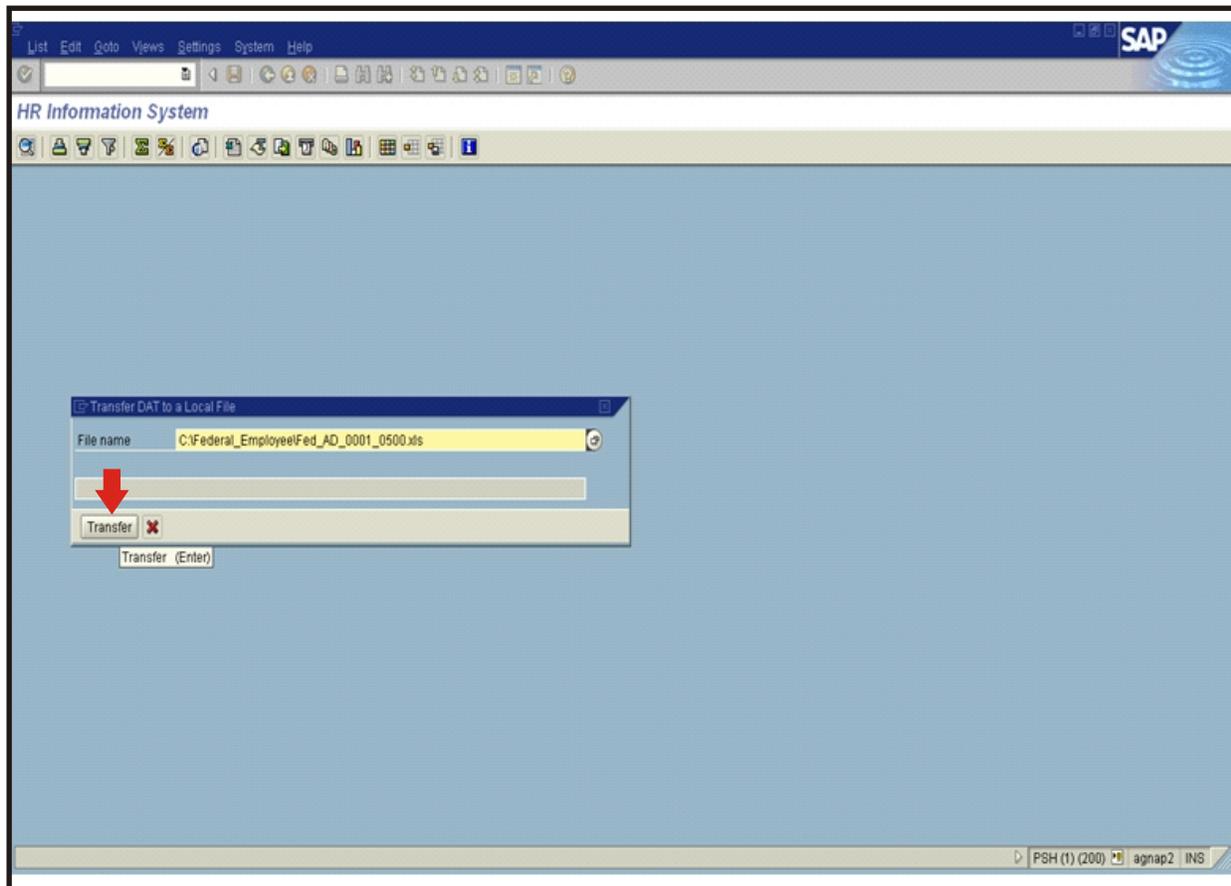


Annotate

The user performs following steps in order to save the data in the hard drive

1. Select the "drive" where you want to save your file
2. Make a "Folder" and "name the Folder" optional but recommended for every set of similar reports to be saved
3. Enter the "file name" with "data format" usually ".xls" is entered to make directly accessible by MS Excel
4. Click on "Save".

Screen shot 29 Transfer Data to Local File



Annotate

1. Now the path is defined and it is indicated as "C:\Federal_Employee\Fed_AD_0001_0500.XLS".
2. Then click on "transfer" to save the file.
3. Wait for few seconds to several minutes depending on the volume of data, once the data is saved SAP will automatically move to the records and will display the following confirmation of saved file.

Note:

Please note that, the larger the file the longer it takes to transfer the data.

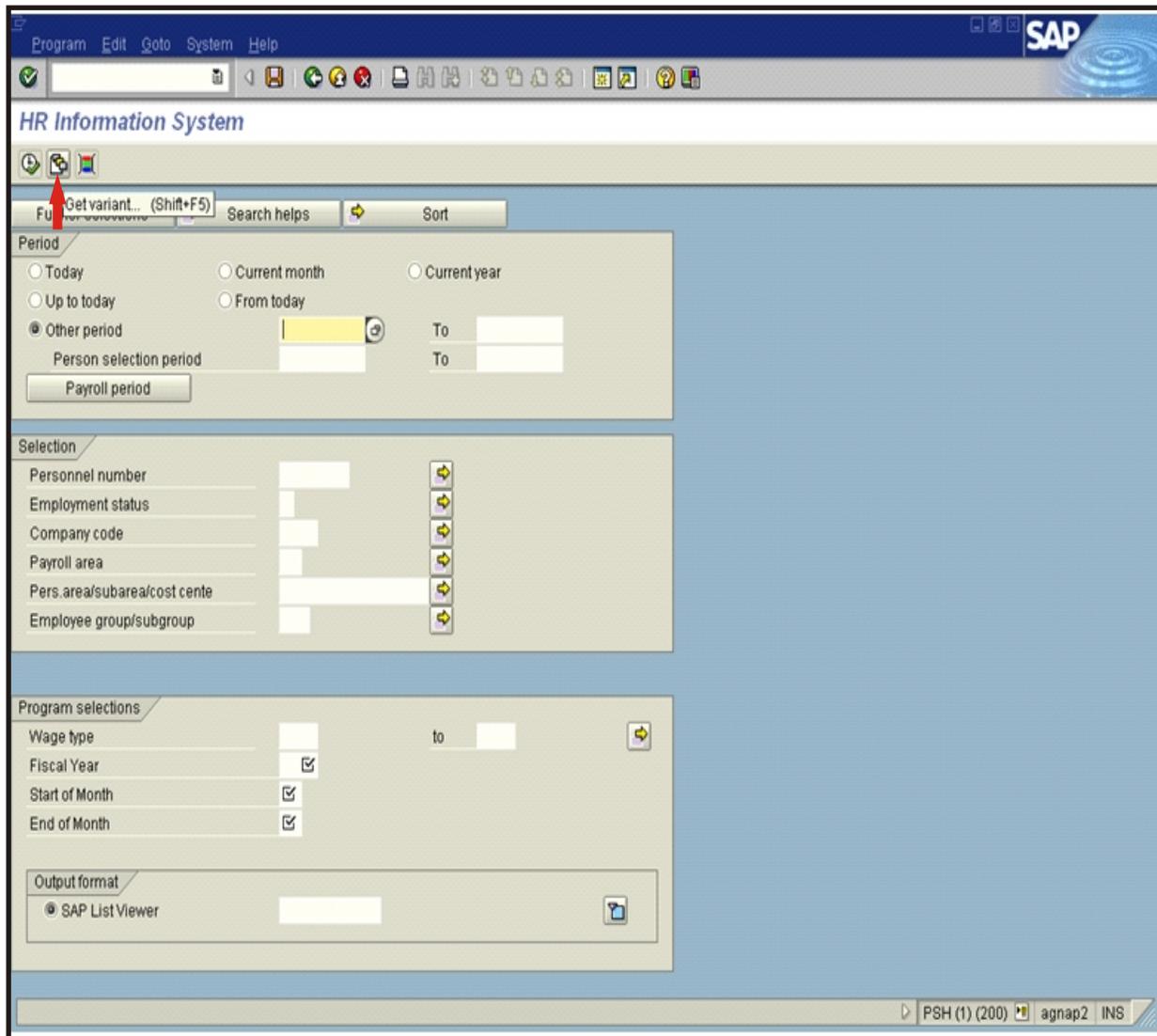
Screen shot 30 Data Transfer Confirmation

Company Code	Personnel Subarea	Personnel Subarea Desc	z.Sno	Cost Center	Cost Center Description	LNo	Pers.no	Name of Employee	Wage type	Wage Type Description	z.Amount in May	z.Amount in Jun
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			5901	Adj Basic Pay	0.00	
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			5002	Adjustment House Rent	0.00	242.00
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			3609	Income Tax	0.00	78.00
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			3501	Benevolent Fund		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			3014	GPF Subscription - Rs 850		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			6602	Loan Payment - MCAR	0.00	0.00
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			6502	MCAR Loan Principal Insta		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			6501	HBA Loan Principal Instal		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			6158	Prime Minister's Spl Fund		0.00
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			5810	Adj Qualification Pay	0.00	
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			3011	GPF Subscription - Rs 415	0.00	0.00
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			1300	Medical Allowance		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			1000	House Rent Allowance		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			0010	Qualification Pay	0.00	0.00
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			0004	Special Pay		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			0001	Basic Pay		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			1864	Dearnes Allowance (2008)		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			1831	Adhoc Relief (2005)		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			1830	Special Relief All(2005)		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0			1770	Spl.Additional allowance		
F	AD	Abbotabad	1.00	AD0016	D.A.O. ABBOTTABAD	0			1530	Hill Allowance		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0		MR	3015	GPF Subscription - Rs 825		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0		MR	1864	Dearnes Allowance (2008)		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0		MR	1831	Adhoc Relief (2005)		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0		MR	3501	Benevolent Fund		
F	AD	Abbotabad	0.00	AD0016	D.A.O. ABBOTTABAD	0		MR	3609	Income Tax		

Annotate

1. The screen shows "2687098 bytes transferred".
2. Check whether the data is transferred to hard drive, perform following steps
 - a. Go to "My Computer"
 - b. Select the drive where the data stored e.g. "C drive"
 - c. Open the folder name "Federal Employee"
 - D. See the file: "Fed_AD_0001_0500.XLS".

Screen shot 31 Get Variant

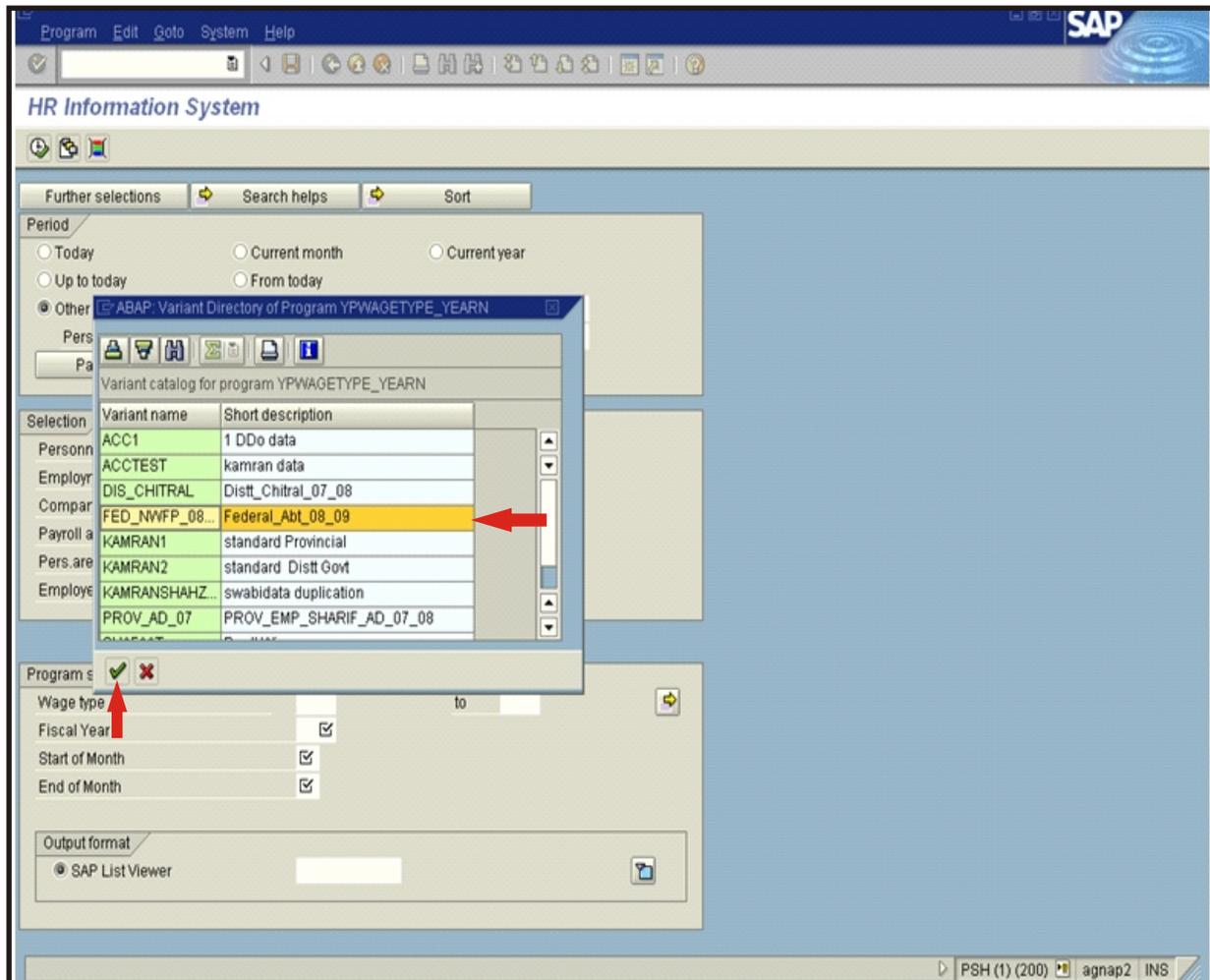


Annotate

Already saved user specific or general variants help the user to quickly input the parameters and change only a particular parameter to produce the required results. This is very helpful where you are generating a complete payroll, where the report is unable to generate all range of cost centers and you have to give a smaller range of cost centers each time.

Click the "Get Variant" or "Shift + F5" to get to the saved variants.

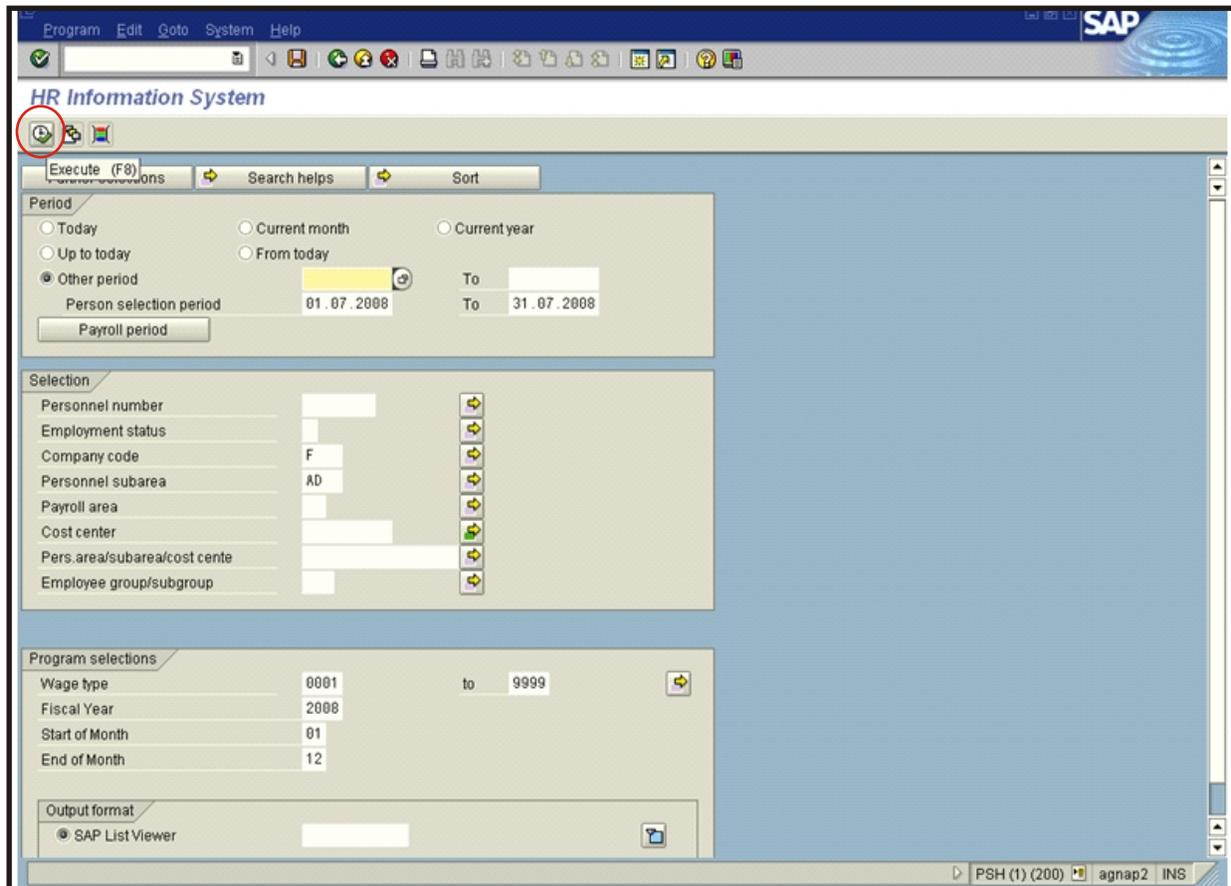
Screen shot 32 ABAP: Variant Directory of Program



Annotate

1. An "ABAP variant Dictionary" dialog box is opened.
2. Select the "variant: Fed_Abt_08_09" which the user has already saved.
3. Select the "✓".

Screen shot 33 Variant Applied



Annotate

1. All input parameters which were saved by the user as a variant are shown on HR Information System. All is required is to change the cost centers or date as you may require.
2. Press Execute or F8 button to run the report.

SECTION II

**MANAGING DATA,
ANALYSIS
AND
REPORTING**



COMPUTER ASSISTED AUDIT TOOLS AND TECHNIQUES (CAATs)

“Computer based tools that permit auditors to increase their personal productivity as well as that of the audit function”. [CAATs & Other BEASTS for Auditors, By David G. Coderre; 1998, Global Audit Publications].

Audit Command Language (ACL) and Interactive Data Extraction & Analysis (IDEA) are the most widely used CAATs around the world. The Department of the Auditor General of Pakistan (DAGP) has implemented ACL as CAATs. ACL provides a means to get access and to analyze the data for a predetermined audit objective and then for reporting on the audit findings with more emphasis on the reliability on the records produced and maintained in the system.

ACL

Since its establishment in 1987, ACL is a global leader in audit, control testing and compliance technology solution. ACL is a tool that helps to read and analyze the data. The global community of ACL consists of approximately 170,000 users in 130 countries including Pakistan. ACL solution helps the smaller to larger organization in analyzing the effectiveness, reliability and completeness of the data. ACL capture the share of 70% from Fortune 500.

What ACL can do for you?

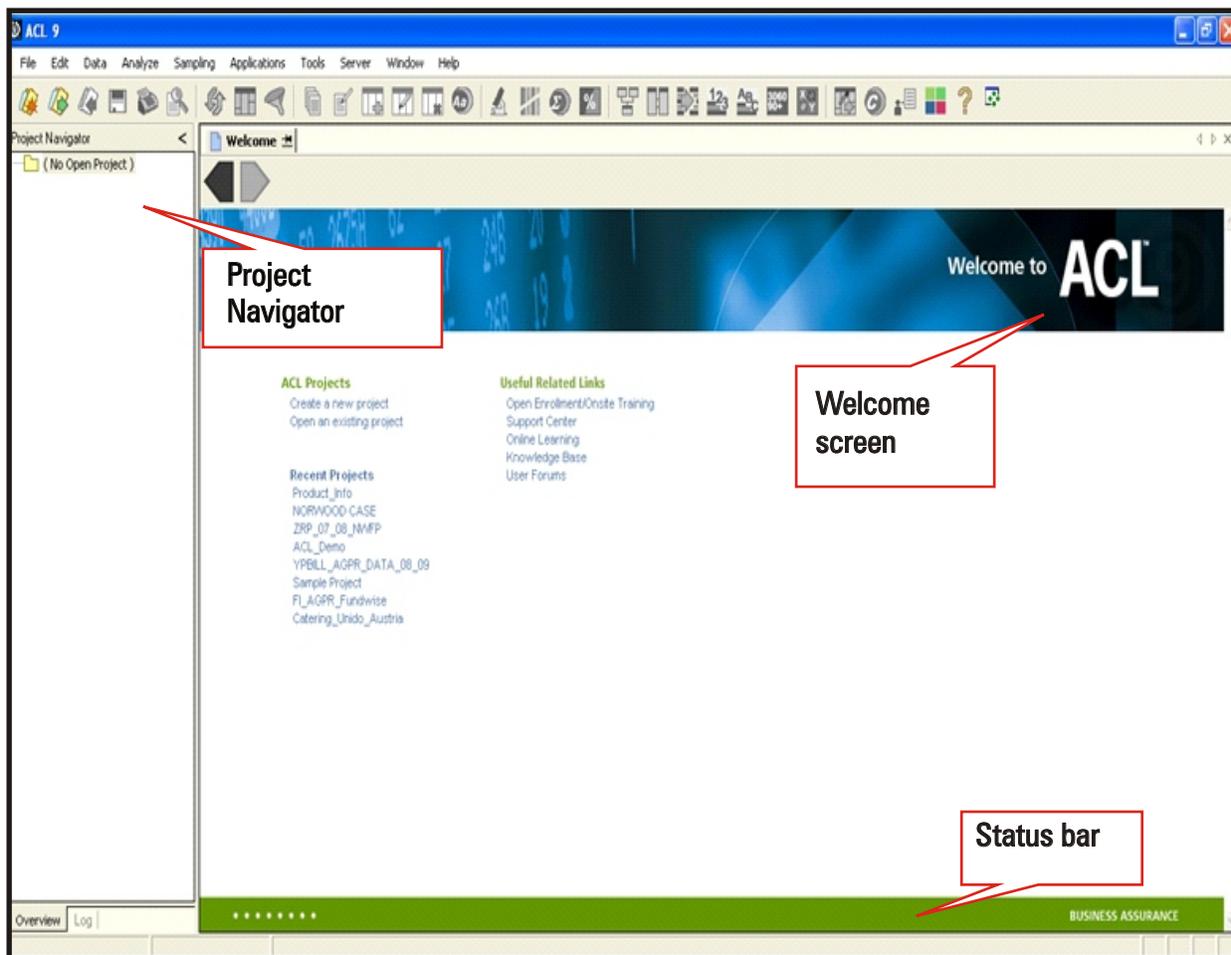
1. Process data from different systems
2. Keeps log of everything done in ACL
3. Capable of analyzing whole population (not just a sample)
4. Imports unlimited number of records.
5. Exports data easily to other applications
6. Easily filters data on user specified criteria (which can then be extracted to smaller more manageable files for others to use)
7. Quickly finds missing data (Blanks)
8. Predictable Patterns (Benford's Law)
9. Aging (default 30,60,90,120 or define your own)
10. Statistics and sampling
11. Graphs (Histogram)
12. Sorts by unlimited fields
13. Integration into Crystal Reports
14. Aids to focus on the audit.
15. And many more

IMPORTING SPREADSHEET INTO ACL

The next step is to access the data outlined in your strategic plan. The report that we have saved is in spreadsheet (ms excel) format. ACL can either directly access the data from the entity's accounting system through integration or can import files of different formats;

Here we will discuss the method where the data file, in spreadsheet format, is imported through the data definition wizard.

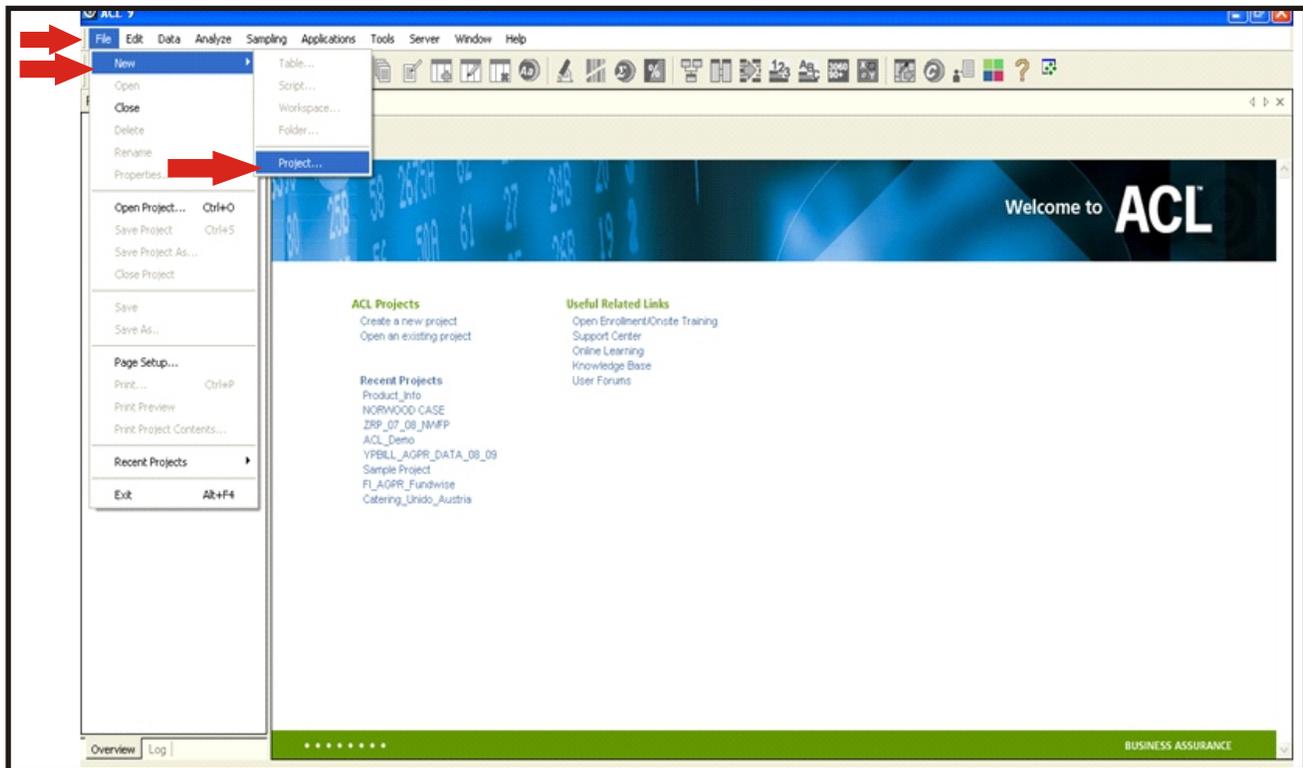
Screen shot 34 ACL 9 Welcome Screen



Annotate

1. Install ACL Desktop Version 9.1 on the computer. For this consult your respective ACL master Trainer of Audit Component.
2. Start the application and you will be taken to the welcome screen of ACL.
3. The Graphical User Interface (GUI) of the ACL is divided into three parts
 - a. Project Navigator
 - b. Welcome Screen
 - c. Status Bar

Screen shot 35 Creating a New Project

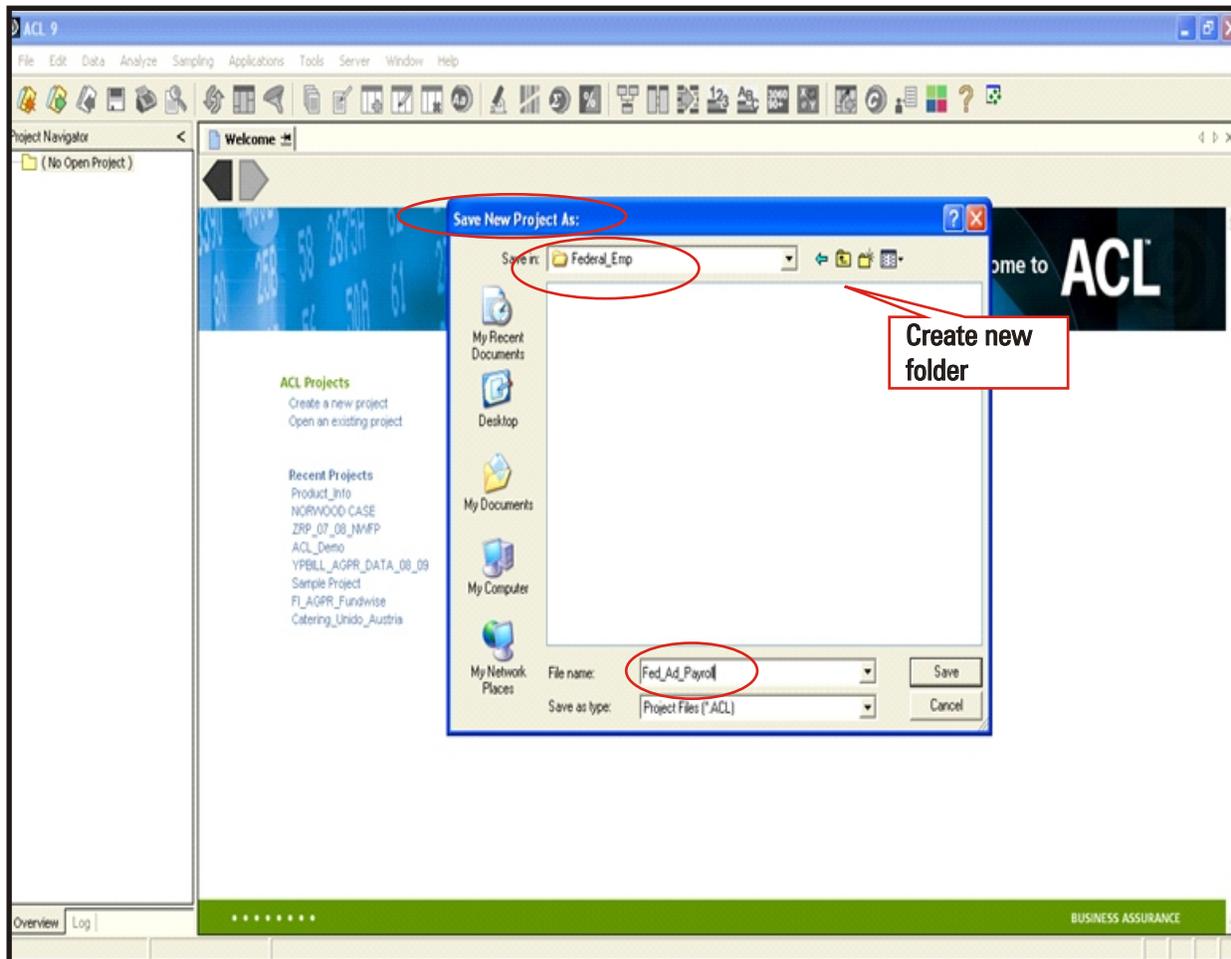


Annotate

1. To import the spreadsheet file into ACL the user first prepares a Project. The step for initiating a Project is as follows:

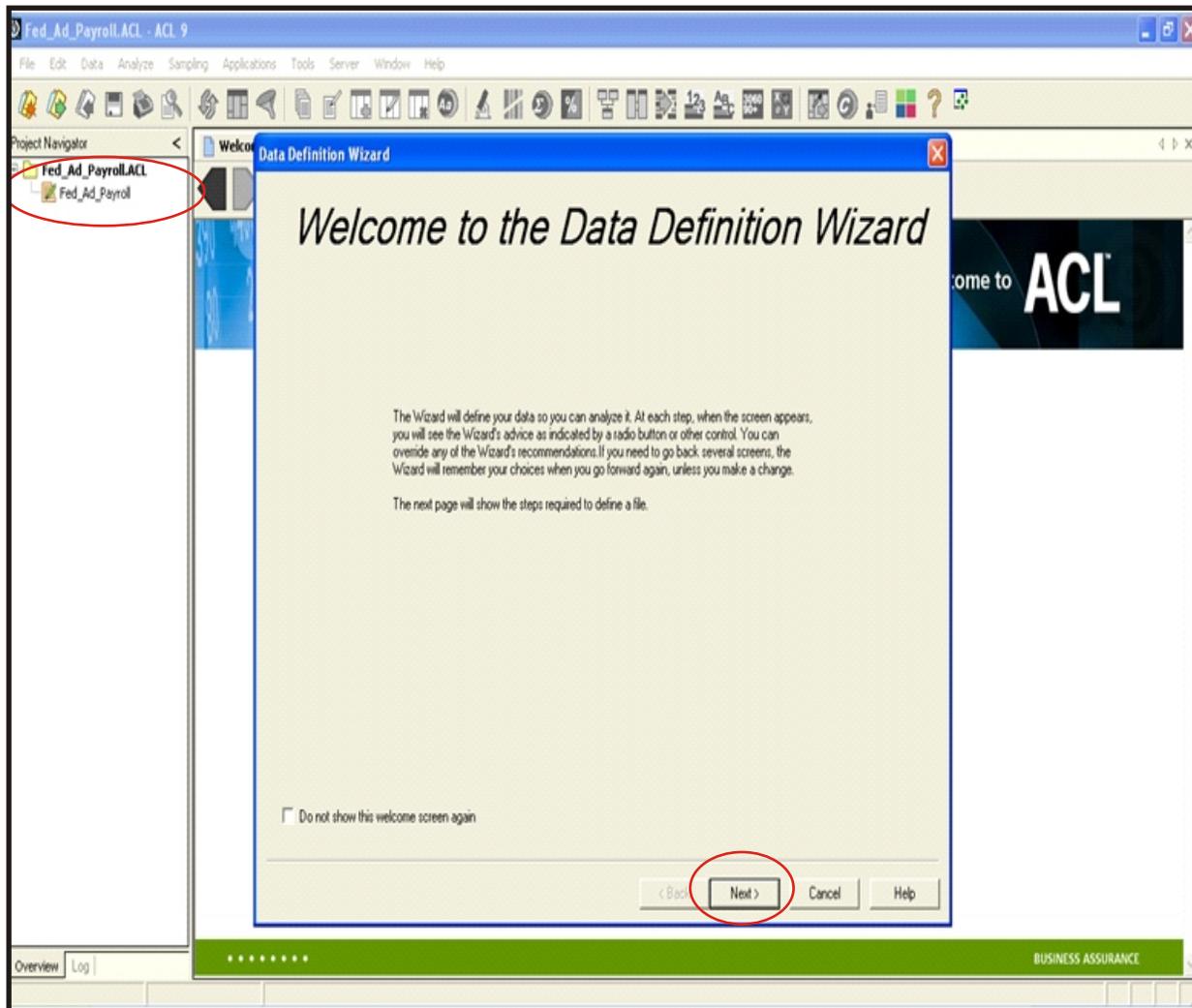
File -> New -> Project

Screen shot 36 Saving New Project



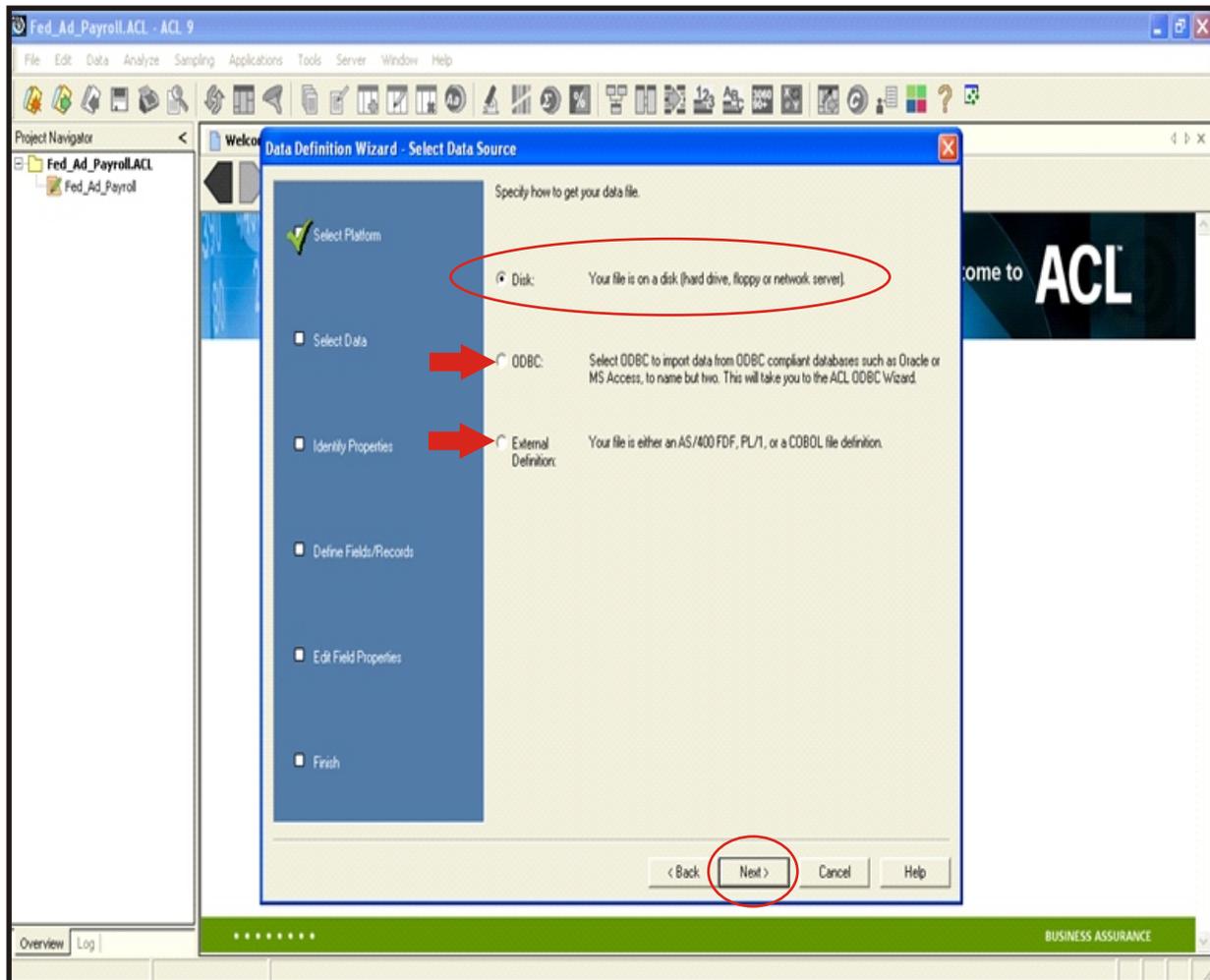
Annotate

1. A dialog box appears: "Save New Project As"
2. It is more appropriate to create the folder of a specific project in which all project files shall be saved. As an example "Federal_Emp" is created.
3. Write a project file name "Fed_Abd_Payroll"
4. Click on "Save".

Screen shot 37 Data Definition Wizard**Annotate**

1. In "Project Navigator" a Project with the name "Fed_Abd_Payroll" is created.
2. When you save the project the Data Definition Wizard, as shown above, automatically starts.
3. Click on "Next" to continue.

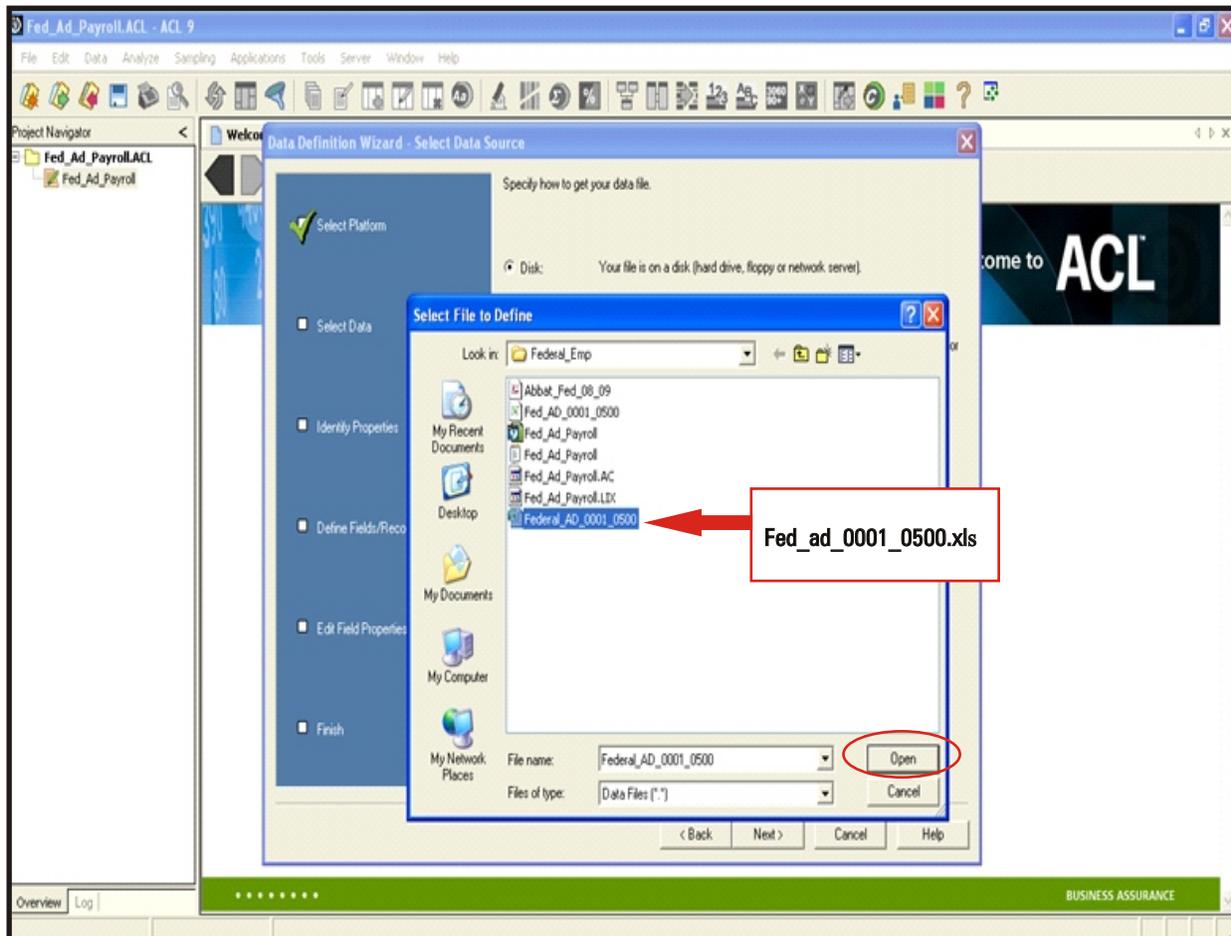
Screen shot 38 Selecting Data Source



Annotate

1. The screen appears “Data Definition Wizard: Select Data Source”.
2. Here you need to specify how to get your data file.
 - a. Disk
 - b. ODBC Open Database Connectivity
 - c. External Definition used for mainframe computers or legacy systems
3. The user has to specify the data source. Generally the data source is “Disk” especially when we are Defining the data in “MS Excel File”.
4. Select “Disk” radio button.
5. Click on “Next” to continue.

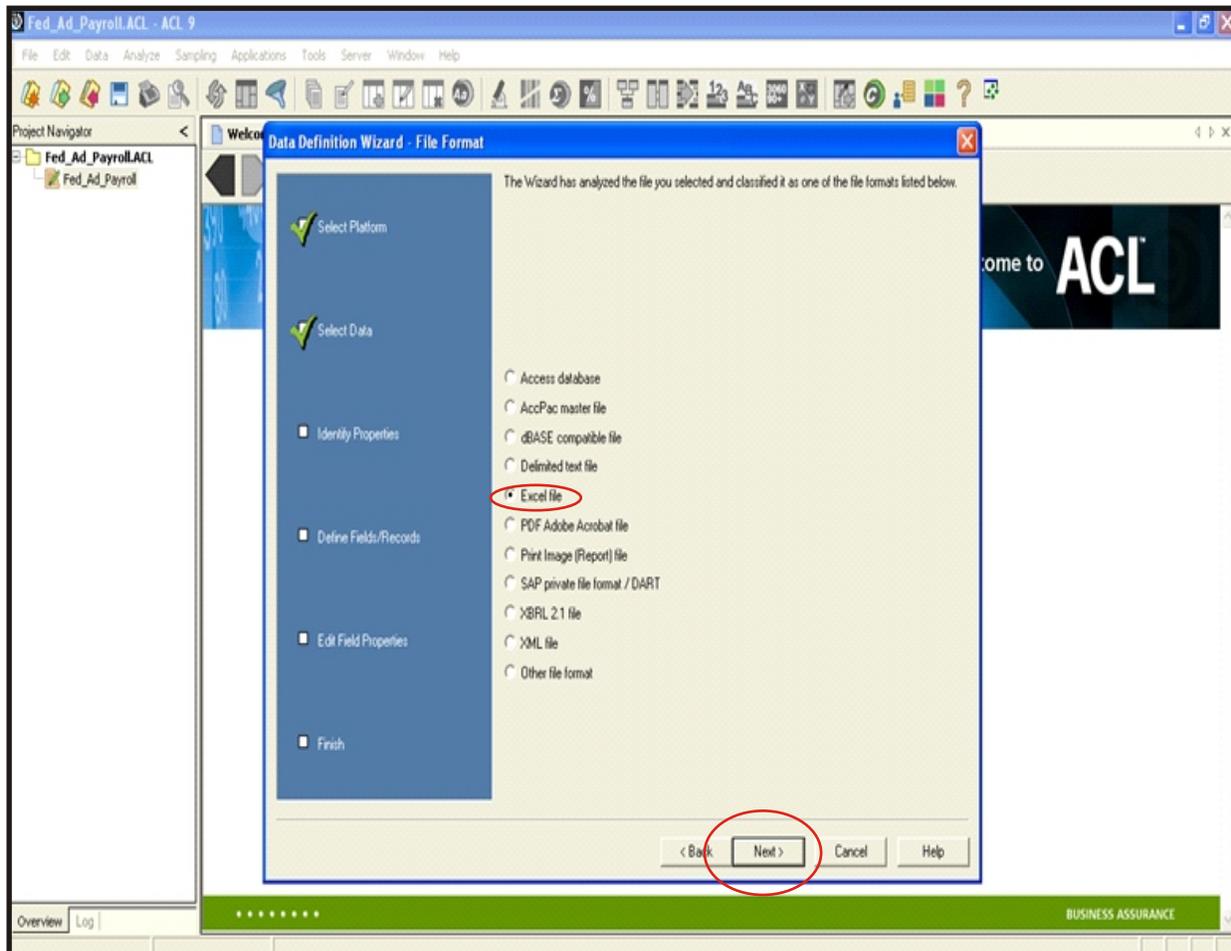
Screen shot 39 Select File to Define



Annotate

1. The dialog box "Select File to Define" is opened.
2. Select the file name Federal_AD_0001_0500.xls in the defined path i.e. "C:\Federal_Employee\Fed_AD_0001_0500.XLS".
3. Click on "Open" to continue.

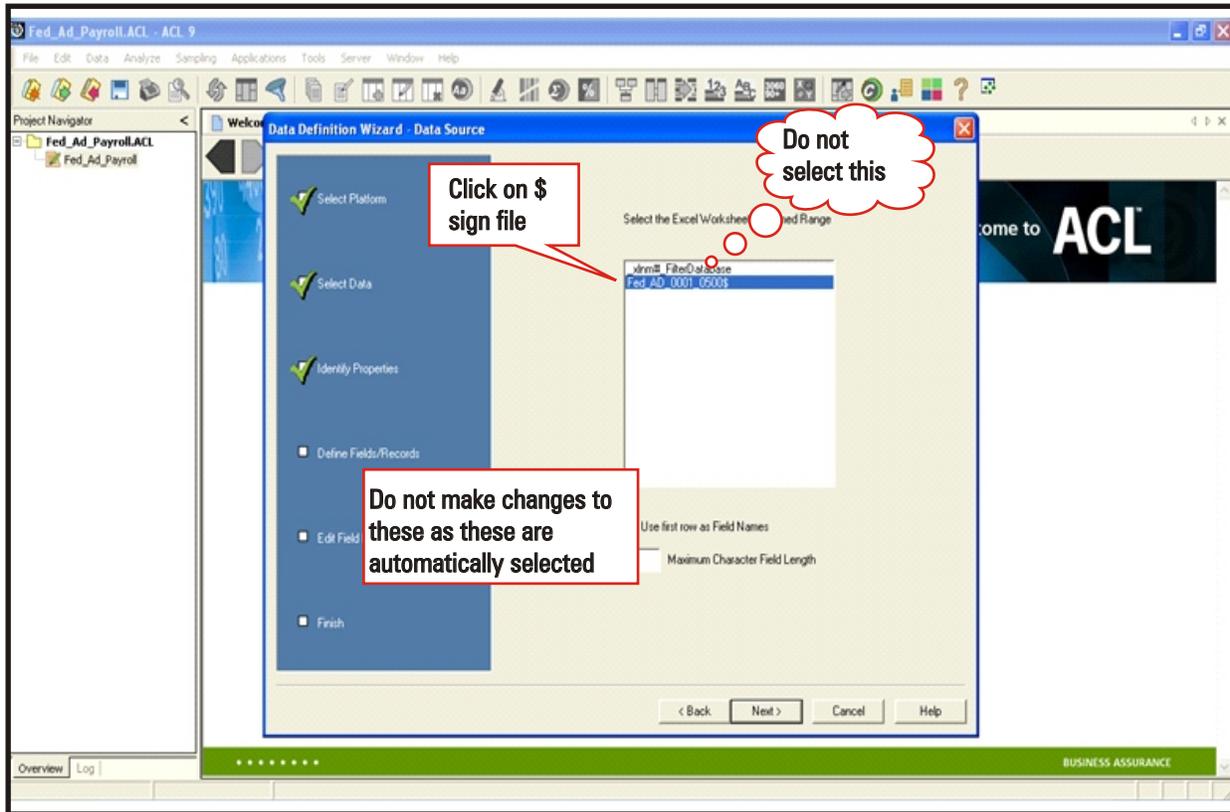
Screen shot 40 Data Definition Wizard



Annotate

1. The next screen in Data Definition Wizard appears in which the user identifies the "File Format". We have saved our data from SAP in spreadsheet (MS Excel) format and therefore we select "Excel file".
2. ACL Data Definition Wizard automatically identifies the format and selects the radio button of "Excel File". However, before continuing to the next screen you need to make sure that you have selected the Right format otherwise the setup will not continue.
3. Click on "Next" to continue.

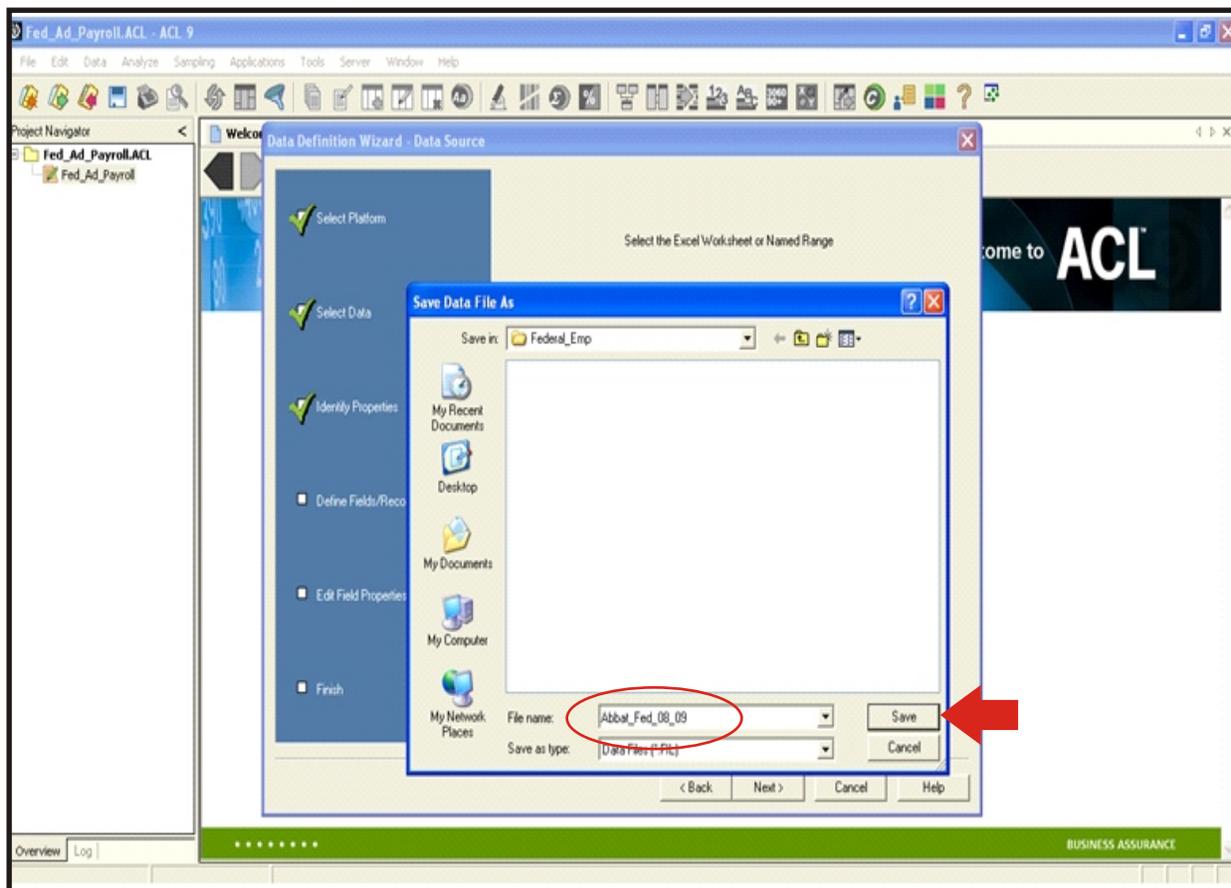
Screen shot 41 Data Definition Wizard: Data Source



Annotate

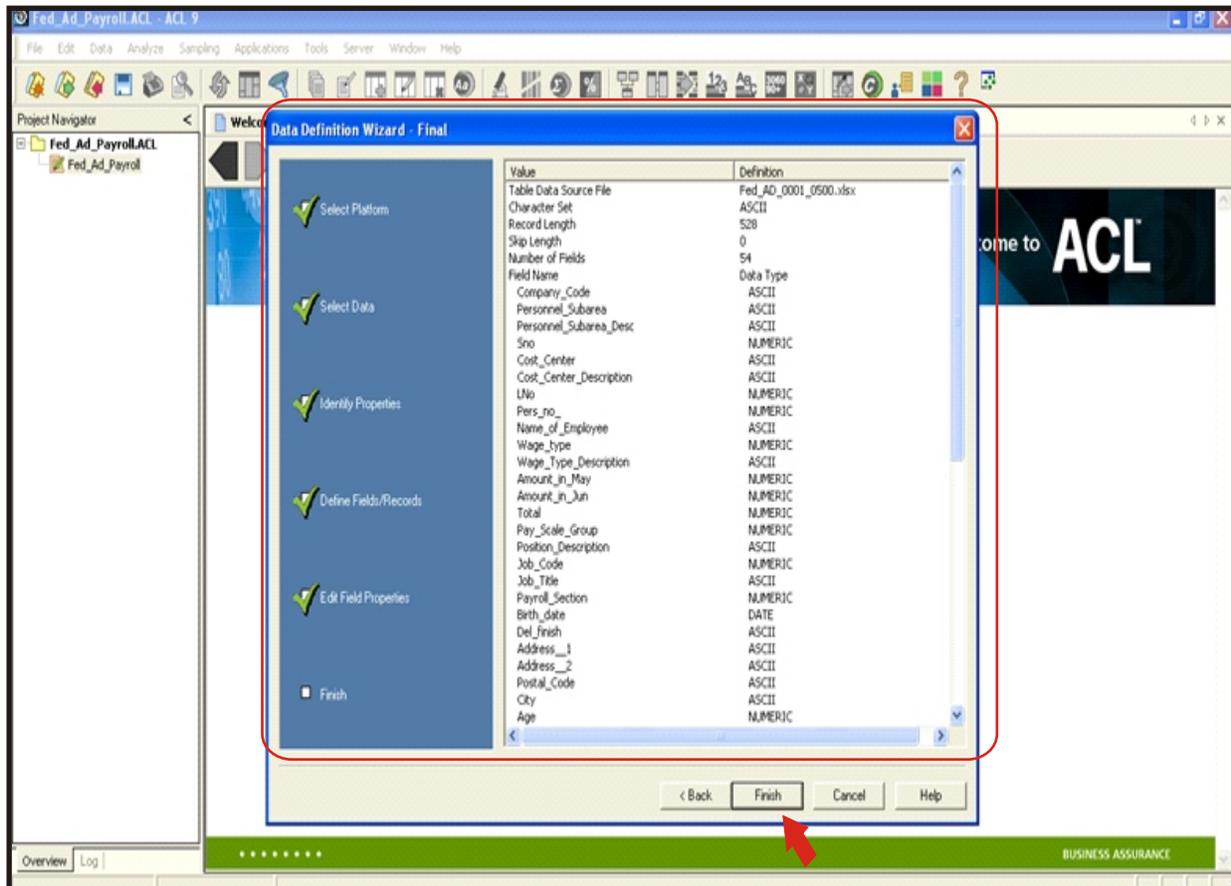
1. The next screen of Data Definition Wizard shows "Data Source".
2. There are two options as shown above
 - a. "Xlnm# Filter Database" (Don't select it)
 - b. "Fed_ad_0001_0500\$" (Select the worksheet)

ACL identifies the worksheets that contain data and display all of them with "\$" sign at the end of their names. Choose the appropriate sheet. Since we had only one sheet in our file, only one sheet is shown above.

Screen shot 42 Saving the Data File**Annotate**

1. The dialog box appears "Save Data File as"
2. Enter the File Name such as "Abbat_Fed_08_09."
3. Click on "Save" Button.

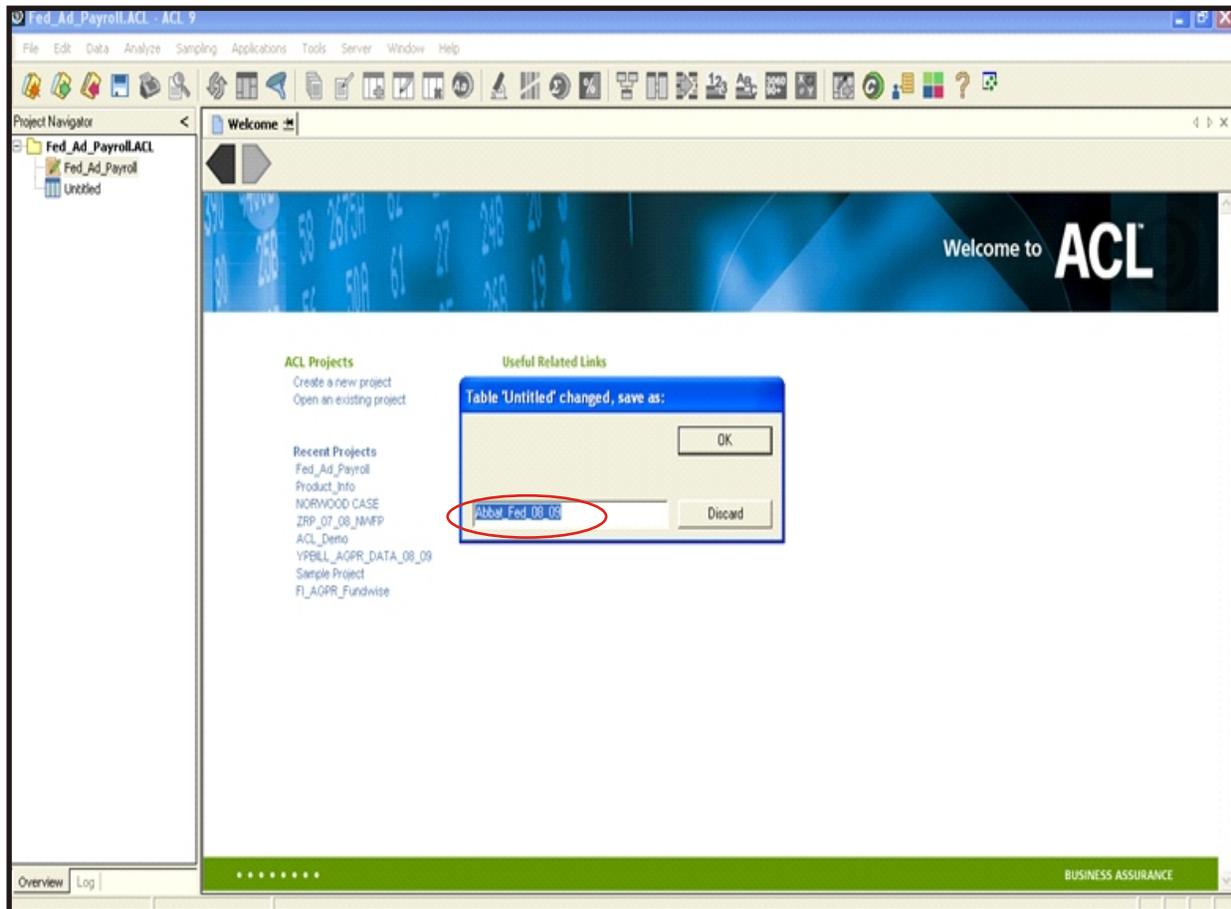
Screen shot 43 Data Definition Wizard: Final



Annotate

1. The dialog box "Data Definition Wizard: Final" is opened
2. This screen shows the "value" and "definition" on the screen.
3. The "Data Definition Wizard: Final" dialog box shows the table layout, data source file, character set, Record Length, Skip Length and Number of Fields.
4. Click on "Finish".

Screen shot 44 Save Table



Annotate

1. The dialog box "Table Untitled Changed, Save as:" is opened
2. The user has the option to "save" the table with a different name but if doesn't change the name of the "table" then press OK.

Screen shot 45 Data Defined

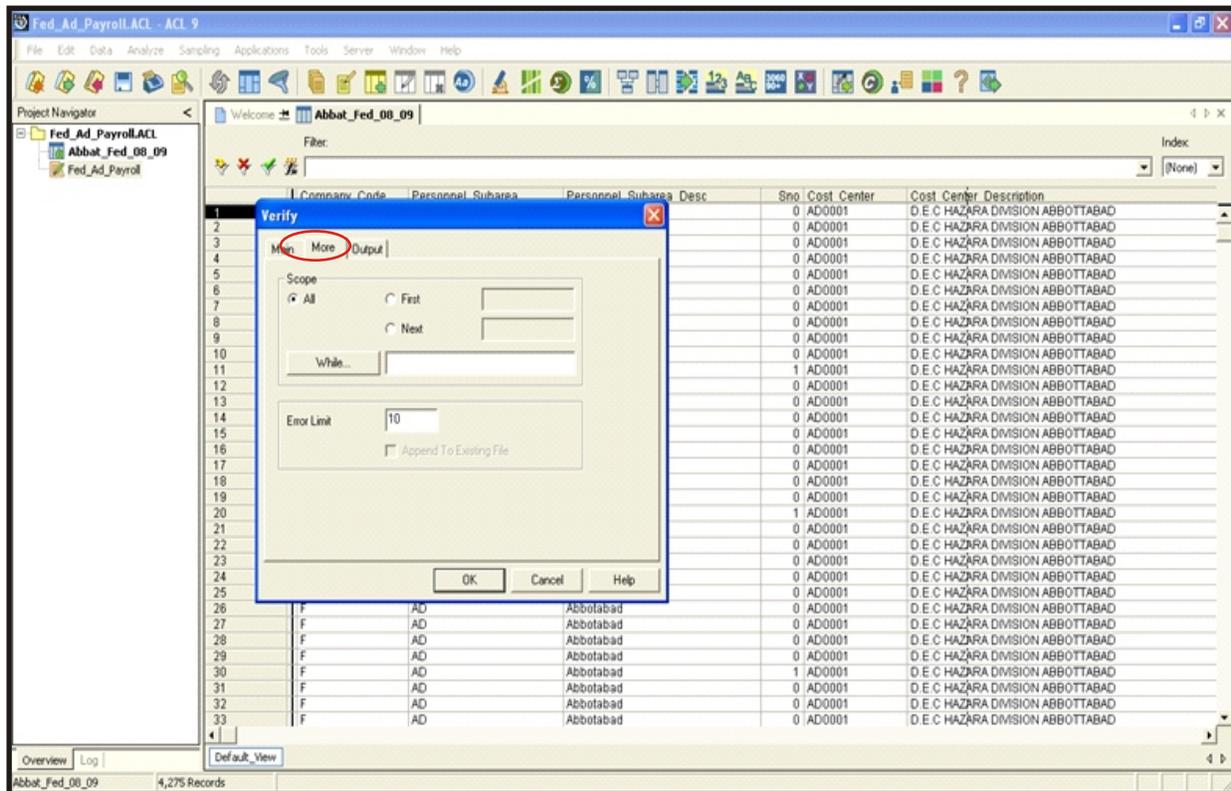
The screenshot shows the ACL software interface. The Project Navigator on the left lists the project 'Fed_Ad_Payroll.ACL' and its tables: 'Abbat_Fed_08_09' (highlighted with a red circle) and 'Fed_Ad_Payroll'. The main window displays a table with the following columns: Company Code, Personnel Subarea, Personnel Subarea Desc, Sno, Cost_Center, and Cost_Center Description. The table contains 33 rows of data. A red box labeled 'Data defined' points to the table header. The status bar at the bottom shows 'Abbat_Fed_08_09' and '4,275 Records', with a red box labeled 'Status bar' pointing to it.

	Company Code	Personnel Subarea	Personnel Subarea Desc	Sno	Cost_Center	Cost_Center Description
1	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
2	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
3	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
4	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
5	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
6	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
7	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
8	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
9	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
10	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
11	F	AD	Abbotabad	1	AD0001	D E C HAZARA DIVISION ABBOTTABAD
12	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
13	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
14	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
15	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
16	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
17	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
18	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
19	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
20	F	AD	Abbotabad	1	AD0001	D E C HAZARA DIVISION ABBOTTABAD
21	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
22	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
23	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
24	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
25	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
26	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
27	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
28	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
29	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
30	F	AD	Abbotabad	1	AD0001	D E C HAZARA DIVISION ABBOTTABAD
31	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
32	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
33	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD

Annotate

- Now the Abbat_Fed_08_09 data has been imported into ACL.
- Project Navigator above shows the Name of the Project: "Fed_Abt_Payroll.ACL"
 - Under the name of the Project the user has a table name "Abbt_Fed_08_09".
 - Under the name of the Project a "Log file" with the name "Fed_Abt_Payroll"
- Status bar shows the following details such as:
 - Name of the table: "Abbat_Fed_08_09"
 - Number of Records: "4275 Records"
- "Payroll Data" with the identified "fields" is shown in the "welcome screen".

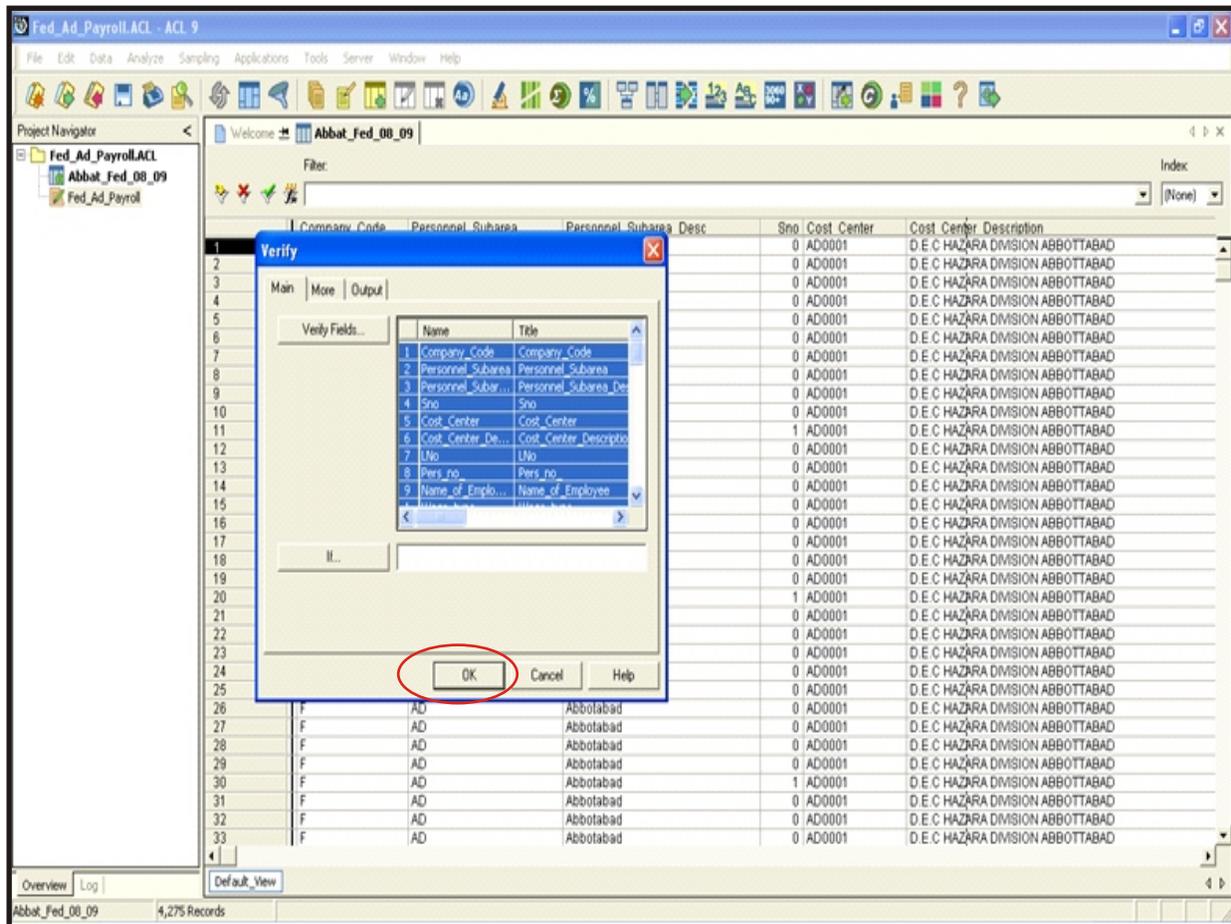
Screen shot 48 Verify: More



Annotate

1. There are three tabs shown in "Verify" dialog box.
 - a. Main
 - b. More
 - c. Output
2. "More" tab gives option to increase or decrease the error limit. By default it is 10.
3. Now move to next tab "Output".

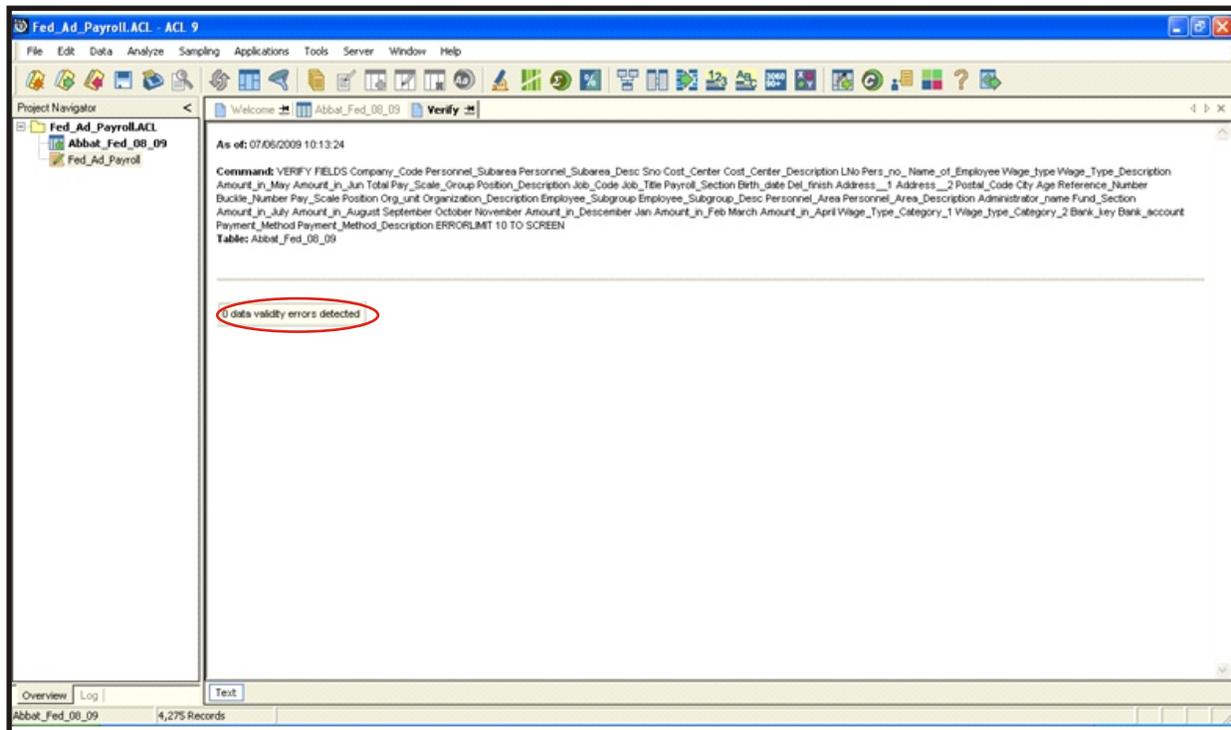
Screen shot 50 Verify Fields



Annotate

Click on "Ok" to continue.

Screen shot 51 Data Validity Errors



Annotate

The screen displays the result of validity checks of “Verify” command which is “0 data validity error detected”. But if the auditor found validity errors then he/she should perform following action regarding the validity of the data.

- 1 Determine if errors are in the table layout or in the data itself.
- 2 If errors are in table layout, fix and check validity again.
- 3 If errors are in data, either have the data re-sent or try to fix them.

Screen shot 52 Default View

The screenshot shows a software application window titled "Fed_Ad_Payroll.ACL - ACL 9". The interface includes a menu bar (File, Edit, Data, Analyze, Sampling, Applications, Tools, Server, Window, Help), a toolbar with various icons, and a Project Navigator on the left. The Project Navigator shows a tree view with "Fed_Ad_Payroll.ACL" expanded, and "Abbt_Fed_08_09" selected and circled in red. A red arrow points to this folder. The main area displays a table with the following data:

	Company Code	Personnel Subarea	Personnel Subarea Desc	Sno	Cost Center	Cost Center Description
1	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
2	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
3	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
4	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
5	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
6	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
7	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
8	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
9	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
10	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
11	F	AD	Abbotabad	1	AD0001	D E C HAZARA DIVISION ABBOTTABAD
12	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
13	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
14	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
15	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
16	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
17	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
18	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
19	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
20	F	AD	Abbotabad	1	AD0001	D E C HAZARA DIVISION ABBOTTABAD
21	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
22	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
23	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
24	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
25	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
26	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
27	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
28	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
29	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
30	F	AD	Abbotabad	1	AD0001	D E C HAZARA DIVISION ABBOTTABAD
31	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
32	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD
33	F	AD	Abbotabad	0	AD0001	D E C HAZARA DIVISION ABBOTTABAD

Annotate

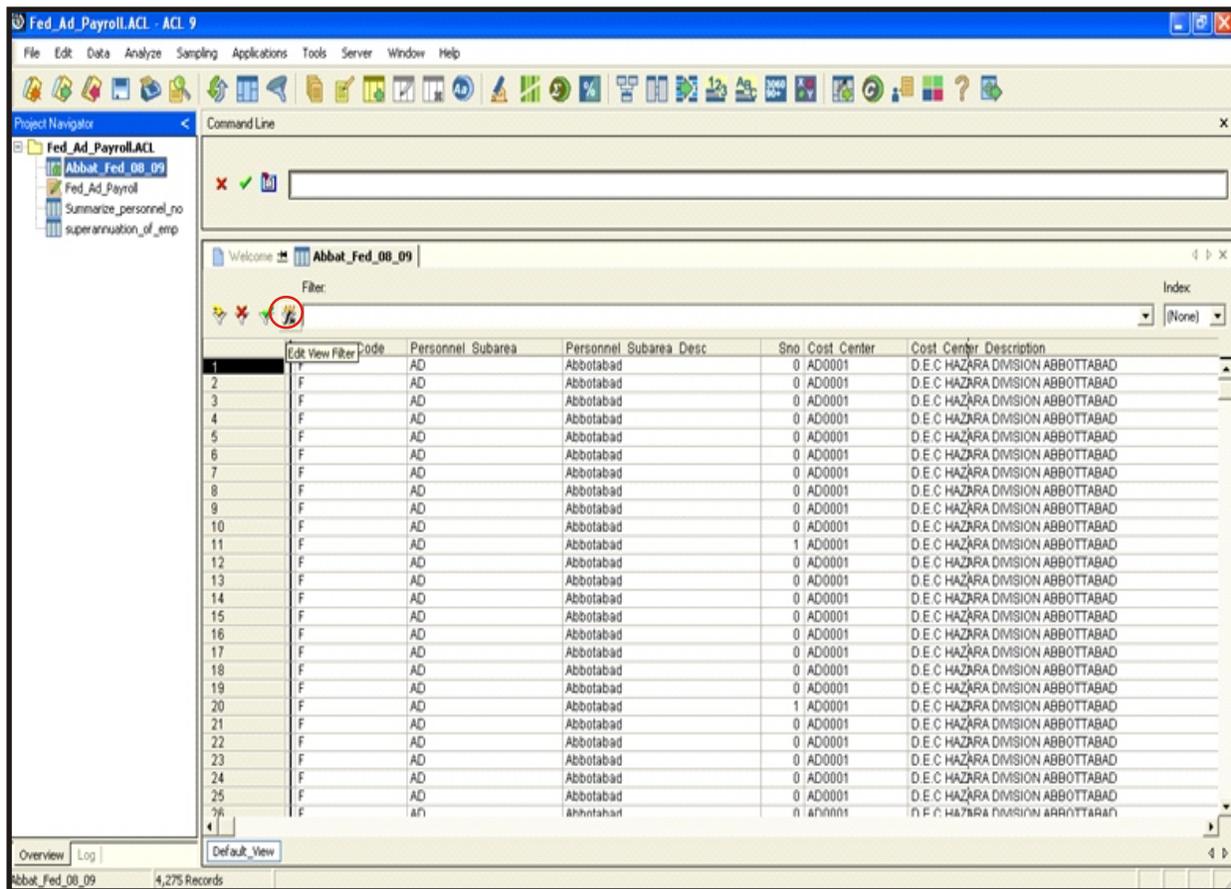
Now open your main table "Abbt_Fed_08_09" data for further data integrity checks.

User extracts the Payroll data of Federal employees from the SAP/R3 and wants to ensure that the data is complete or not. The user simply collects the total strength of the Federal employees who are working in District. The District Accounts Office gives the total number of Federal employees who have drawing salary say 333 or you obtain the data directly from SAP as explained in Section I.

To test the completeness of the data, user may apply two methods

- (i) By using Filter; and
- (ii) By using Summarization Command. Here we will explain only one way and that is by using the filter criteria to see how many employees are working in District Region. The Screen shots for checking the integrity of Federal employees District are as follows:

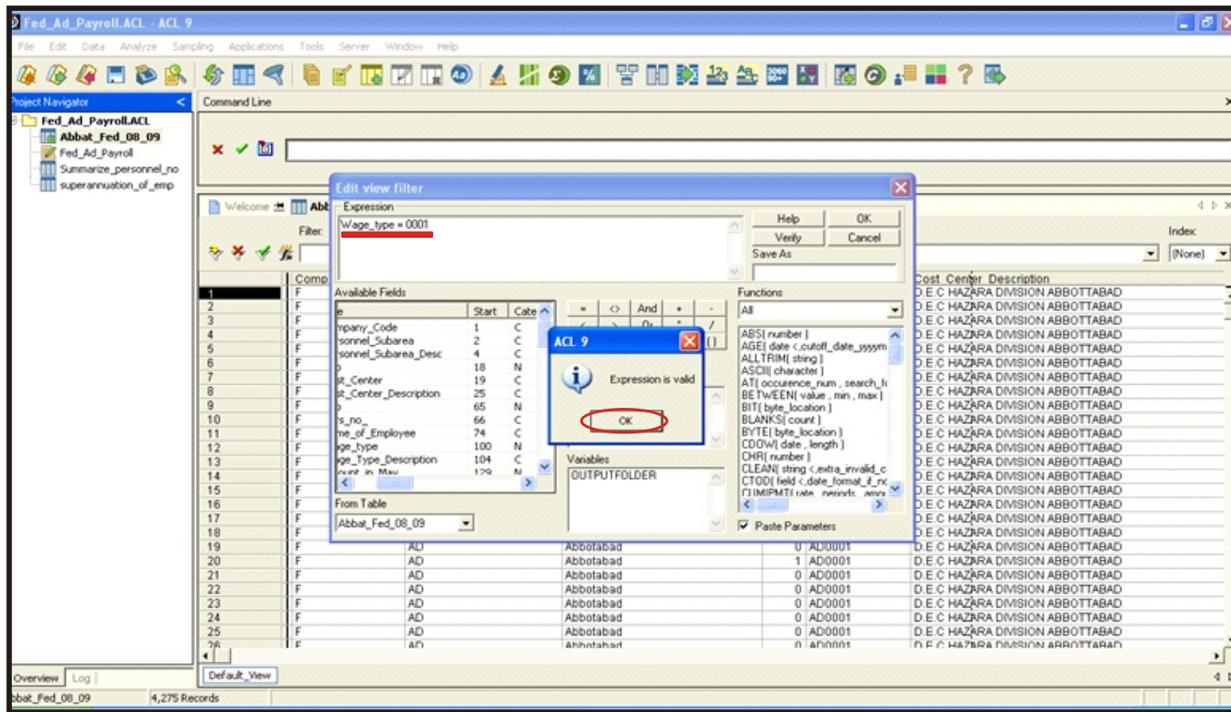
Screen shot 53 Filter



Annotate

Click on “Edit View filter” (As shown above)

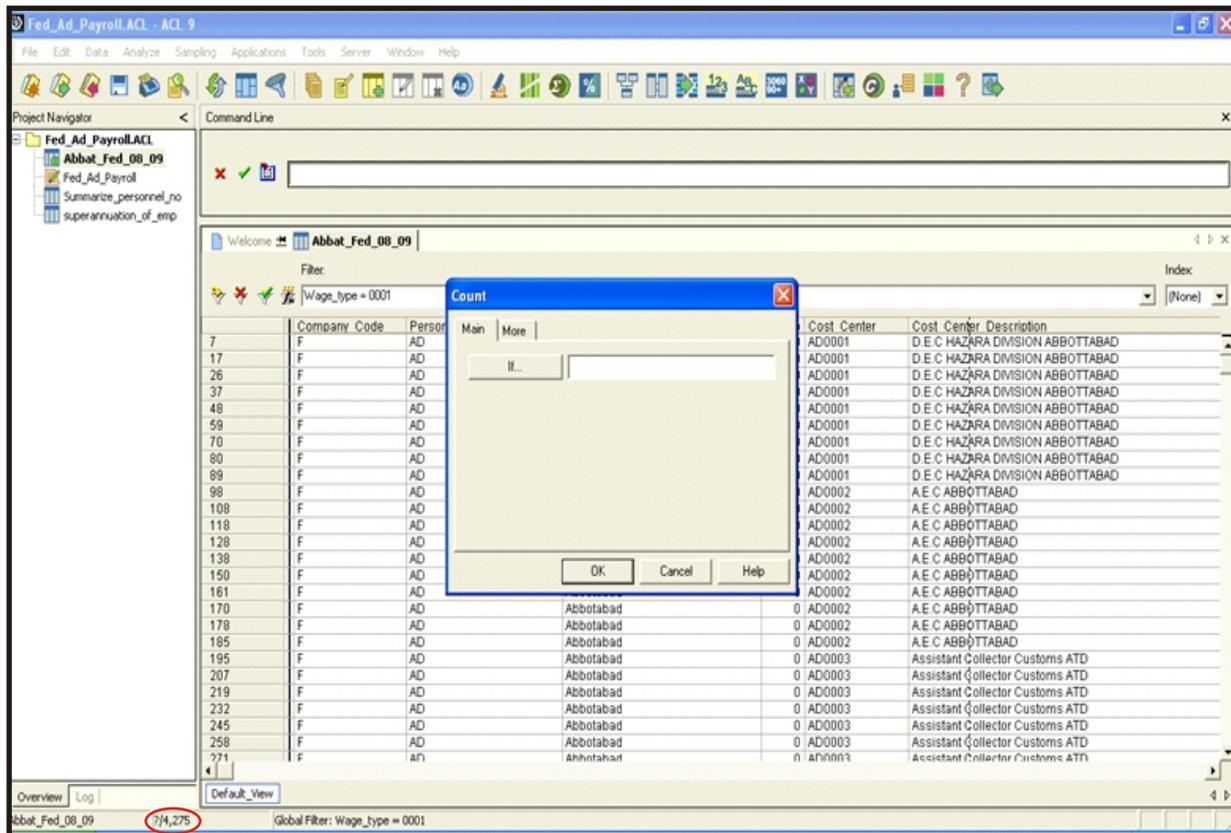
Screen shot 54 Edit View Filter



Annotate

1. When you click the “jx” button, “Edit View Filter” dialog box is opened
2. Enter the expression such as: “Wage_Type=0001” (0001 is a code for Basic Pay)
3. By entering the above expression you get the number of Federal employees working in District who Drew basic pay. Click the “Verify” button to check whether the expression is valid.
4. Click on “OK” to continue.

Screen shot 55 Count



Annotate

1. Analyze → Count Records
(This will show the total number of Federal employees working in a district).
2. "Count" dialog box is opened
3. Press "OK" to continue.

Screen shot 56 Count Records

The screenshot shows a software window titled "Fed_Ad_Payroll.ACL - ACL 9". The main area displays a table with the following columns: Company Code, Personnel Subarea, Personnel Subarea Desc, Sno, Cost Center, and Cost Center Description. A filter is applied: "Wage_type = 0001". The status bar at the bottom shows "333/4,275" and "Global Filter: Wage_type = 0001".

	Company Code	Personnel Subarea	Personnel Subarea Desc	Sno	Cost Center	Cost Center Description
7	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
17	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
26	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
37	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
48	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
59	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
70	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
80	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
89	F	AD	Abbotabad	0	AD0001	D.E.C HAZARA DIVISION ABBOTTABAD
98	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
108	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
118	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
128	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
138	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
150	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
161	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
170	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
179	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
185	F	AD	Abbotabad	0	AD0002	A.E.C ABBOTTABAD
195	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD
207	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD
219	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD
232	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD
245	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD
258	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD
271	F	AD	Abbotabad	0	AD0003	Assistant Collector Customs ATD

Annotate

When you have analyzed the data the status bar indicates that there are 333 records/instances out of 4,275. By applying the filter we have produced the records that are drawing basic pay and that is one for each employee, so by counting the records produced we can count the number of employees.

Note:

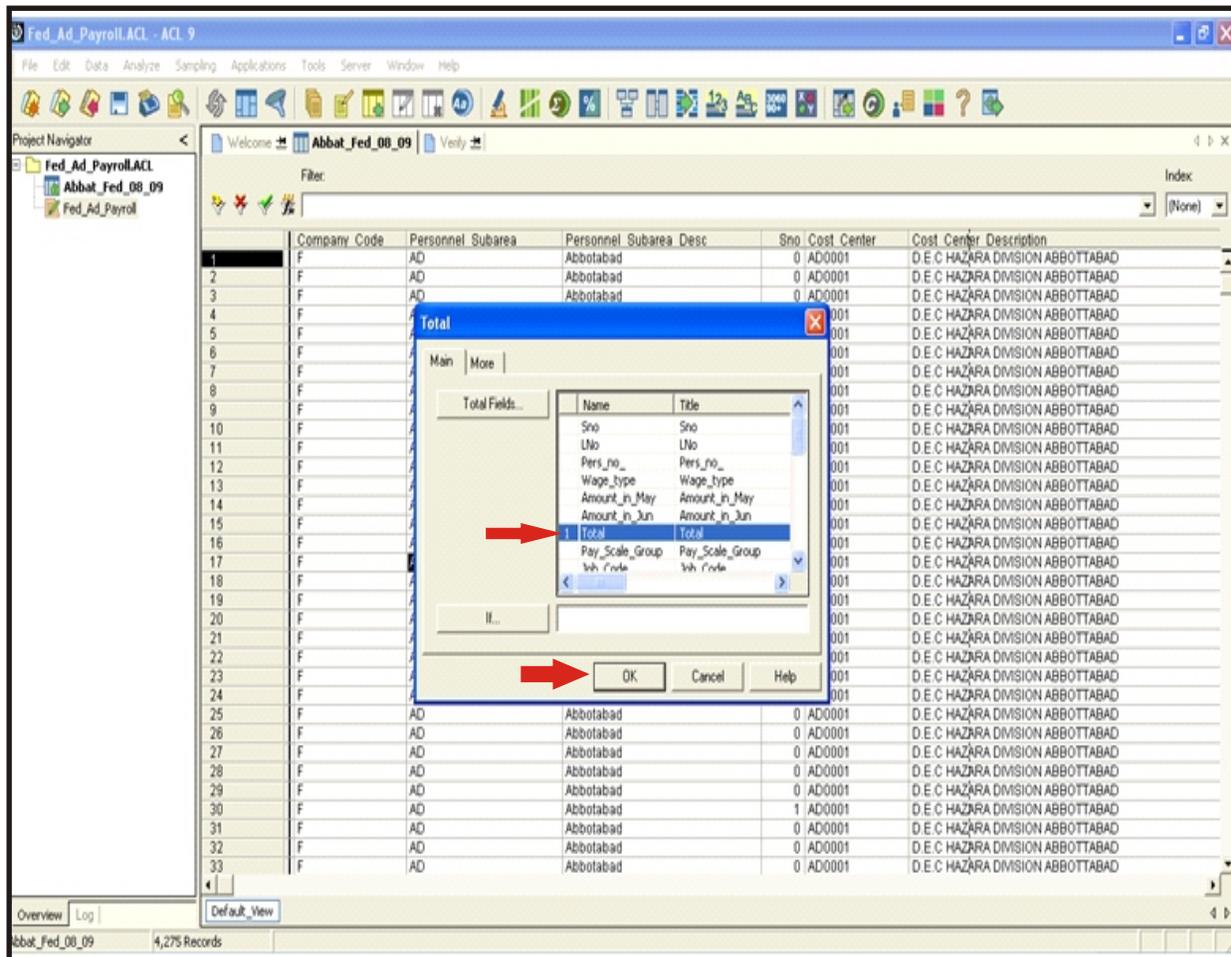
In this way the number of employees will depend on our source data, i.e. since we have obtained the data for whole year, this is the maximum number of employees that have worked in a specific district during the whole year. This is not the number of employees at a given date. For that purpose you need to have payroll for particular month to check the number of employees in that month. Moreover, you also need to obtain details regarding the number of employees who are paid directly through cheques out of the payroll system. It is highly recommended that you obtain monthly payroll figures if you are generating the whole years report. In that case you can filter a particular month say June 2009, and then apply the above filter, this will result in the number of employees, other than those directly paid that existed in a given set of population.

User also matches the total expenditure of payroll of Federal employees from the appropriation accounts or SAP system for the year 2008-09. Note down the “Total Field” expenditure at the end of The Excel table “Fed_Ad_0001_0500”.

Wage Type Description	Amount in May	Amount in Jun	Total	Pay Scale Group	Position Description	Job Code	Job Title	Payroll Section	Birth date	Del/ty
Earnings Allowance (2006)	698	698	8,376.00	9	Non-Gazetted	1494	UPPER DIVISION CLERK		1 30.04.1969	30.10
GPF Subscription - Rs 320	-320	0	-3,340.00	9	Non-Gazetted	1494	UPPER DIVISION CLERK		1 30.04.1969	30.10
GPF Subscription - Rs 365	0	-365	-365	9	Non-Gazetted	1494	UPPER DIVISION CLERK		1 30.04.1969	30.10
Special Benefit Att(2005)	2,944.00	1,344.00	18,364.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Spl.Additional allowance	776	776	8,536.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Convey Allowance 2005	2,480.00	2,480.00	24,800.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Basic Pay	18,280.00	18,280.00	199,200.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Spl Allowance -100%(2005)	18,280.00	18,280.00	199,200.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Income Tax	1,725.00	1,568.00	18,448.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Group Insurance	-182	-182	-2,002.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Benevolent Fund	-155	-155	-1,705.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
GPF Subscription - Rs1050	-760	-760	-8,360.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
Earnings Allowance (2006)	1,880.00	1,880.00	20,680.00	16	Gazetted	1400	SUPERINTENDENT		4 01.10.1983	11.07
	6110472	6258052	71,259,140.00							

Now test the completeness and accuracy of data using the “Total Field Command” from the “ACL” and view that whether these total expenditure of 12 month salary match with the source record or not. This is explained with the help of following screen shots.

Screen shot 58 Total



Annotate

1. Select Analyze → Total Fields
2. The "total" dialog box is opened
3. Click on "Total"; the ACL displays "1" in the left column which indicates that out of the total fields the Numbered "1" field will have total computed
4. Click on "Ok"

Screen shot 59 Comparison of Totals

	1,725.00	1,568.00	18,448.00	16 Gazetted	140
	-182	-182	-2,002.00	16 Gazetted	140
	-155	-155	-1,705.00	16 Gazetted	140
	-760	-760	-8,360.00	16 Gazetted	140
Total Expenditure of Payroll	1,880.00	20,680.00	16 Gazetted	140	
Total	71,259,140.00				

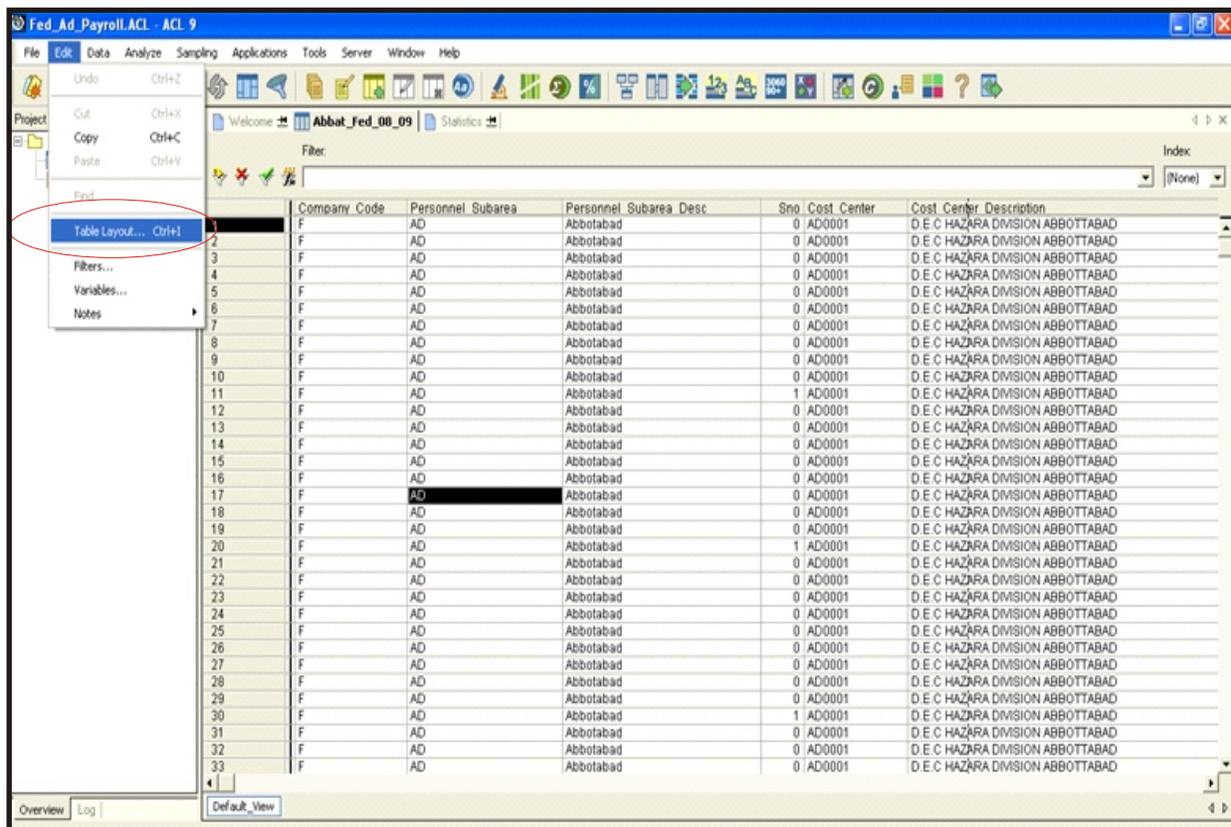
COMPARISON OF TOTAL PAYROLL EXPENDITURE FOR THE YEAR

The “total” of the Ms Excel File “Field” total is 71,259,140 and when calculating the “Total field” of “table Fed_AD_0001_0500” which was import into ACL. The Total field of ACL is also 71,259,140. The Total expenditure of both table Ms-Excel (Source File) and Data imported in ACL is reconciled.

TESTING FOR CONSISTENCY

Your data source can have values derived from calculations, usually based on other fields. For Example, in payroll table of Federal employee of district the field "total" is based on sum of amounts in July 2008 to June 2009. To check the reliability of "Total Field" in a data we have to make a computed field and check that whether the system total is correct. Computed Fields exist in a table but they are not the part of the source data. Computed Field is a virtual field which is based on your calculation on the data and doesn't affect the original data.

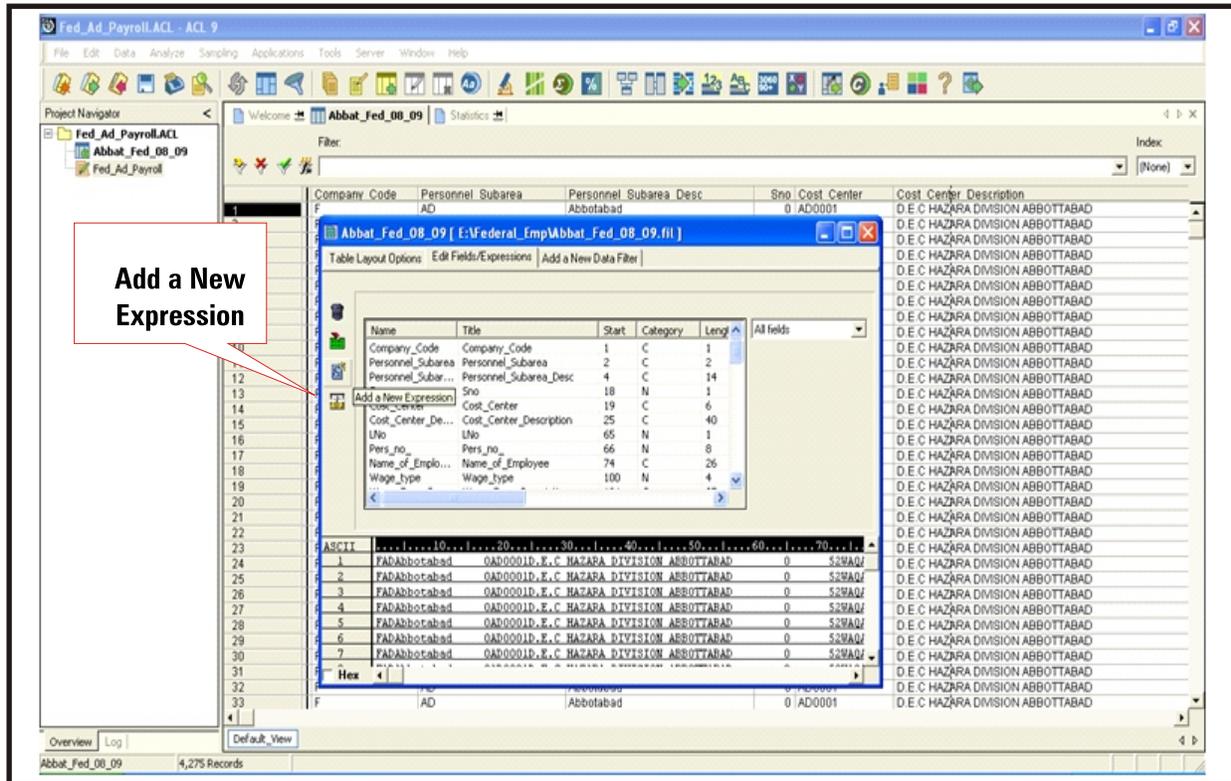
Screen shot 60 Table Layout



Annotate

Go to Edit → Table Layout.

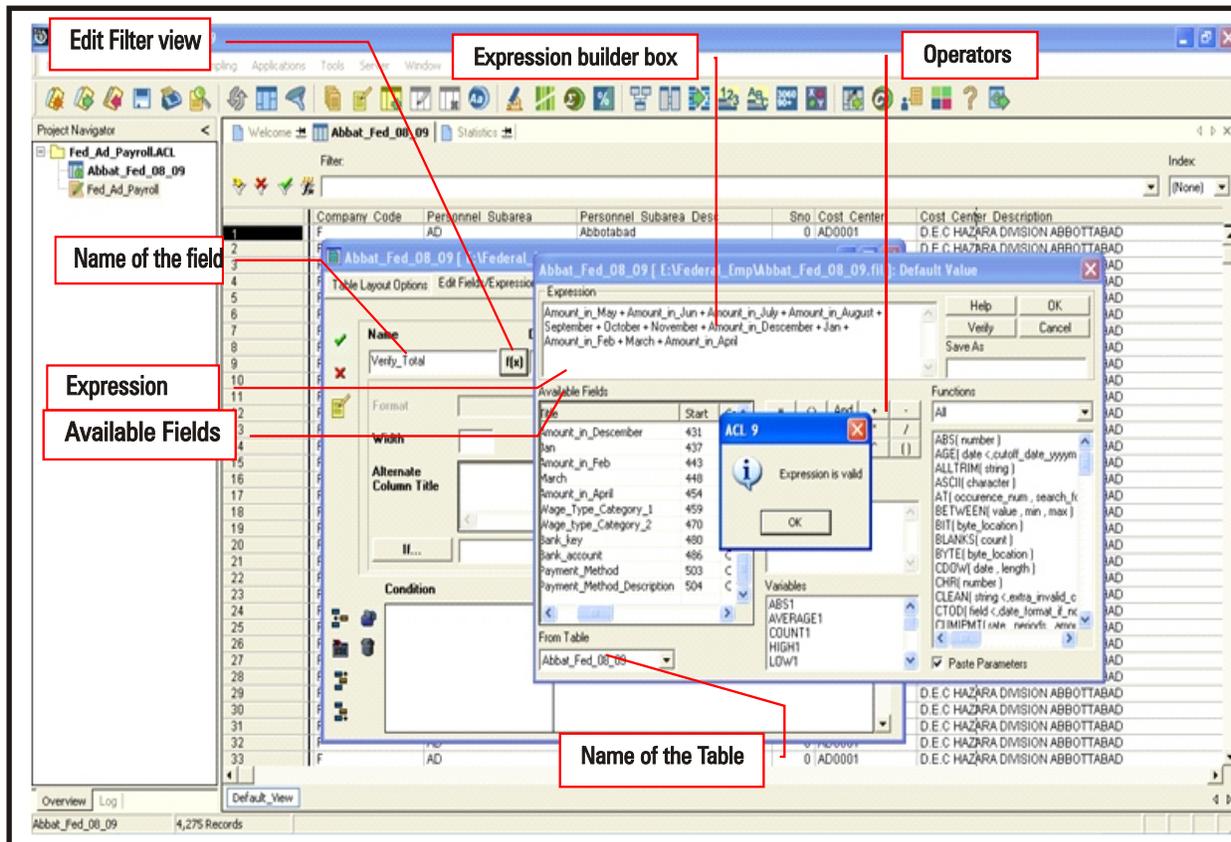
Screen shot 61 Add New Expression



Annotate

Select "Add a New Expression".

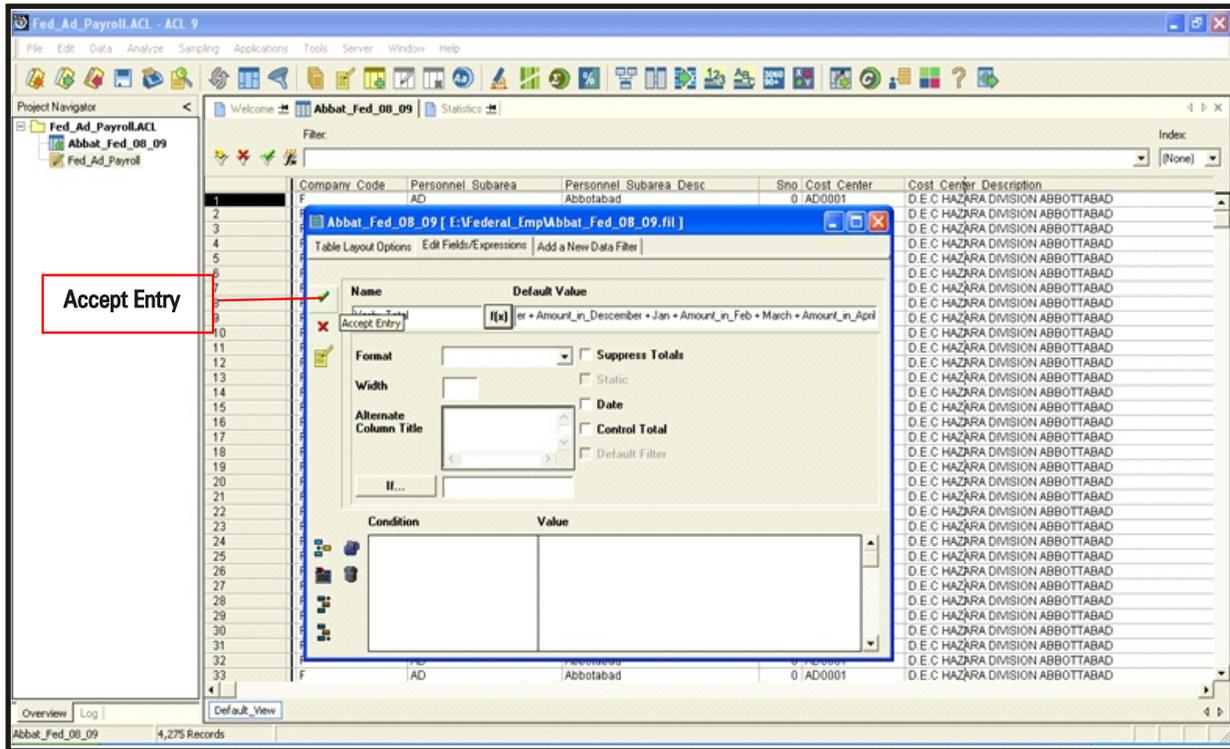
Screen shot 62 Expression



Annotate

1. Select the table from where the fields would be used to create the expression then "Name" the Field Name like "Verify_Total" and now enter the expression in "f(x)" button.
2. An "expression" dialog box appears. Write down the expression.
3. Test the validity of the expression, this is important as it will highlight any technical errors made while creating the expression which may involve an invalid data type used for a particular field. It is Recommended that data types of fields in a selected table are checked to ensure that they are correct.
4. Click on "OK" to continue.

Screen shot 63 Accept Entry

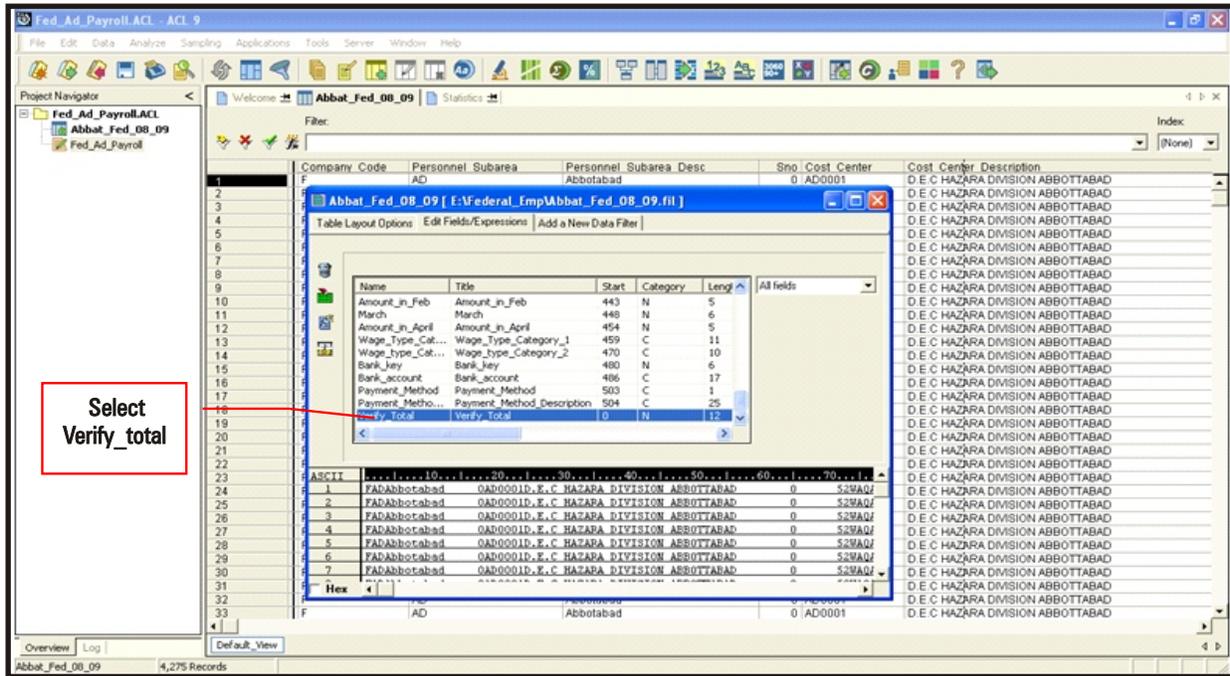


Accept Entry

Annotate

Now select the "accept entry" button (✓).

Screen shot 64 Verify Total



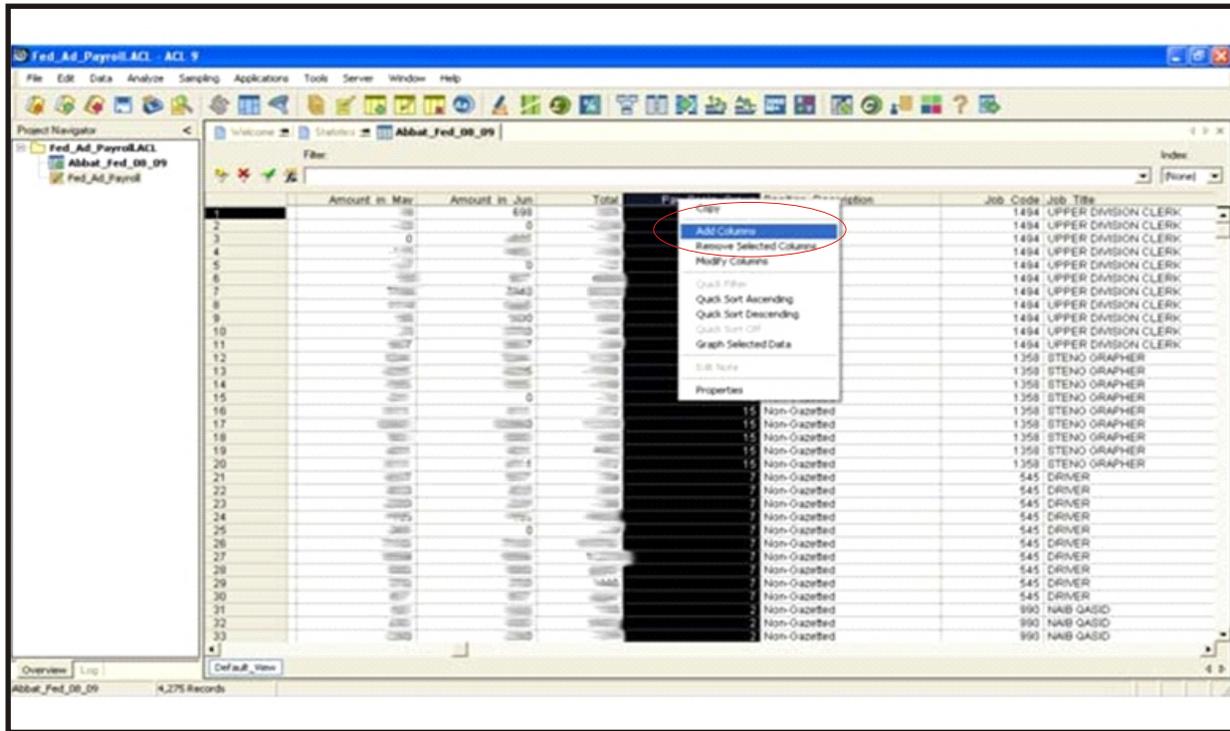
Annotate

Now check where computed field with the name "Verify_Total" is created. It is always at the end of the fields present in table layout.

Note:

The new column will not be displayed and it will need to be added to the existing columns as indicated by the following screen shots.

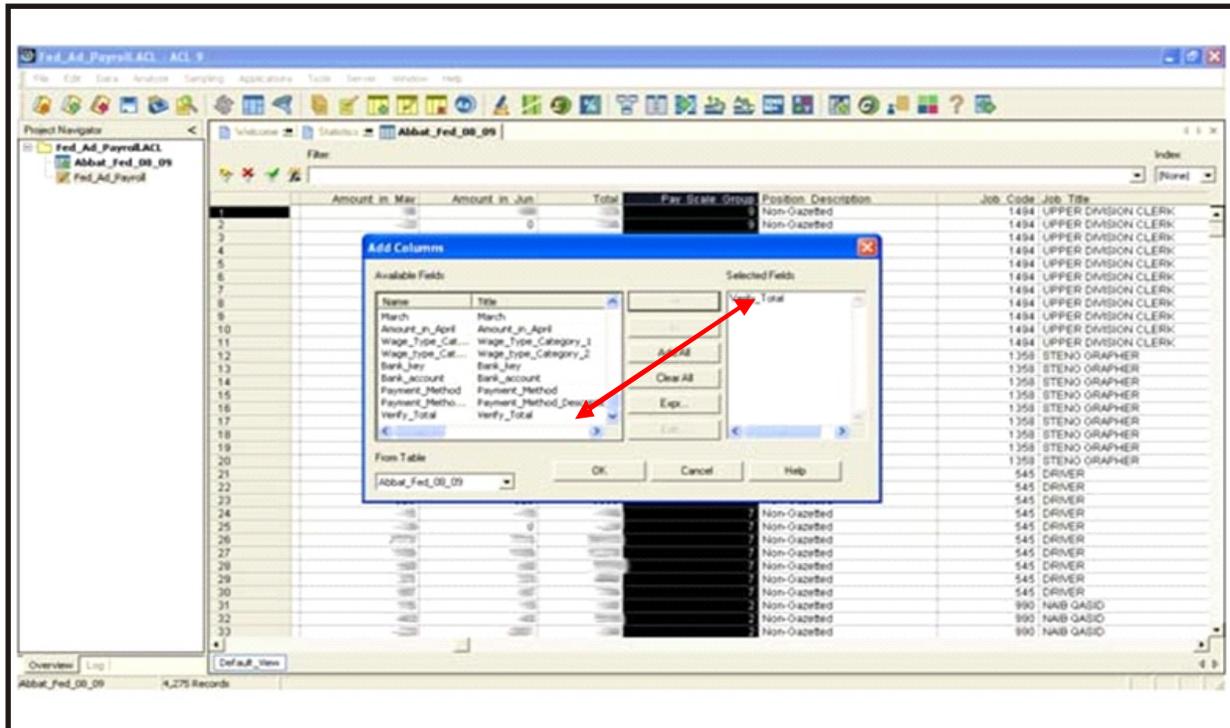
Screen shot 65 Add Columns



Annotate

Right click on the "column" and select "Add Column" from the list.

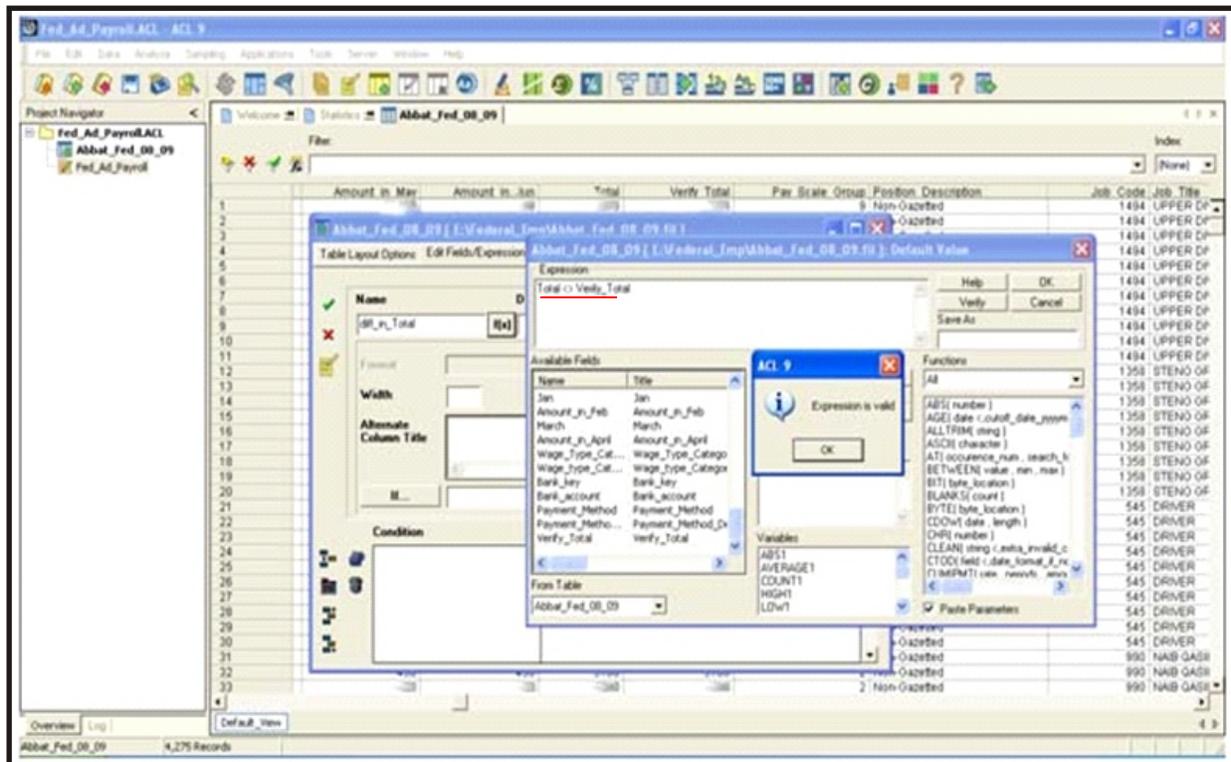
Screen shot 66 Add Columns



Annotate

1. Select the computed field which you created i.e. "Verify_Total"
2. Click on "OK"
3. The "total_verify" column added near to "Total" Field.

Screen shot 67 Expression

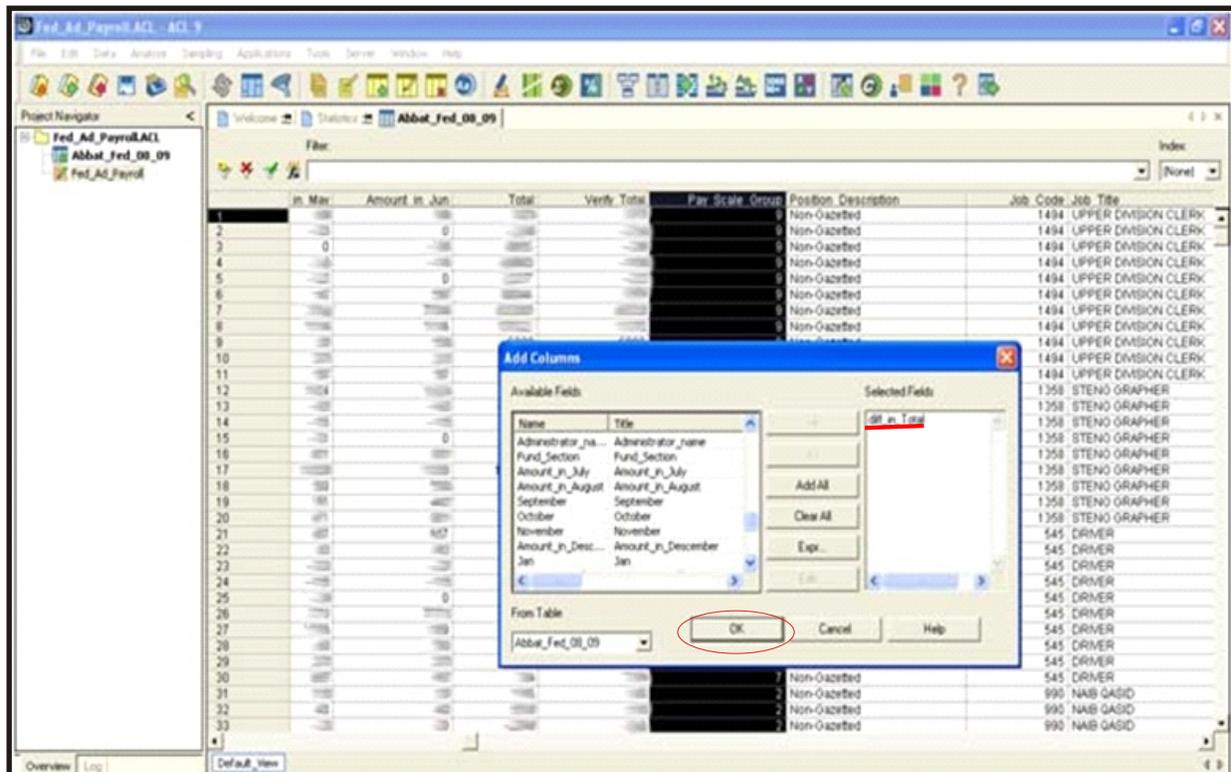


Annotate

First check if totals of the fields match. In either case add another expression to check the difference between the two fields.

1. Select Edit → Table Layout.
2. Select "Add a New Expression" button.
3. Name the Field Name like "diff_in_total" and now enter the expression in "f(x)" button.
4. An expression dialog box appears. Write down the expression in it "Total <=> Verify_Total".
5. Select "Verify" button
6. Click on "OK".

Screen shot 68 Add Columns: Select Fields



Annotate

1. Similarly add computed field which you created i.e. "diff_in_Total"
2. Click on "OK"
3. The "diff_in_Total" column is included near to "Total" Field.

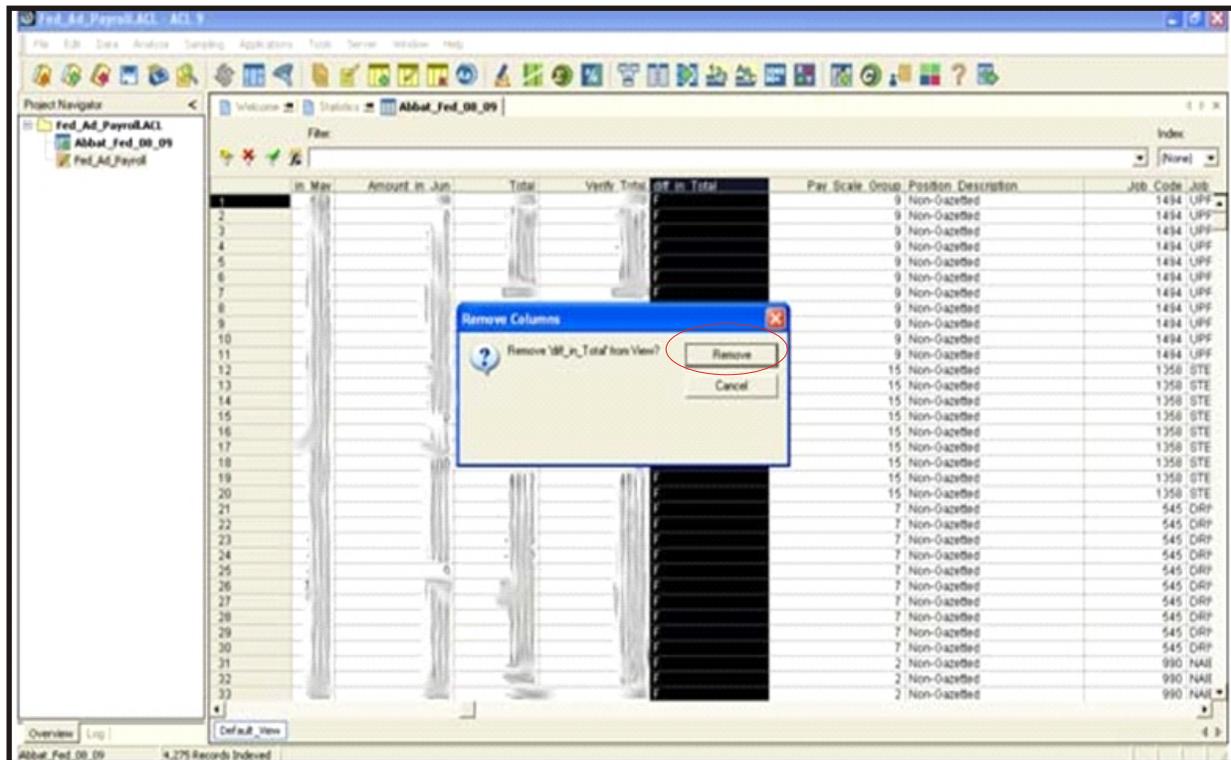
Screen shot 69 Check

	In May	Amount in Jun	Total	Verify Total	diff in Total	Par Scale Group	Position Description	Job Code	Job
1					F	9	Non-Gazetted	1434	UPF
2					F	9	Non-Gazetted	1434	UPF
3					F	9	Non-Gazetted	1434	UPF
4					F	9	Non-Gazetted	1434	UPF
5					F	9	Non-Gazetted	1434	UPF
6					F	9	Non-Gazetted	1434	UPF
7					F	9	Non-Gazetted	1434	UPF
8					F	9	Non-Gazetted	1434	UPF
9					F	9	Non-Gazetted	1434	UPF
10					F	9	Non-Gazetted	1434	UPF
11					F	9	Non-Gazetted	1434	UPF
12					F	15	Non-Gazetted	1358	STE
13					F	15	Non-Gazetted	1358	STE
14					F	15	Non-Gazetted	1358	STE
15					F	15	Non-Gazetted	1358	STE
16					F	15	Non-Gazetted	1358	STE
17					F	15	Non-Gazetted	1358	STE
18					F	15	Non-Gazetted	1358	STE
19					F	15	Non-Gazetted	1358	STE
20					F	15	Non-Gazetted	1358	STE
21					F	7	Non-Gazetted	545	DRP
22					F	7	Non-Gazetted	545	DRP
23					F	7	Non-Gazetted	545	DRP
24					F	7	Non-Gazetted	545	DRP
25					F	7	Non-Gazetted	545	DRP
26					F	7	Non-Gazetted	545	DRP
27					F	7	Non-Gazetted	545	DRP
28					F	7	Non-Gazetted	545	DRP
29					F	7	Non-Gazetted	545	DRP
30					F	7	Non-Gazetted	545	DRP
31					F	2	Non-Gazetted	990	NAH
32					F	2	Non-Gazetted	990	NAH
33					F	2	Non-Gazetted	990	NAH

Annotate

As per our expression "F" shows in diff_in_Total field that the difference between Total and Verify_Total is zero. "F" or "T" represents the Logical Expression. If there is "T" in the table then it means that data is not calculated by the system. You may filter to see if there are records with the expression "T".

Screen shot 70 Remove Unwanted Column



Annotate

1. The user can remove/hide the fields from the table.
2. Select the column you want to remove, right click and click "remove columns".
3. Select "Remove" diff_in_Total.

When the data is imported, invalid or broken records may not be properly imported into ACL, or for any reason there is a risk that some data may not have been correctly imported. To ensure that complete records have been imported with complete details as per the source file, you may perform bytes calculations which are explained as follows;

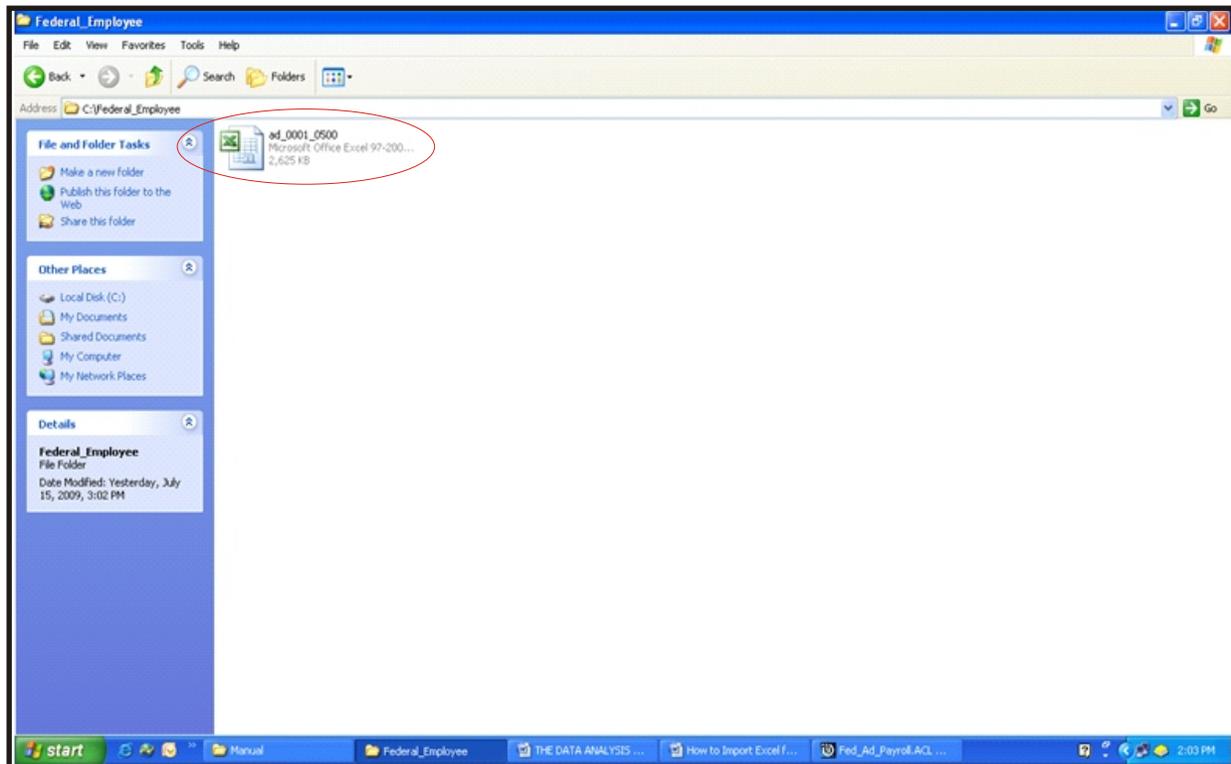
Screen shot 71 Bytes Transferred

The screenshot displays the SAP HR Information System interface. At the bottom of the window, a status bar shows a green checkmark icon followed by the text "2687098 Bytes transferred". The main area of the screen contains a table with the following columns: Company Code, Personnel Subarea, Personnel Subarea Desc, S Bno, Cost Center, Cost Center Description, UNZ, Pers no, Name of Employee, Wage type, Wage Type Description, Amount in Mar, and Amount in Jun. The table lists various employees from the Abbotabad district, including details on their cost centers and wage types such as Basic Pay, House Rent Allowance, and Medical Allowance.

Annotate

1. If you remember when we transferred data from SAP it indicated the number of bytes that were transferred to local file. The above screen shot shows "2687098 bytes" transferred for Federal Employees of district.
2. Check whether the data has been transferred to the hard drive, please do the following steps
3. Go to the file location "Federal Employee"

Screen shot 72 Checking File in "My Computer"



Annotate

1. The MS-Excel File "ad_0001_0500" shows "2625KB" transferred in Federal Employee Folder kept in "C Drive".
2. Now check whether the system transferred all bytes as mentioned in your SAP Screen shot which is "2680798 bytes" and equals to the Ms-Excel file "2625KB or 2.56 MB".
3. Here we follow simple calculation. As we know that

8 bit = 1 bytes
 1024bytes= 1 Kilo bytes
 1024KB= 1 Megabytes
 1024MB= 1 Gigabytes.

Suppose to calculate the SAP/R3 Screen shot at page 78 which is "2680798 bytes" and wants to know the "2625 KB or 2.56 MB" of Ms-Excel file name "AD_0001_0500.XLS".

$$= \frac{2687098 \text{ bytes}}{1024 \text{ bytes}} = 2624.1191 \text{ KB} \quad \text{Or}$$

Round the figure to 2625 KB.

But now if user wants to know the "2.56 MB" of Ms-Excel file name "AD_0001_0500.XLS" then what is the procedure for calculating the figures.

$$= \frac{2624.1191 \text{ KB}}{1024 \text{ KB}} = 2.56 \text{ MB}$$

DATA ANALYSIS

Data Analysis is the most important part of Data Analysis Methodology. In this part, user has achieved the objectives which were defined in planning phase of the Data Analysis Methodology.

Screen shot 73 Classify

Mar	Amount in Jun	Total	Vehi Total	Pay Scale Group	Position Description	Job Code Job Title
13				9 Non-Oaerted		1404 UPPER DIVISION CLERK
14				9 Non-Oaerted		1404 UPPER DIVISION CLERK
15				9 Non-Oaerted		1404 UPPER DIVISION CLERK
16				9 Non-Oaerted		1404 UPPER DIVISION CLERK
17				9 Non-Oaerted		1404 UPPER DIVISION CLERK
18				9 Non-Oaerted		1404 UPPER DIVISION CLERK
19				9 Non-Oaerted		1404 UPPER DIVISION CLERK
20				15 Non-Oaerted		1358 STENO GRAPHER
21				15 Non-Oaerted		1358 STENO GRAPHER
22				15 Non-Oaerted		1358 STENO GRAPHER
23				15 Non-Oaerted		1358 STENO GRAPHER
24				15 Non-Oaerted		1358 STENO GRAPHER
25				15 Non-Oaerted		1358 STENO GRAPHER
26				15 Non-Oaerted		1358 STENO GRAPHER
27				15 Non-Oaerted		1358 STENO GRAPHER
28				7 Non-Oaerted		545 DRIVER
29				7 Non-Oaerted		545 DRIVER
30				7 Non-Oaerted		545 DRIVER
31				7 Non-Oaerted		545 DRIVER
32				7 Non-Oaerted		545 DRIVER
33				7 Non-Oaerted		545 DRIVER
				2 Non-Oaerted		990 HAB GASID
				2 Non-Oaerted		990 HAB GASID
				2 Non-Oaerted		990 HAB GASID

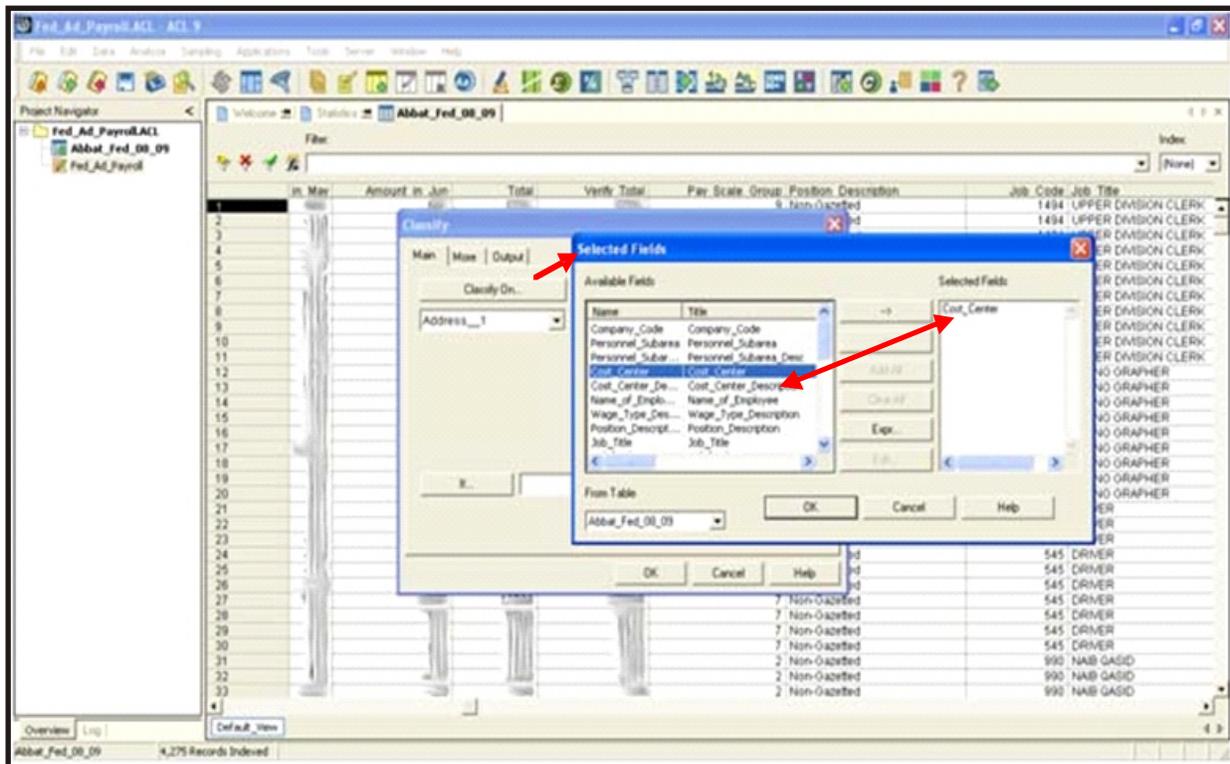
Analysis

Consider the situation where you want to calculate or see those cost Centers which have high percentage of Expenditure.

Annotate

Select Analyze → Classify

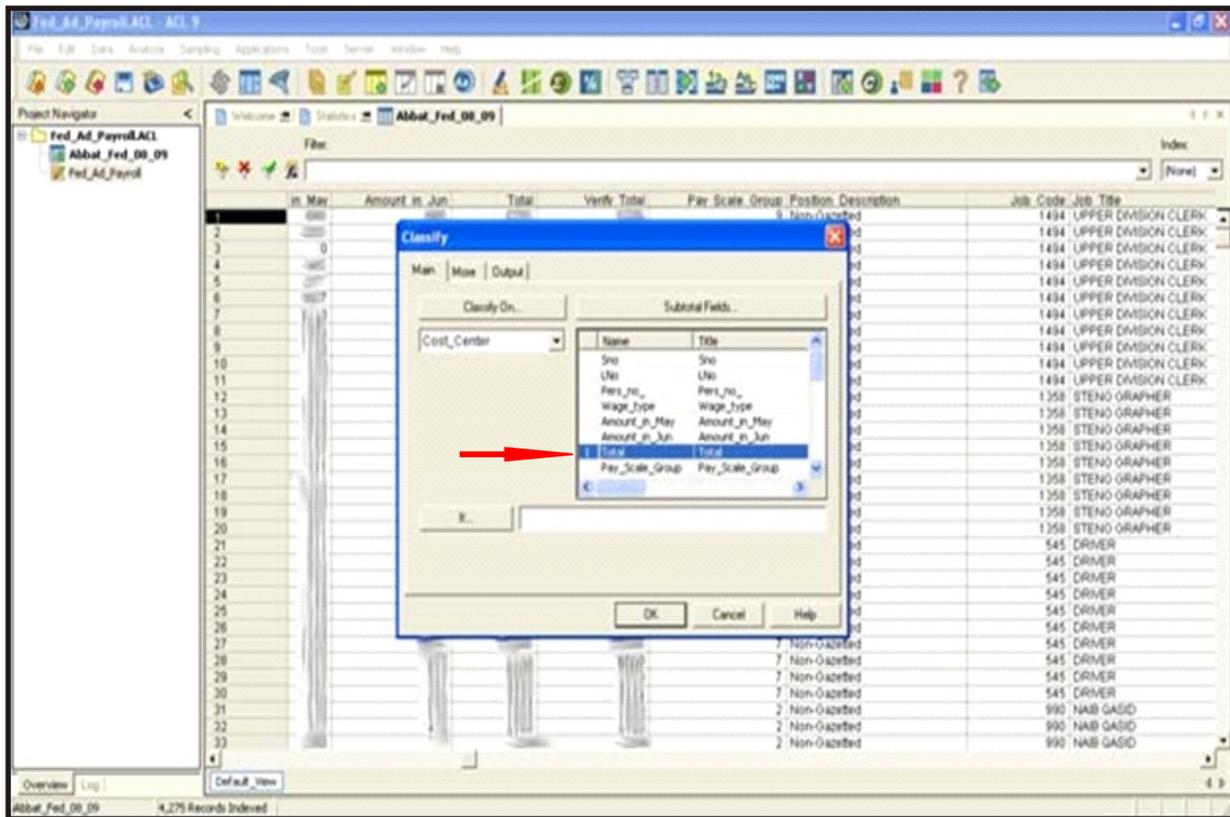
Screen shot 74 Classify Selected Fields



Annotate

1. "Classify" dialog box is opened
2. Click on "Classify On"
3. Dialog box of "Selected Field" is opened
4. Select the "Cost Center Field" on which analysis is to be made.

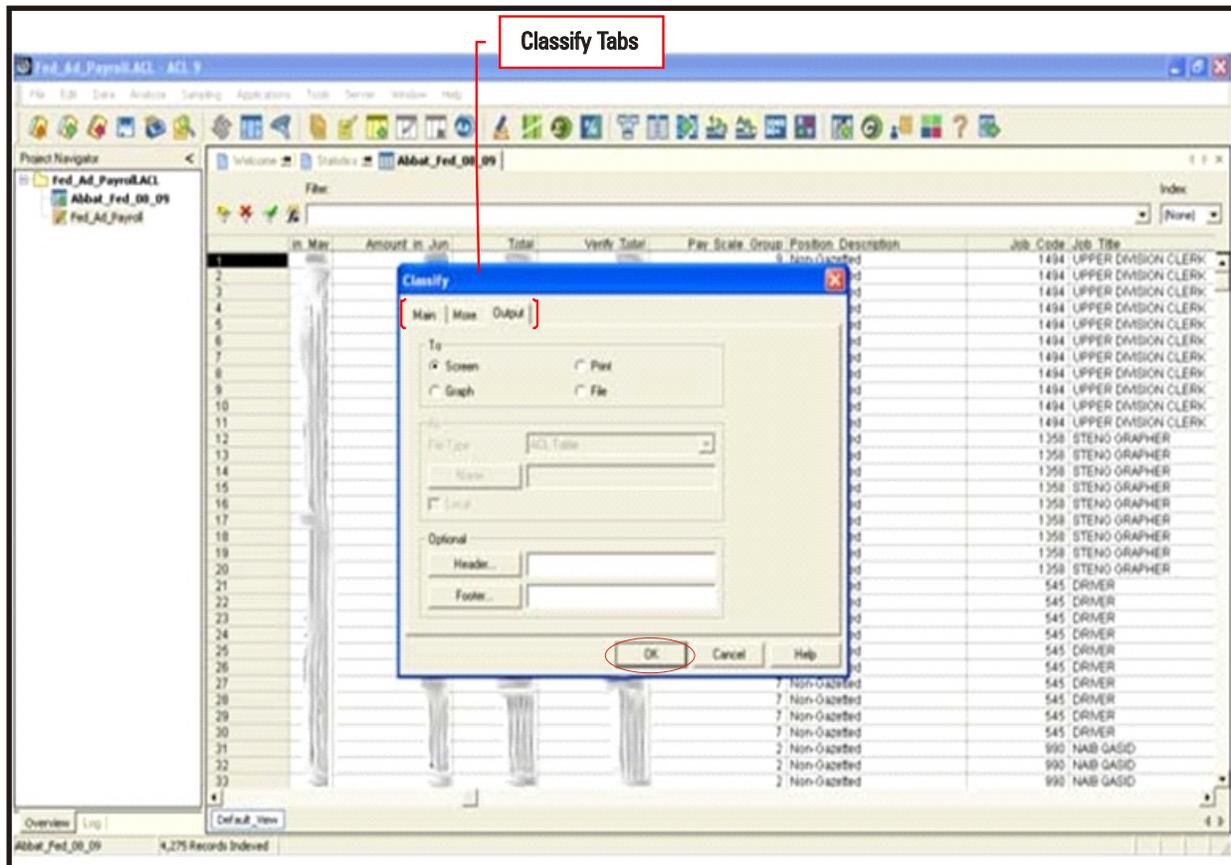
Screen shot 75 Classify Dialog Box



Annotate

1. Select "Total Field" by clicking "Subtotal Field" button.
2. Click on "OK".

Screen shot 76 Classify Tabs



Annotate

1. Classify dialog box has three tabs
 - a. Main
 - b. More
 - c. Output
2. Click Output tab and user can see the table in four ways
 - a. Screen
 - b. Print
 - c. Graph
 - D. File
3. First choose the "Screen" Radio button.
4. Click on "OK".

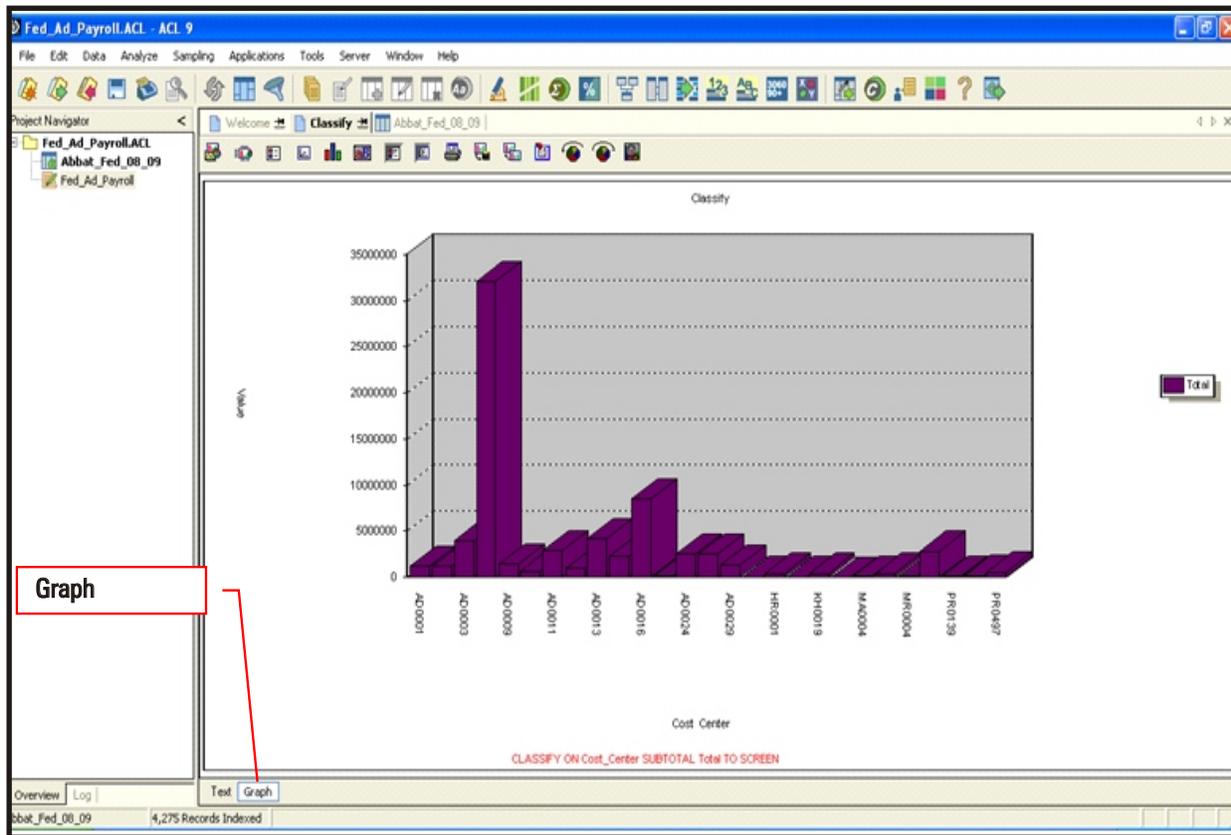
Screen shot 77 Classify Output

Cost_Center	Count	Percent of Count	Percent of Field	Total
AD0001	90	2.15%	1.67%	
AD0002	95	2.22%	1.7%	
AD0003	245	5.73%	5.62%	
AD0005	1,635	39.25%	45%	
AD0009	94	2.2%	2%	
AD0010	47	1.1%	0.97%	
AD0011	136	3.18%	4.06%	
AD0012	90	2.11%	1.36%	
AD0013	334	7.81%	5.92%	
AD0014	194	4.54%	3.21%	
AD0016	529	12.37%	11.86%	
AD0021	13	0.3%	0.23%	
AD0023	187	4.37%	3.52%	
AD0025	189	4.42%	3.81%	
AD0029	76	1.78%	1.84%	
AD0033	4	0.09%	0.07%	
HE0001	16	0.37%	0.55%	
HE0002	7	0.16%	0.09%	
HE0012	29	0.68%	0.81%	
MA0001	7	0.16%	0.03%	
MA0003	11	0.26%	0.19%	
MA0005	19	0.44%	0.56%	

Annotate

Screen shows the results of the “Classify command”

Screen shot 78 Classify Graph



Annotate

1. User can also view the results in as a graphical presentation.
2. Select the Graph by clicking the “Graph” option shown in the “Default View screen”.

TERMINOLOGY OF ACL

EXPRESSIONS

Expressions are set of operators and values used to perform calculations, specify logical conditions, or create values that do not exist directly in the data. Expressions are lines of code that return values. Expressions are divided into Filters and Computed Field.

FILTERS

Filters are further subdivided into Global Filter view and Command Filters.

COMPUTED FIELD

Computed Field is subdivided into Unconditional and Conditional Computed Field.

There are three types of Filters such as Fields, Operators and Values.

FIELDS

Use fields from your table to build filters. The fields are listed in, and selected from, the Expression Builder's Available Fields list.

OPERATORS

Operators are used to combine simple expressions into more complex expression. ACL uses the following operators:

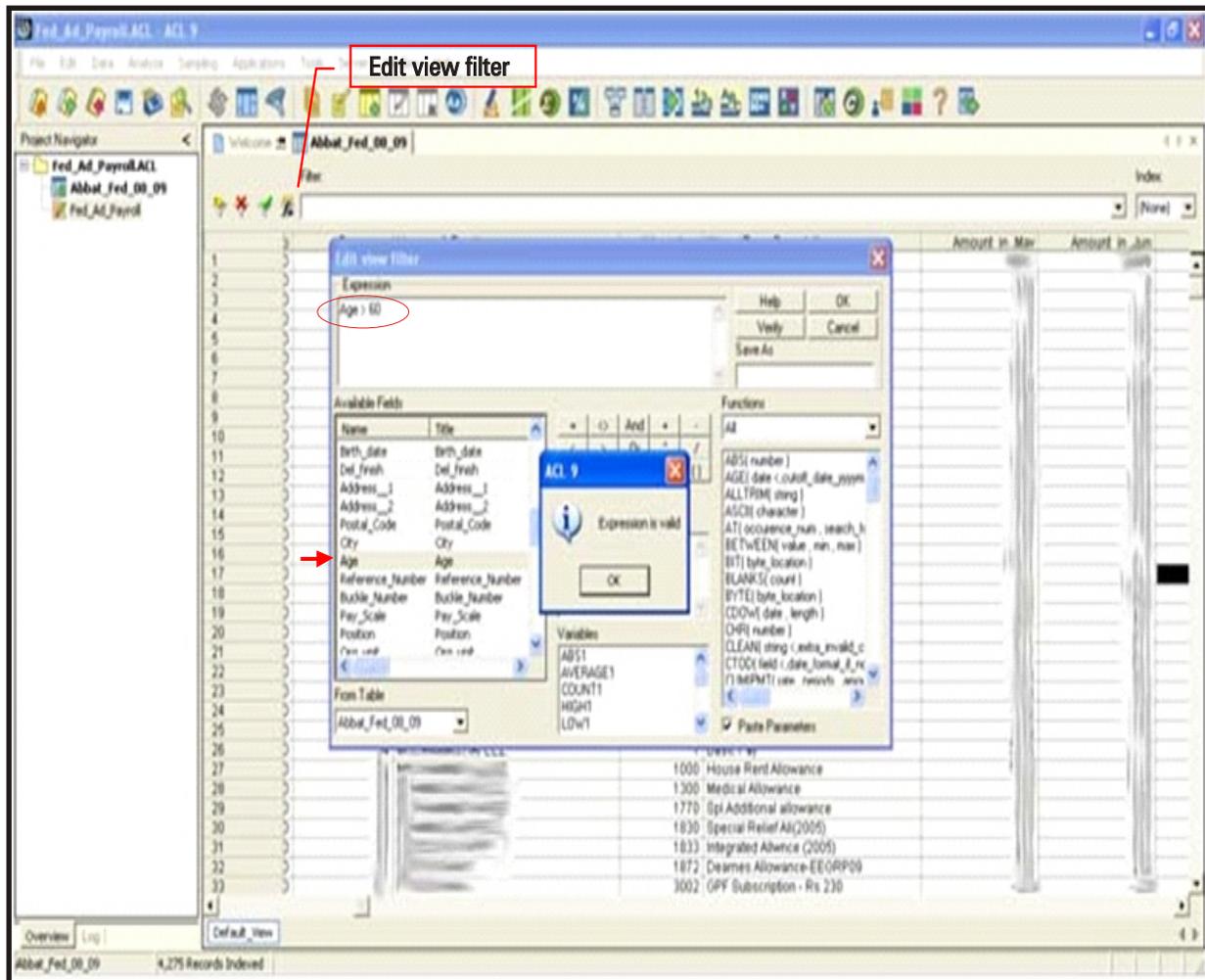
Operator	Description
=	Equal to
>	Greater Than
<	Less Than
>=	Greater Than equal to
<=	Less than equal to
<>	Not Equal to
^	Exponent

VALUES:

Values contain the data you want to filter. Values can be used by following standard rules of ACL.

Data Type	Delimiter	Example
Character	Double Quotes	"KHURRAM KHAN"
Numeric	No punctuation	51000.00
Date	Reverse Quote	`20090715`

Screen shot 79 Edit View Filter

**RULE**

Display those Government Officials who have attained the age of superannuation i.e. 60 years but are still in Government job. (Annexure C (2))

Annotate

1. Click on "Edit view filter f(x)".
2. Enter the "Expression" like this:
Age > 60
3. This will produce those records where the employee's age is greater than 60 years.

Screen shot 80 Output: Superannuation Age

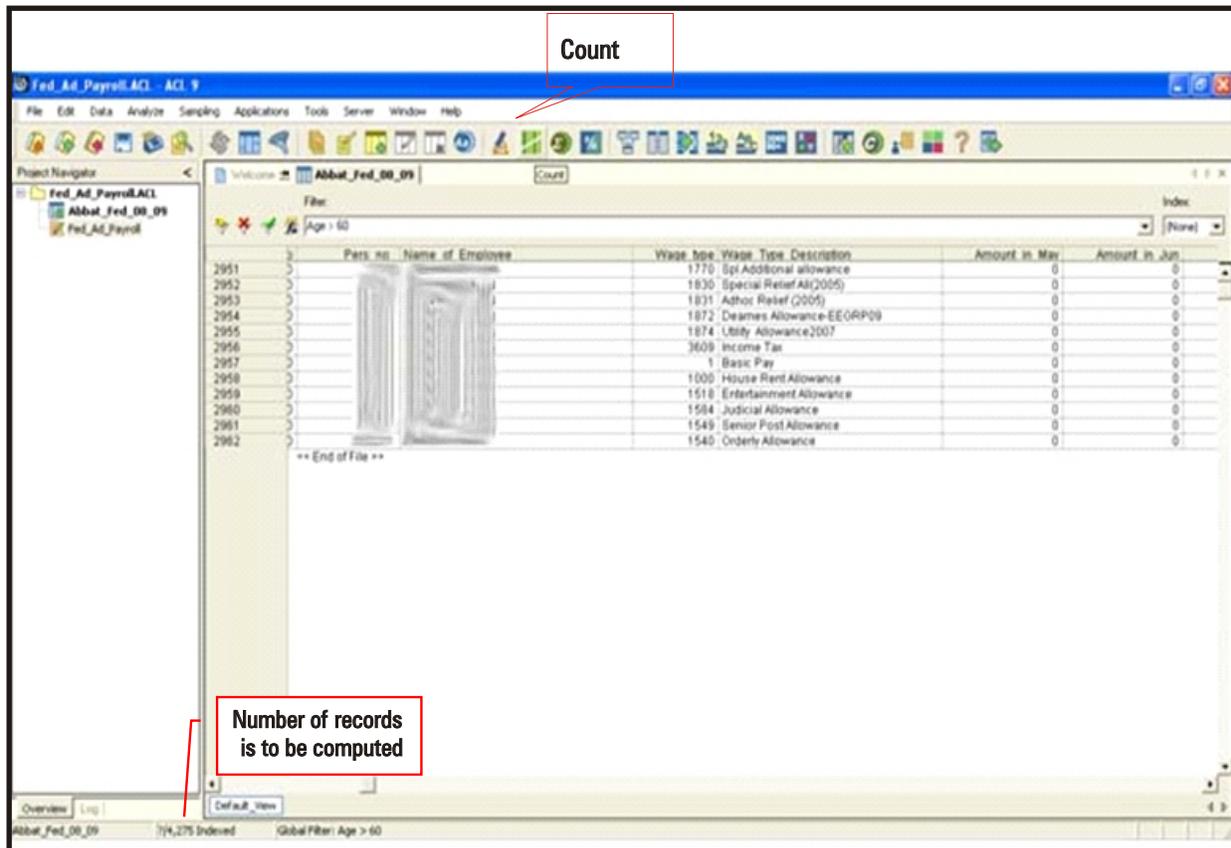
The screenshot shows a software window titled 'Fed_Ad_Payroll.ACI - ACI 9'. The main area displays a table with columns: Pers no, Name of Employee, Wage hpe, Year, Type, Description, Amount in May, and Amount in Jun. The table contains 12 rows of data, with the last row being '** End of File **'. A filter 'Age > 60' is applied to the data. The status bar at the bottom indicates 'Global Filter: Age > 60'.

Pers no	Name of Employee	Wage hpe	Year	Type	Description	Amount in May	Amount in Jun
2951		1770			Sp1 Additional allowance	0	0
2952		1830			Special Relief All(2005)	0	0
2953		1831			Adhoc Relief (2005)	0	0
2954		1872			Deames Allowance-EEORP09	0	0
2955		1874			Utility Allowance2007	0	0
2956		3609			Income Tax	0	0
2957		1			Basic Pay	0	0
2958		1000			House Rent Allowance	0	0
2959		1518			Entertainment Allowance	0	0
2960		1584			Judicial Allowance	0	0
2961		1549			Senior Post Allowance	0	0
2962		1540			Orderly Allowance	0	0
** End of File **							

Annotate

The above screen shows the number of employees whose age is greater than 60 years. In the status bar the filter applied is displayed however, the number of records shall be computed to see the number of instances.

Screen shot 81 Count



Annotate

There are two ways to check how many records are produced.

1. From menu
 - a. Select "Analyze"
 - b. Select "Count Records"
 - c. Select "Ok"

or

2. From toolbar
 - A. Press "Count" button

Screen shot 82 Number of records counted

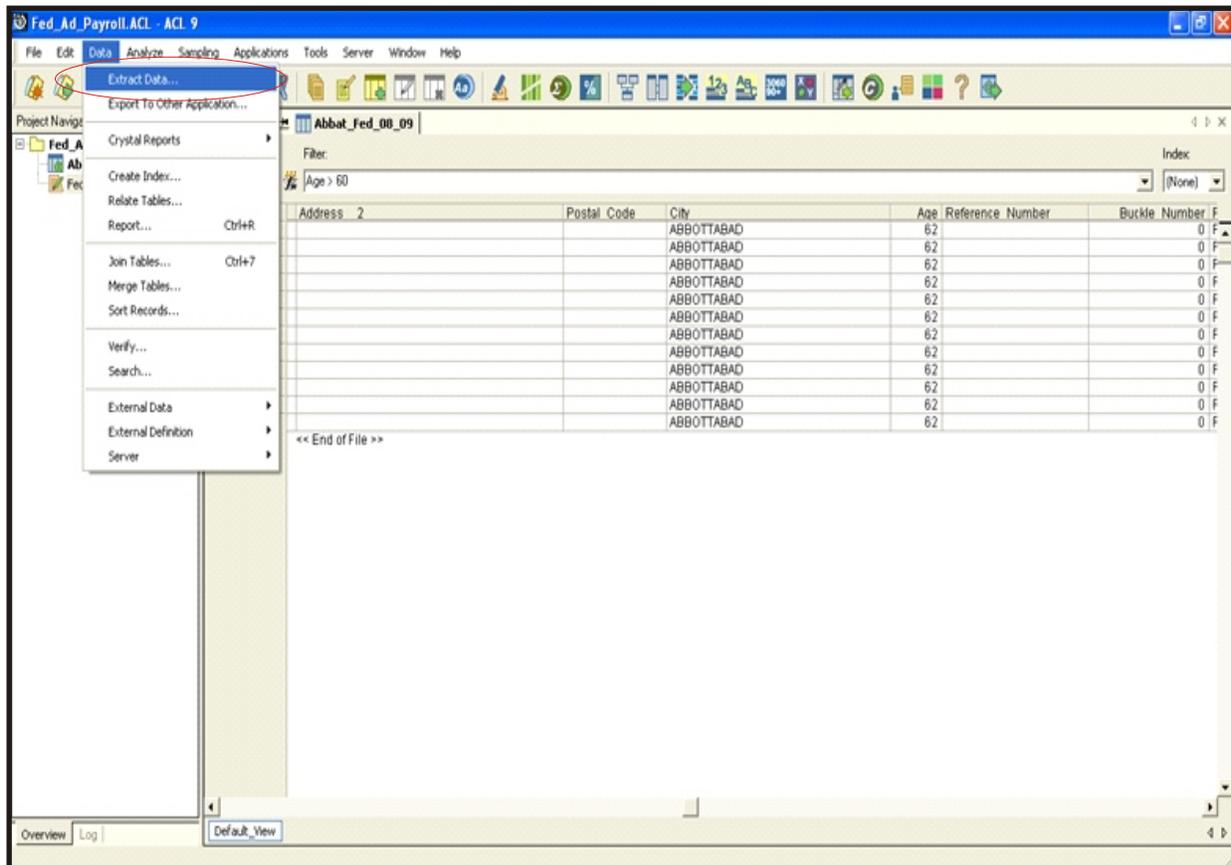
The screenshot shows a software window titled "Fed_Ad_Payroll.ACL - ACL 9". The main area displays a table with columns: Address_2, Postal Code, City, Age, Reference Number, and Buckle Number. The data is filtered by "Age > 60". The table contains 12 rows of data, all with "ABBOTTABAD" as the city and "62" as the age. The status bar at the bottom shows "Abbot_Fed_08_09" with a circled "12/4,275 Indexed" and "Global Filter: Age > 60".

	Address_2	Postal Code	City	Age	Reference Number	Buckle Number	F
2951			ABBOTTABAD	62			0 F
2952			ABBOTTABAD	62			0 F
2953			ABBOTTABAD	62			0 F
2954			ABBOTTABAD	62			0 F
2955			ABBOTTABAD	62			0 F
2956			ABBOTTABAD	62			0 F
2957			ABBOTTABAD	62			0 F
2958			ABBOTTABAD	62			0 F
2959			ABBOTTABAD	62			0 F
2960			ABBOTTABAD	62			0 F
2961			ABBOTTABAD	62			0 F
2962			ABBOTTABAD	62			0 F
<< End of File >>							

Annotate

The "status bar" shows the number of records which in this case are 12 records out of the total 4275, whose age is greater than 60 years.

Screen shot 83 Extract Data

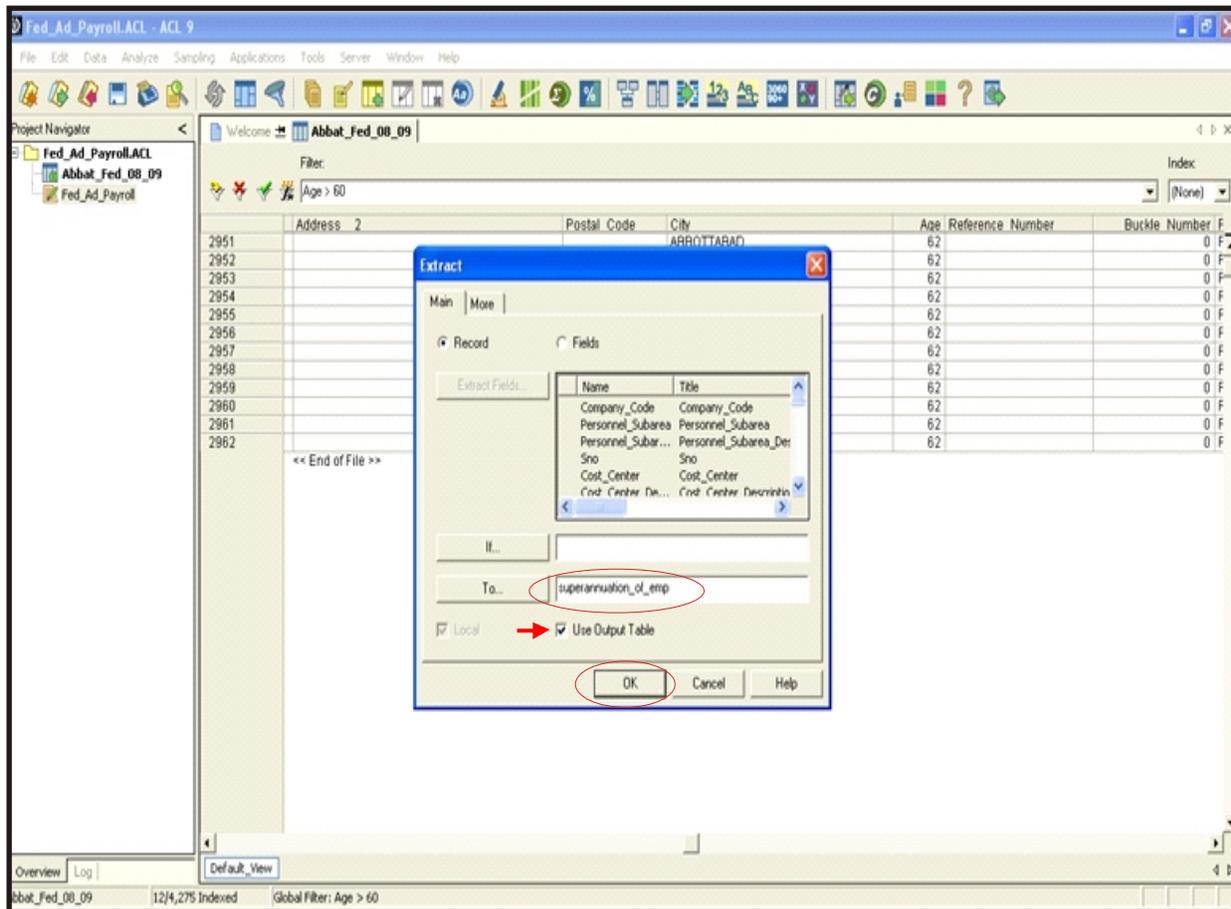


Annotate

1. Select "Data"
2. Click on "Extract Data"

If you want to save the 12 records from 4275 records, ACL gives us the facility to "extract the table" with a new name.

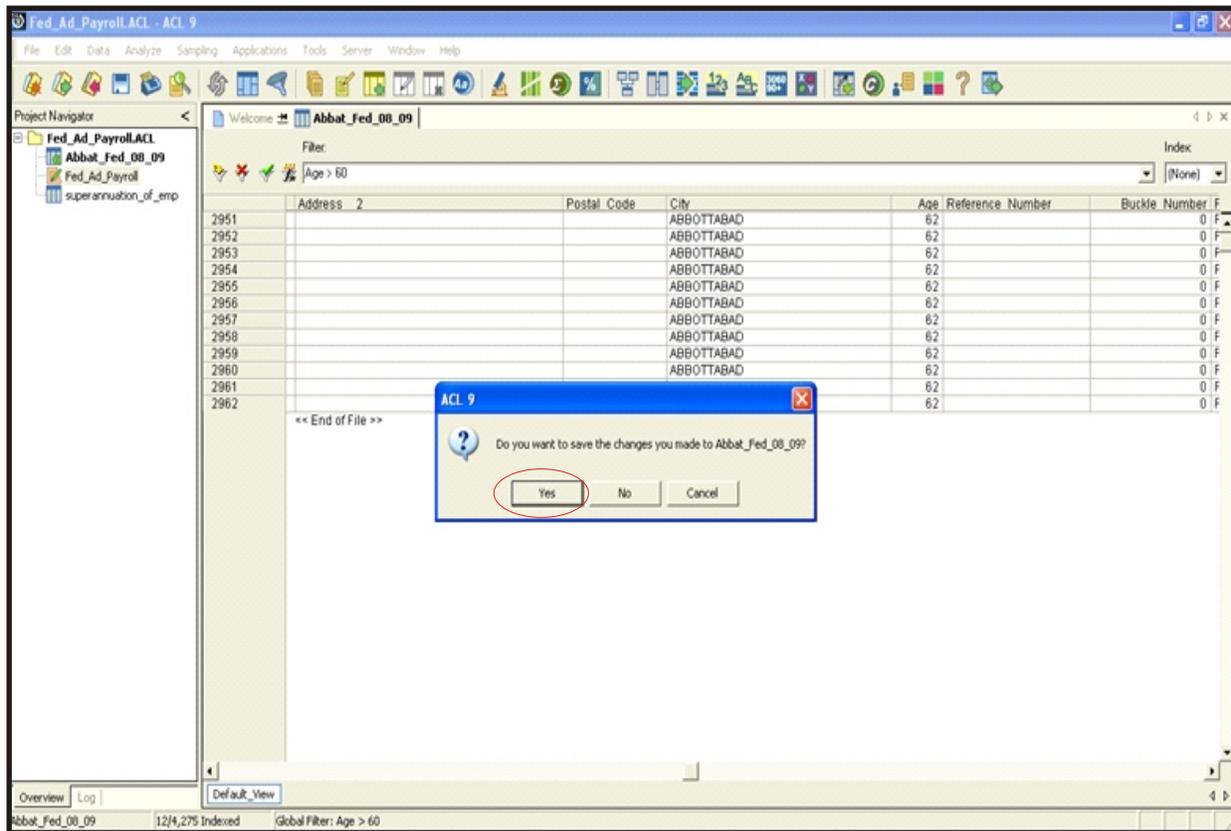
Screen shot 84 Extract Data: File Name



Annotate

1. "Extract" dialog box is opened
2. Enter the table name to: "superannuation_of_emp"
3. Select "use output table" if not already selected

Screen shot 85 Save Changes



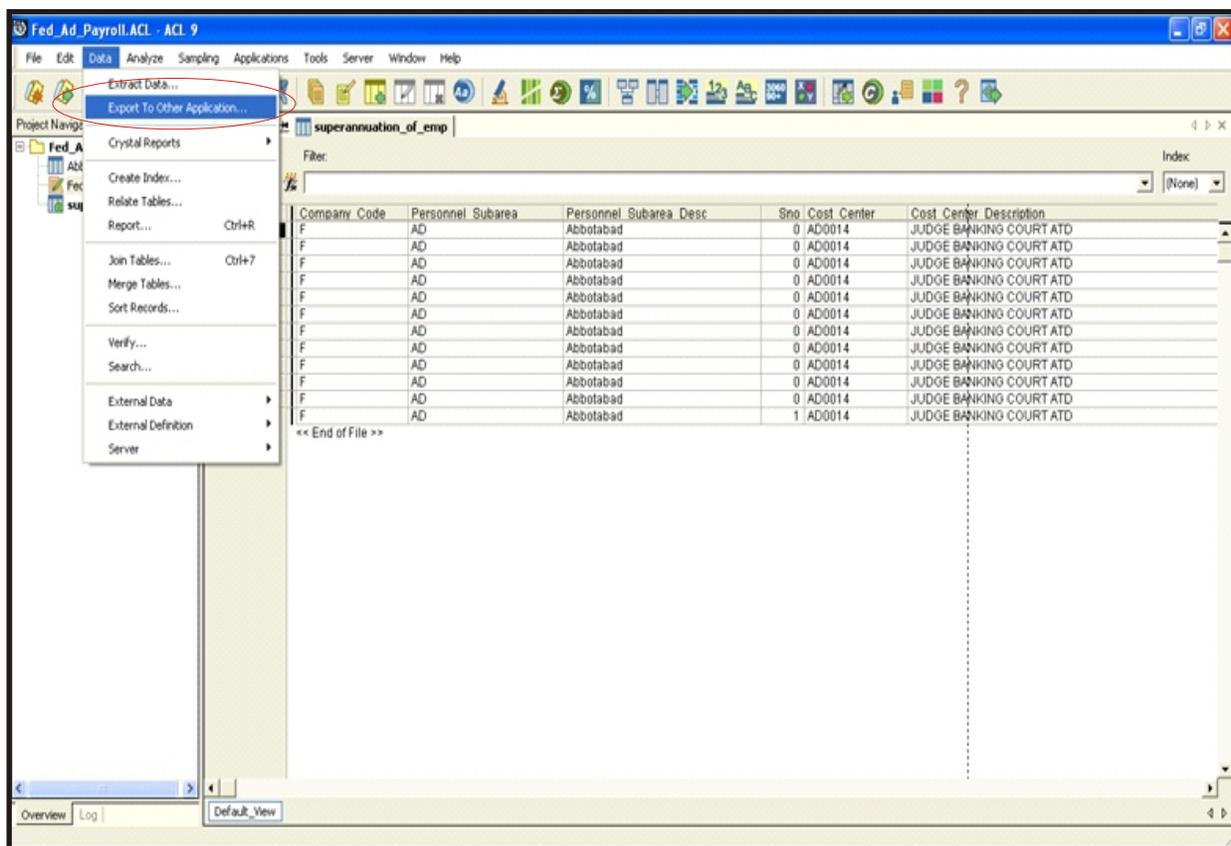
Annotate

Click on "Yes" to save changes.

EXPORTING DATA

At this stage you may export the data for further audit procedures or for inclusion in your audit documentation. In this case, the auditor performs further audit procedures to check the age of the employees that is greater than 60 years by checking the personal files or inquiries of the management. It is best to export the data in spreadsheet format which is used to open the file in MS Excel. The steps involved in exporting the data are explained below;

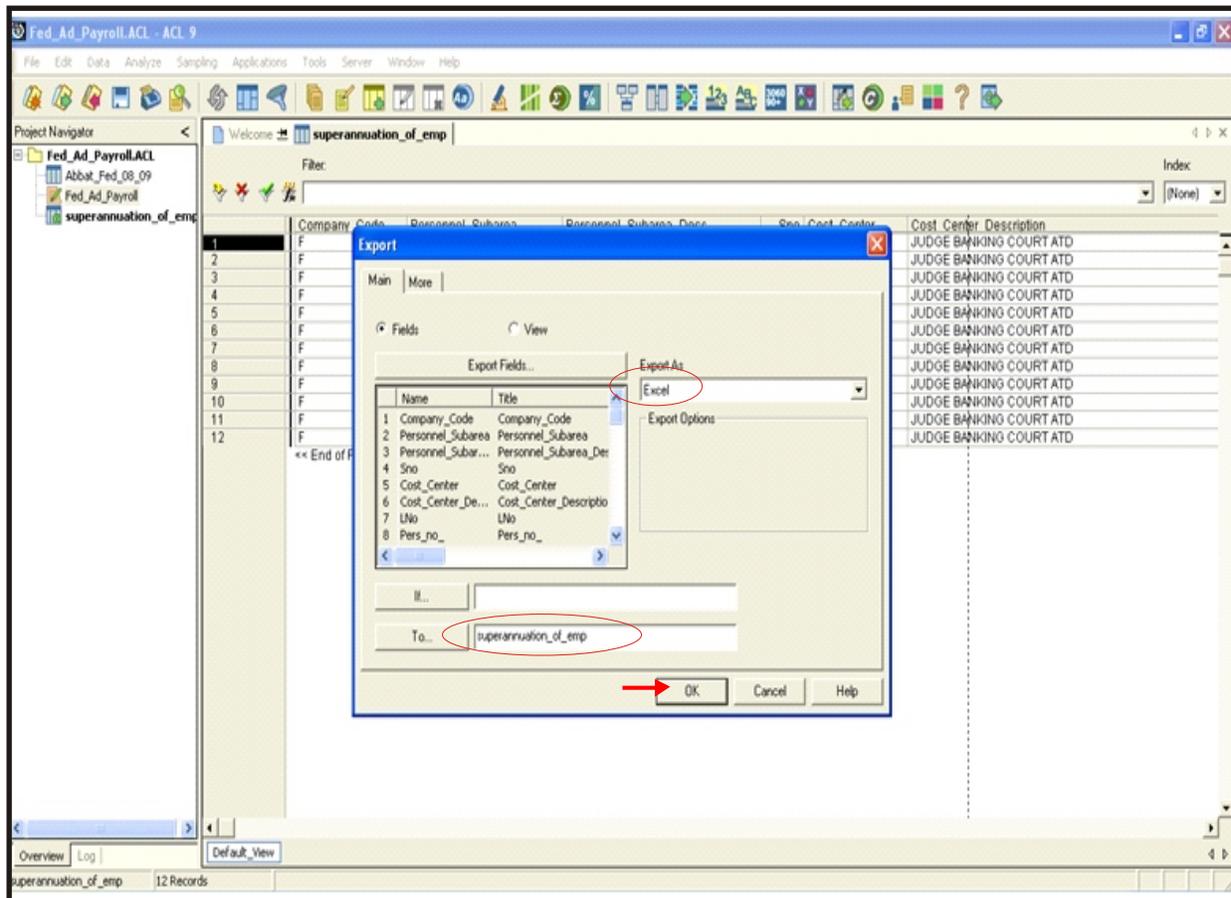
Screen shot 86 Export to other Application



Annotate

Select Data from menu bar and select "Export to Other Application"

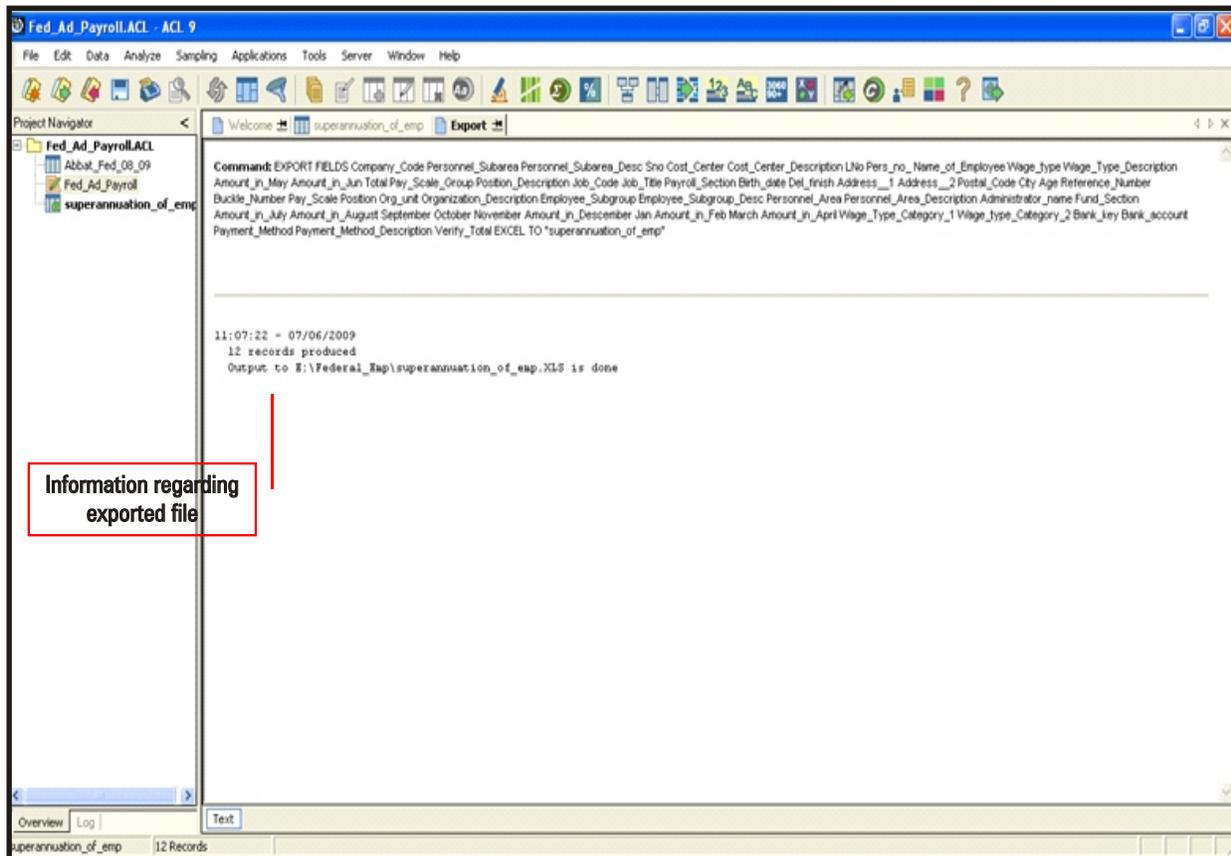
Screen shot 87 Export



Annotate

1. "Export" dialog box is opened.
2. In the "Main" tab; select "Excel" from "Export As" drop down menu
3. Select "Field" Radio Button
4. Enter the exported data file name: "Superannuation_of_Emp".
5. Click on "Ok" to continue.

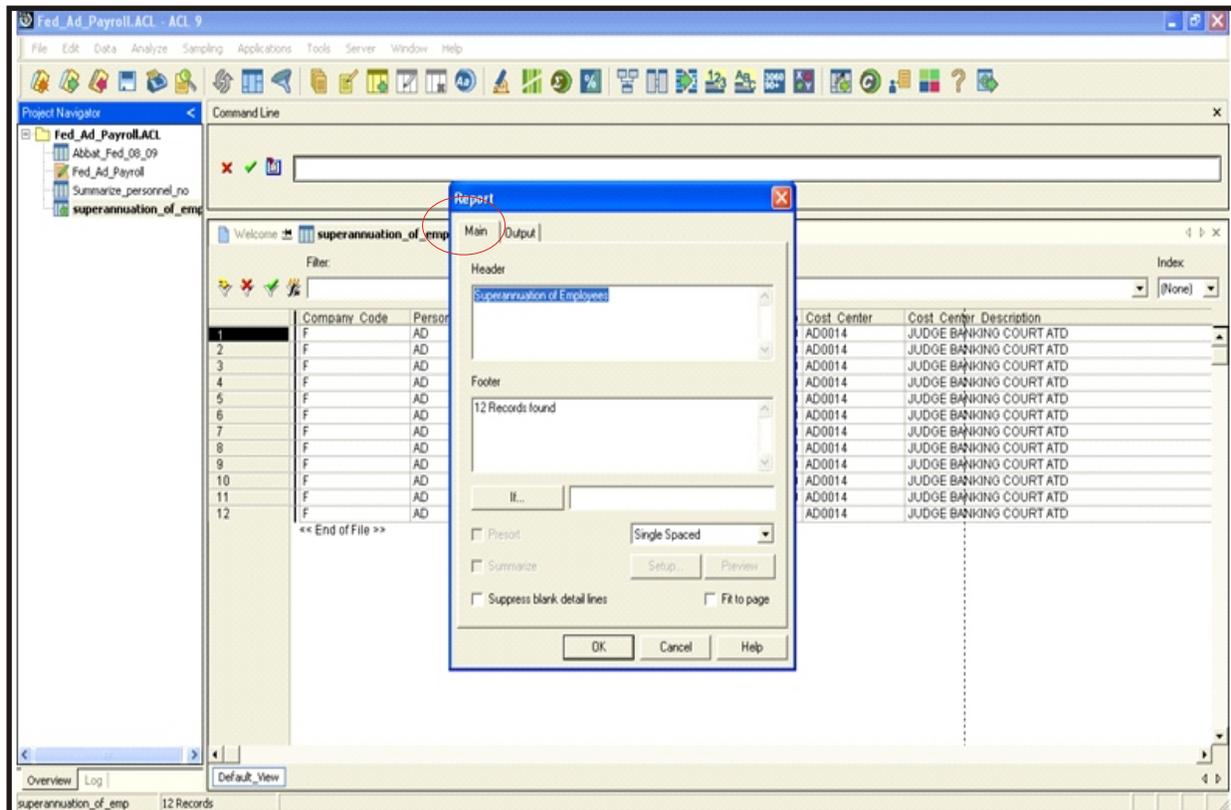
Screen shot 88 Output: Records Produced



Annotate

The above screen shown the number of records produced and the path of the exported file along with the date and time.

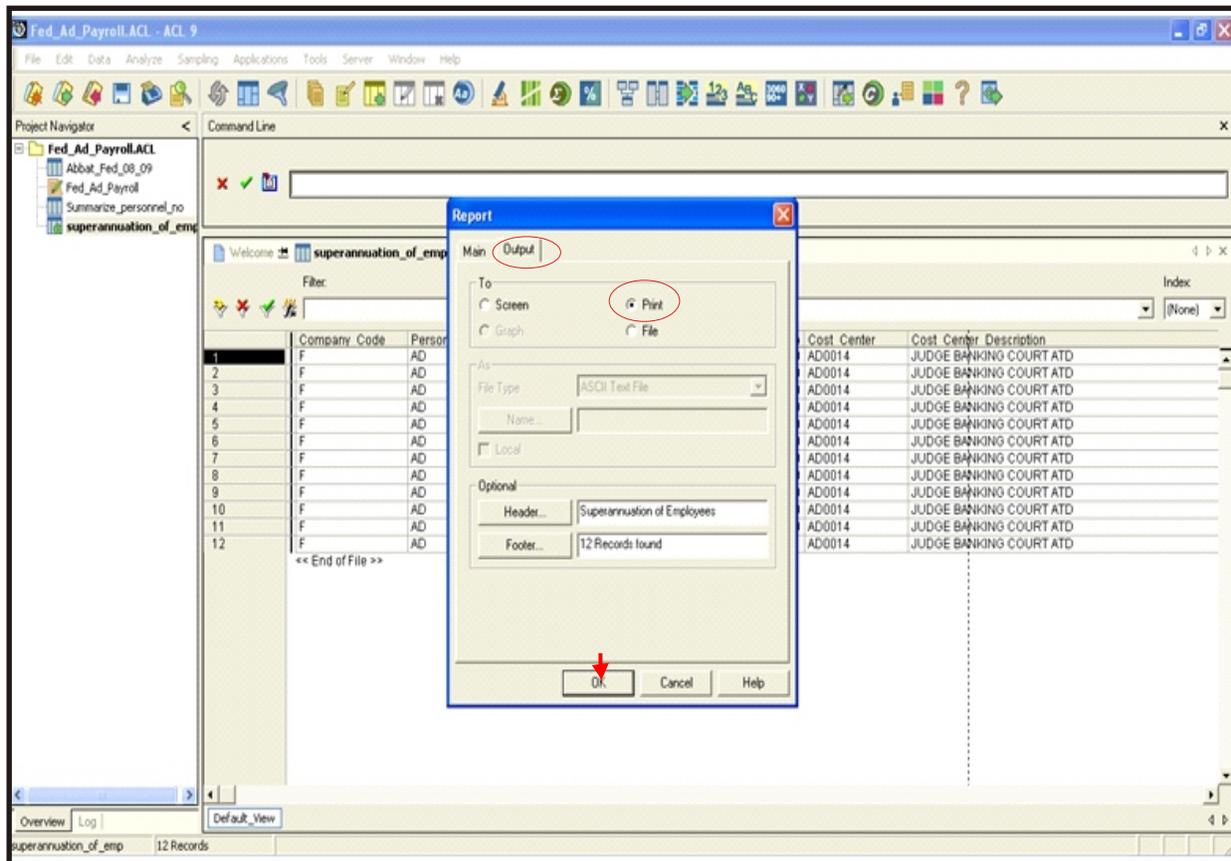
Screen shot 90 Report Dialog Box



Annotate

1. "Print" window is opened as shown above.
2. Input optional Header and Footer

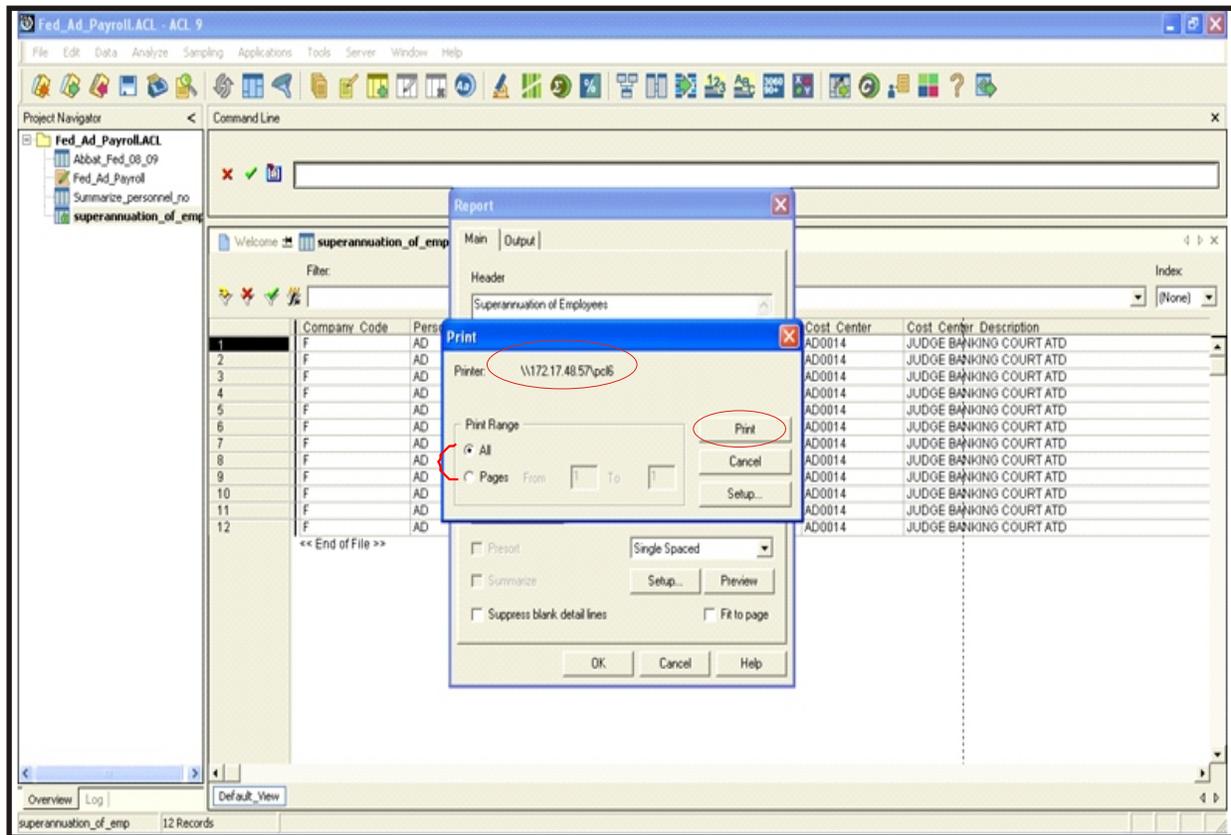
Screen shot 91 Report: Output



Annotate

1. Select the "Output" tab.
2. Here you see four options out of which three are selectable. Select "Screen" to see the report on your monitor or you may select "Print" if you want the hard copy or select "File" if you want your report to be Saved to a file for future printing or use.
3. You may also input report Headers and Footers which is optional.
4. Press "Ok" to continue.

Screen shot 92 Print



Annotate

1. In the "Print" window; select the Print Range (all pages or range may also be provided).
2. Check the printer name/address. You may change/check printer settings by clicking on the "Setup" Button.
3. Press the "Print" button.

Annexure - A

FIELDS FOR PAYROLL DATA

- | | | | |
|-----|--------------------------|-----|----------------------------|
| 1. | Personnel Subarea Desc | 39. | Job Title |
| 2. | Personal Number. | 40. | Employee Subgroup |
| 3. | Name of Employee | 41. | Employee Subgroup Desc |
| 4. | S.no | 42. | Personnel Area |
| 5. | Wage type | 43. | Personnel Area Description |
| 6. | Amount in July | 44. | Personnel Subarea |
| 7. | Amount in August | 45. | Payroll Section |
| 8. | September | 46. | Administrator name |
| 9. | October | 47. | Fund Section |
| 10. | November | 48. | LNo |
| 11. | Amount in Descember | 49. | Wage Type Category 1 |
| 12. | Jan | 50. | Wage type Category 2 |
| 13. | Amount in Feb | 51. | Bank key |
| 14. | March | 52. | Bank account |
| 15. | Amount in April | 53. | Payment Method |
| 16. | Amount in May | 54. | Payment Method Description |
| 17. | Amount in Jun | | |
| 18. | Total | | |
| 19. | Del/finish | | |
| 20. | Company Code | | |
| 21. | Address #1 | | |
| 22. | Address #2 | | |
| 23. | Postal Code | | |
| 24. | City | | |
| 25. | Birth date | | |
| 26. | Age | | |
| 27. | Reference Number | | |
| 28. | Buckle Number | | |
| 29. | Pay Scale | | |
| 30. | Pay Scale Group | | |
| 31. | Wage Type Description | | |
| 32. | Cost Center | | |
| 33. | Cost Center Description | | |
| 34. | Position | | |
| 35. | Position Description | | |
| 36. | Org.unit | | |
| 37. | Organization Description | | |
| 38. | Job Code | | |

Annexure -B

WAGE TYPE S USED IN SAP/R3 SYSTEM

Wage Type	Description	Wage Type	Description
1	Basic Pay	38	L.H.P. Officiating
2	Substantive Pay	39	Basic Pay
3	Subsistance pay	40	Qualification (SAS)Pay
4	Special Pay	41	Spl. Pay Police 20%(2005)
5	Officiating pay	42	Spl.Pay Police 100%(2005)
6	Technical pay	43	Special Pay - 20%
7	Deputation Pay	44	Special Pay 20% Level 1
8	Personal Pay	45	Fixed Pay/ Salary
9	Additional Pay	46	Personal Pay(Maxim Grade)
10	Qualification Pay	47	Special Pay 20%(2007)
11	Sub. Marrian Pay	48	25% Special Pay (Gilgit)
12	Disturbance Pay	49	Basic Pay (Contractual)
13	Command Pay	100	Monthly Pension
14	Deputaion Speacial pay	101	Pension Increase 1
15	Good Conduct Pay	102	Pension Increase 2
16	Appointment Pay	103	Pension Increase 3
17	Incentive pay	104	Pension Increase 4
18	Staff pay	105	Pension Increase 5
19	Indexation Pay	106	Pension Increase 6
20	Special Pay to Post	107	Pension Increase 7
21	L.F.P Sub.Con.H.P.	108	Pension Increase 8
22	L.F.P Offg Con.H.P.	109	Pension Increase 9
23	L.F.P Offg	110	Pension Increase 10
24	Extran Salary	111	Pension Increase 11
25	Leave Salary	112	Pension Increase 12
26	Instruction Pay	113	Pension Increase 13
27	Monit Pay	114	Pension Increase 14
28	Rank pay	115	Pension Increase 15
29	Fly Pay	116	Pension Increase 16
30	Shof Pay	117	Pension Increase 17
31	Basic Pay for Contract	118	Pension Increase 18
32	Spl:Prosecutional Pay	119	Pension Increase 19
33	Fixed Basic Pay	120	Pension Increase 20
34	Basic Pay	121	Test Wage Type
35	Special Service Pay	1000	House Rent Allowance
36	Charge Pay	1001	House Rent Allowance 45%
37	Mly Service Ben Pay	1002	House Rent All 30%- MOver

Wage Type	Description	Wage Type	Description
1003	House Rent All 45%- Mover	1532	House Rent Ceiling
1201	Convey All 2001_01-10	1533	Road Journey Allowance
1202	Convy M.Cyc 2001_01-10	1534	Kit . Tailoring Allowance
1203	Convey All 2001_11-22	1537	NAB Allowance
1204	Convy M.Car 2001_16-22	1538	Non - Practicing Allowanc
1205	Convey All 1994_01-10	1539	Office Maintenance Allowa
1206	Convy M.Cyc 1994_01-10	1540	Orderly Allowance
1207	Convey All 1994_11-22	1541	Personal Allowance
1208	Convy M.Car 1994_16-22	1542	Presidency Allowance / P.
1209	Conveyance Allow. Others	1543	Profeciency Allowance
1210	Convey Allowance 2005	1544	Project Allowance
1300	Medical Allowance	1545	Prosecution Allowance
1400	Daily Allowance	1546	Qualification Allowance
1413	Deputation Allowance-1994	1547	Ration Allowance
1494	Instruction Allowance	1548	Rural Compensatory Allowa
1500	Computer Allowance	1549	Senior Post Allowance
1501	Additional Allowance	1550	Special Allowance
1502	Adhoc Relief Allowance	1551	Special Conveyance Allowa
1503	Anti - Tarrorist SQD: ALC	1552	Special Research Allowanc
1504	B. Mak / Ratn / H. Cut /	1553	NIPA Allowance
1505	Charge Allowance	1554	Spl. Comp. Allowance
1511	Conservancy Allowance	1555	Stationery Allowance
1512	Copier / Photostat Allowa	1556	Study Allowance
1513	Deputation Allowance	1557	Sumptuary Allowance
1514	Desig. Allowance/ ADC All	1558	Sup. Jud. Off. Allowance
1515	Design Allowance	1559	T. K. Allowance
1516	Dress/ Uniform Allowance	1560	Science Teaching Allowan
1517	Dusting Allowance	1561	Technical Allowance
1518	Entertainment Allowance	1562	Telecom Allowance
1519	Federal Police Allowance	1563	Telephone Allowance
1520	Language Allowance	1564	Transfer / Disturb Allowa
1521	Fixed T.A / D.A	1565	Uniform / Livery Allowanc
1522	Flying allowance	1566	Utility Allowance Gas
1523	Fuel / Electricity Subsid	1567	Washing Allowance
1524	Furniture / Cloth / Water	1568	Parachute Allowance
1525	GD Maintenance Allowance	1569	Statistics Allowance
1526	Gilgit Compensatory Allow	1570	SSG Allowance
1527	Hair Cutting Allowance	1572	Stipent / House job All
1528	Unattractive Area Allow	1573	Training Allowance
1529	Headquarter Allowance	1574	Commission Allowance
1530	Hill Allowance	1575	Anesthesia Allowance
1531	Hostel Warden Allowance	1576	Spl. Additional Moveover

Wage Type	Description	Wage Type	Description
1577	Basic Science Allowance	1621	Gent.Duty Allowance
1578	Dearness Allowance	1622	House Rent (1994)
1579	Quaid Azam Police medal A	1623	Special Additional Allowa
1580	Overtime Allowance	1624	Special Fee
1581	P.P.M. Allowance	1625	Justice Allowance
1582	FATA Travelling Allowance	1626	Basic Tehsil Allowance
1583	Governor House Allowance	1627	Expatriation Allowance
1584	Judicial Allowance	1628	Post Operation Allowance
1585	A.D.C Allowance	1629	Extra Dep Emp Allowance
1586	Danger Money Allowance	1630	Foreign Allowance
1587	Cash Handling Allowance	1631	Accreditation Allowance
1588	Fixed Pay/ Contingency Al	1632	Raining Allowance
1589	Research Allowance	1633	Cond Travelling Allowance
1590	Honorarium	1634	Utility Allow (Ministers)
1591	Basta Allowance	1635	Utility Allowan Electri
1592	Mess Allowance	1636	Night Duty Allowance
1593	Incentive Allowance	1637	Rest and Recitation Allow
1594	Instruction Allowance	1638	Outfit Allowance
1595	Secretariat Allowance	1639	Contingent Allowance
1596	Sub Marine Allowance	1640	Extra Duty Allowance
1597	Special Area Allowance	1641	Out Station Allowance
1598	Northern Area Allowance	1642	Advance Allowanvce
1601	Local Allowance	1643	CAL Area Allowance
1602	Cost of Living Allowance	1644	Ph.d/ M.Phil Allowance
1603	Motor Car Mainten. Allowa	1645	Drink Water Allowance
1604	Kacha Allowance	1646	Constabulary R Allowance
1605	Driving Allowance	1694	Instruction Allowance 20%
1606	Permenant Convey Allowan	1695	Instruction All.20%(2005)
1607	Maintenance Allowance	1760	spl Local Compensatry All
1608	Nursing Allowance	1761	Special Mess Allowance
1609	Check Allowance	1762	Condiment Allowance
1610	Border Allowance	1763	Acting Allowance
1611	Store Allowance	1764	Boat Tailoring Allowance
1612	Medical Charges Remit	1765	Waste Paper Coll. Allow
1613	Convey. Allowance Indexa.	1766	Army Off. Rationing Allow
1614	House Rent Allow Indexa.	1767	Practice Compensatory All
1615	Performance Eva Allowance	1768	Spl:Allow current charge
1616	Hostel Allowance	1769	House Rent (General)Allow
1617	Patwar Khana Allowance	1770	Spl.Additional allowance
1618	Warden Allowance	1771	Cycle Maintenance Allowan
1619	Field Allowance	1772	Adhoc Increase
1620	Subsistance allowance	1773	C.I.L.Q Allowance

Wage Type	Description	Wage Type	Description
1774	P.C. Allowance	1817	Diet Allowance
1775	M.T Allowance	1819	Add. judicial Allowance
1776	Special Relief Allowance	1820	Utility Allowance
1777	Summer Allowance	1821	Tamgha-e-Khidmat
1778	SHO Allowance	1822	Endorsement Allowance
1779	Hardship Allowance	1823	Self Sharing Allowance
1780	Add compensatory allowan.	1824	Fixed Conv Allow
1781	Machine Operator	1825	Boot Repairing Allowance
1782	Stamp Allowance	1826	Ext. Ration Allow
1783	Typing Allowance	1827	Incharge Allowance
1784	Special Increase Allowan.	1828	Command Staff Allowance
1785	Risk Allowance	1829	Regional Language Allowan
1786	PB Police Mdl. Allowance	1830	Special Relief All(2005)
1787	Adv.Staff College/NDC All	1831	Adhoc Relief (2005)
1788	Spl.Compensatory Allow	1832	Deputation Allwnce (2001)
1789	Other Allowance	1833	Integrated Allwnce (2005)
1790	Legislative Allowance	1834	Kit Allowance
1791	Jail Warder Allowance	1835	Comp. In Lieu Of Quarters
1792	Police Consitable Allow	1837	Protocol Allowance (2005)
1793	Disturbance Allowance	1838	Teaching Allowance(2005)
1794	Office Maint.MPAs&Parliam	1839	Spl. All. Police20%(2005)
1795	Cholistan Allowance	1840	Sp. All. A.C.E 40%(2005)
1796	National Self Reliance Fu	1841	Fuel Allowance
1797	Telephone Allowance	1842	Social Security Ben - 30%
1798	Cycle Maintaince Allowanc	1843	Tec. All. Police20%(2005)
1799	House Payment Subsidy	1844	Spl Allowance -100%(2005)
1800	Washing All (Others)	1845	NAB Allowance - 20%(2005)
1801	Dress/Uniform (Army) All.	1846	NAB Allowance - 15%(2005)
1803	Session Allowance	1847	Spl Message Allowance
1804	Adhoc Relief (2004)	1848	Servant Allowance
1805	Petrol&Car allow. (PSEC)	1849	Clib Allowance
1806	RTN, FTADA & PCA	1850	Batman Allowance
1807	RTN,TECH& Cyl Main. Allow	1851	Mufty Allowance
1808	DUP Machine Allowance	1852	Curry Powder Allowance
1809	Lift Operator Allowance	1853	Guide Allowance
1810	Spl. Jud. Allowance	1854	Special Evening Allowance
1811	Spl. Protection Group All	1855	Parliment H Allow G-01-03
1812	Leave Allowance	1856	Parliment H Allow G-04-06
1813	SPL (CONSOL) ALL 40%	1857	Parliment H Allow G-07-09
1814	Balochistan Allowance	1858	Parliment H Allow G-10-16
1815	ADD AGNY Allowan	1859	Parliment H Allow G-17-22
1816	Special Program Allowance	1860	House Subsidy Allowance

Wage Type	Description	Wage Type	Description
1861	Spl. Elite Ration Allow.	1903	Hard Area Allowance 20%
1862	40% Spl. Elite Allowance	1904	Ordinary F.D.A Polic(2009
1863	Anti Tarrorism Court All.	1905	Special F.D.A Polic(2009)
1864	Dearnes Allowance (2006)	1906	Ration Allw. Police (2009
1865	Teaching Allowance (2006)	1907	Risk Allow Police (2009)
1866	Health Sector Reforms All	1908	Adhoc Relief-2009 (01-16)
1867	CM's Secretariat Allowanc	1909	Adhoc Relief-2009 (17-22)
1868	Special Allowance (2006)	1910	CAF Allow-100%(2009)
1869	Non Practice All(Adv Gen)	1911	Compen Allow 20% (1-15)
1870	Special Addl Allowance	1912	Compen Allow 20% (16-N1)
1871	Spl. Hardship Allowance	1913	Comp Allow 20%(N2, 17to22)
1872	Dearnes Allowance-EEGRP09	1914	UAA-CHITRAL 50%(1-15)
1873	Mobility Allowance	1915	UAA-CHITRAL 50%(16 G/NG)
1874	Utility Allowance2007	1916	UAA-CHITRAL 50%(17-22)
1875	Special Allowance 20%	1917	UAA-CHITRAL 40%(1-15)
1876	Stipend Incentive Award	1918	UAA-CHITRAL 40%(16 G/NG)
1877	Spl Dearness Allow EGRP09	1919	UAA-CHITRAL 40%(17-22)
1878	Non-Practcng Alwn(Judges)	1920	UAA-KOHISTAN 40%(1-15)
1879	Special Addl Allow (2007)	1921	UAA-KOHISTAN 40%(16 G/NG)
1880	House Requisition Allow	1922	UAA-KOHISTAN 40%(17-22)
1881	Utility Allownce2007(Fix)	1923	UAA-OTHER 20%(1-15)
1882	Special Relief All (EG 9)	1924	UAA-OTHER 20%(16 G/NG)
1883	Adhoc Relief Allow (EG 9)	1925	UAA-OTHER 20%(17-22)
1884	Spl Science & Tech Allow	1926	Special Allow 20% (2009)
1885	Mobility Allow (Teachers)	2000	Journey Allowance
1886	Transport Allowance	3000	GPF Subscription
1887	UAA-2008	3001	GPF Subscription - Rs 130
1888	High Risk Allowance 50%	3002	GPF Subscription - Rs 230
1889	Police Serv Uniform Allow	3003	GPF Subscription - Rs 250
1890	25% Special Allowance	3004	GPF Subscription - Rs 270
1891	Addl Flying Allowance	3005	GPF Subscription - Rs 290
1892	Shared Salary	3006	GPF Subscription - Rs 305
1893	15% Medical Allowance	3007	GPF Subscription - Rs 320
1894	Hard Area Allowance 50%	3008	GPF Subscription - Rs 340
1895	10% Higher Post Allowance	3009	GPF Subscription - Rs 365
1896	Remote Area Allowance	3010	GPF Subscription - Rs 395
1897	Housing Subsidy Allowance	3011	GPF Subscription - Rs 415
1898	Income Tax Adjustment	3012	GPF Subscription - Rs 720
1899	Incentive Allowance 20%	3013	GPF Subscription - Rs 780
1900	Judicial Allowance	3014	GPF Subscription - Rs 850
1901	Risk Allowance (Police)	3015	GPF Subscription - Rs 925
1902	Special Incentive Allownce	3016	GPF Subscription - Rs1050

Wage Type	Description	Wage Type	Description
MC99	Stock options	MI01	Planned hours TM04
MD00	Deduction, C with advance	Mi02	Absence hours TM04
MD02	Deduction, D, absolute	MI10	Normal hours
MD04	Deduction, C w/o arrears	ML01	Piecework time
MD06	Deduction, D with arrears	MI02	Absence hours TM04
MD50	Arrears w. balance recov.	MI10	Normal hours
MD60	Recovery for MD50	ML01	Piecework time
MD70	Balance f. MD60 recovery	ML02	Average paid times
MD80	Deduction f. MD70 balance	MP10	PPD: Payment
MEX1	External payments	MP40	PPD: Reimbursement
MG10	Piecework time	MQ10	Bonus 25%
MG20	Paid times	MY10	Force bank transfer

Annexure -C

POSSIBLE AUDIT PROCEDURES ON PAYROLL DATA

S.No	Description	Expression
1	Employees who were receiving Special Relief Allowance and whose date of joining/appointment into service was after 1st July 2005.	wage_type=1830 AND Del_Finish>`20050701`
2	Those Government officials who have attained the age of superannuation.	Age>60
3	Those Government officials who are under 18 years of age but are still in Government Job.	Age<18
4	Employees who were receiving Computer Allowance, applicable in differently in different province.	Wage_type=1500
5	Employees who were receiving Dearness Allowance (1872, 1864) and who joined after 01-07-2007.	(Wage_type=1872 OR wage_type=1864) AND del_finish>`20070701`
6	Hill Allowance is admissible to BPS 1-15 at a Fixed rate of Rs. 100 and who worked inside of Quetta.	i) Wage_type=1530 AND Employee_subgroup>15 ii) Wage_type=1530 AND City<> "Quetta"
7	Employees who were receiving Entertainment allowance and they have below grade 19.	Wage_type=1518 AND employee_subgroup<19
8	Employees below grade 16 shown as Gazetted	Employee_subgroup<16 AND position_Description= "Gazetted"
9	Employees in or above grade 17 shown as Non-Gazetted	Employee_subgroup>17 AND position_Description= "Non-Gazetted"
10	Qualification pay is admissible to SAS, ICMA, NIPA and PhD.	wage_type=1644 OR wage_type=0010
11	Qualification allowance is admissible to post Graduate	Wage_type=1546 AND

	professor who is in Grade 20.	Employee_subgroup < 20
12	Medical Allowance (1300) is allowed to Non-Gazetted officials. Check that Medical Allowance will not be given to Gazetted officers.	Wage_type=1300 AND Position_desc= "Gazetted"
13	Employees who were receiving special additional allowance and whose date of joining in the service was later than December 2001.	Wage_type=1770 AND Del_Finish> `20011201`
14	Finance Division through its circular dated 4th December 2001 had discontinued Special Pay and allowances.	(Wage_type=0043 OR wage_type=0004 OR wage_type=1550) AND Del_Finish> `20011204`
15	Summer Allowance is admissible to BPS 1-15 at a Fixed rate of Rs. 100 and who worked outside of Quetta.	i) Wage_type=1777 AND Employee_subgroup > 15 ii) Wage_type=1777 AND City="Quetta"
16	Uniform Allowance (1516) is admissible only to Nurse Cadre who is below BPS-16.	Wage_type=1516 AND Employee_subgroup>16
17	Hardship Allowance is admissible to BPS 1-4 at a Fixed rate of Rs. 100.	Wage_type=1779 AND Employee_subgroup>4
18	Those Government employees who are getting salary by DDO.	Payment_Method= "Z"
19	Hardship Allowance is admissible only to BPS 1-4 employees with a Fixed Rate Rs. 100.	Wage_type=1779 AND Employee_subgroup>4
20	Special Compensatory Allowance is admissible of Maximum of Rs. 390 only for Teachers outside Quetta.	Wage_type=1554 AND City="Quetta"
21	Those Government employees getting Senior Post Allowance (1549) below grade 20.	Wage_type=1549 AND Employee_subgroup<20
22	Those Government employees getting Wrong Non-Practicing Allowance (1538) in Health Department, above 16 grade.	Wage_type=1538 AND Employee_subgroup>16
23	Cash Handling Allowance is admissible only for Cashier at a	Wage_type=1587 AND

- | | | |
|----|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| | fixed rate of Rs. 100. | Job_Title= "Cashier" |
| 24 | Employees who were receiving Ad hoc Relief Allowance and whose date of joining/appointment into service was after 1st July 2005. | wage_type=1831 AND Del_Finish> `20050701` |
| 25 | Instruction Allowance to the maximum of 20% of salary or limit. | Wage_type=1594 OR wage_type=1695 |

Note:

The list is not exhaustive and the auditor considers his professional judgment in identifying and applying the audit checks in order to achieve his audit objectives in an efficient manner.

Annexure-D

FEEDBACK CORNER

The Guidelines on Data Extraction & Analysis (SAP&ACL) Volume-I Payroll was circulated among Field Audit Offices of Pakistan Audit Department and on International ACL User Forum for feedback/comments to gain reassurance and an independent validation on the above mentioned guidelines. The feedback received from ACL Certified Master Trainers of the World is as follows:

Mr. Dave Coderre, Treasury Board of Canada Secretariat, Canada and super user of the ACL User Forum writes the feedback on the document as "I agree- I read through the entire document and was impressed with the detail- how to build and extract SAP report (variant, etc); as well as how to bring into ACL and an Annex that includes possible payroll tests (very specific to their environment). (I was also please to see they referenced one of my books)."

Mr. George Gitson, Sr Analyst, The Scott Miracle-Gro Company, U.S.A, writes the feedback in the ACL User Forum on the document as "I just looked through your document and I am impressed with the level of detail. Your field auditors will be in a really good position to do their job with this tool. I wish I had a similar document, customized to my environment."

Mr. David Britain, Principal Auditor, Royal Mail Internal Audit & Risk Management, London, UK, writes the feedback on the document as "I thought the document was very good, and very well structured. The extensive use of screenshots enabled an easy assimilation of the information presented. It would be quite easy for an auditor with limited experience of the SAP environment to perform the tasks you outlined."

Although I have seen much of what you provided, I have taken way two good learning points. Firstly, a good reminder of how to create variants in SAP. Secondly to compare the size of files as the "Bytes" level after transfers."

Mr. Harry Srivastava, Business Solution Group, Satori Group, Australia writes the feedback on the document as "Further to your document, I have looked at it and I believe it's quite helpful from my point of view but I cannot test those exact steps as I don't have access to SAP. I work for an ACL channel partner but I have kept the document. I do believe this was the document I was looking for in the payroll point of view and everything is quite well documented."

Mr. Nigel Matthews, ACL Knowledge Sharing Manager from the ACL Service Ltd, Canada writes the feedback on the document as "I've had a chance to read through your document, and I think it's very well structured and potentially very helpful for any of our customers who are interested in auditing SAP Payroll, and a good addition to our knowledge base on the ACL Support Centre."

Note:

Your feedback will be welcomed

Annexure-E

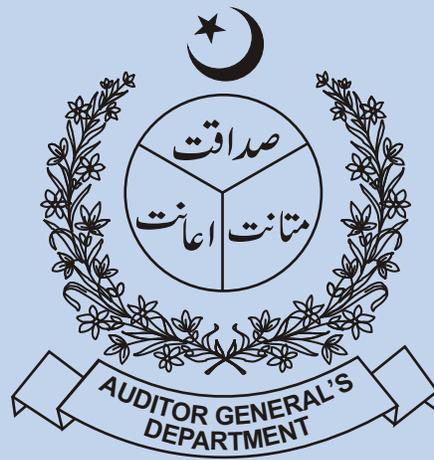
Use of Short Cut Keys in ACL

S.No	Help Key/ Function Key	Description
1	F1	Help
2	F2	Insert Fields OR In Project Navigator Click on Folder Name or Table name and then Press F2 and then do Right click from your mouse, you see following option which can be performed in your ACL Project. 1). Cut 2)Copy 3) Delete 4) Right to Left Reading Order 5) Show unicode control character 6) Insert Unicode Control character (Shows further options) 7) Open IME
3	F4	Insert Project Items
4	F8	Date Selector
5	F10	Control the menu bar with the help of keys of keyboard OR Show/hide Status Bar
6	Ctrl+1	Run a Script
7	Ctrl+2	Create Script from Table History OR View "Default View" should be saved under a different name before proceeding. Three option shows
8	Ctrl+3	Count
9	Ctrl+4	Total
10	Ctrl+5	Stratify
11	Ctrl+6	Sequence
12	Ctrl+7	Join
13	Ctrl+8	Histogram
14	Ctrl+9	Sample OR Sample Records
15	Ctrl+0	Summarize
16	Ctrl+b	Open an existing Project
17	Ctrl+c	Copy

18	Ctrl+I	Table Layout
19	Ctrl+L	Show the result of last session in Word Perfect file
20	Ctrl+N	Save New Project As
21	Ctrl+O	Open the Project
22	Ctrl+S	Save Project
23	Ctrl+R	Report
24	Ctrl+V	Paste
25	Ctrl+X	Cut
26	Ctrl+Z	Undo
27	Ctrl+P	Print
28	Alt	Select/Deselect the Menu bar
29	Alt+E	Open the Edit Menu Bar
30	Alt+F	Open the File Menu Bar
31	Alt+W	Open the Window Menu Bar
32	Alt+T	Open the Tool Menu Bar
33	Alt+S	Open the Sample Menu Bar
34	Alt+Tab	Switch between the Help Windows and the active program.
35	Alt+F4	Exist from ACL Desktop Version
36	Ctrl+Tab	Display the next tab
37	Ctrl+Shift+Tab	Display the previous tab
38	Ctrl+PgDn	Sample OR Sample Records
39	Ctrl+PgUp	In a Project Navigator: Display the overview Tab In a view: Display the previous view (If the table has more than view) In a command result: Display the result as text
40	Insert	View window: When a column is selected, display the Add Column dialog box

REFERENCES

1. Foundations of ACL: Concept and Practices.
2. SAPTM by George W. Anderson and Danielle Larocca.
3. [Www.acl.com](http://www.acl.com)



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