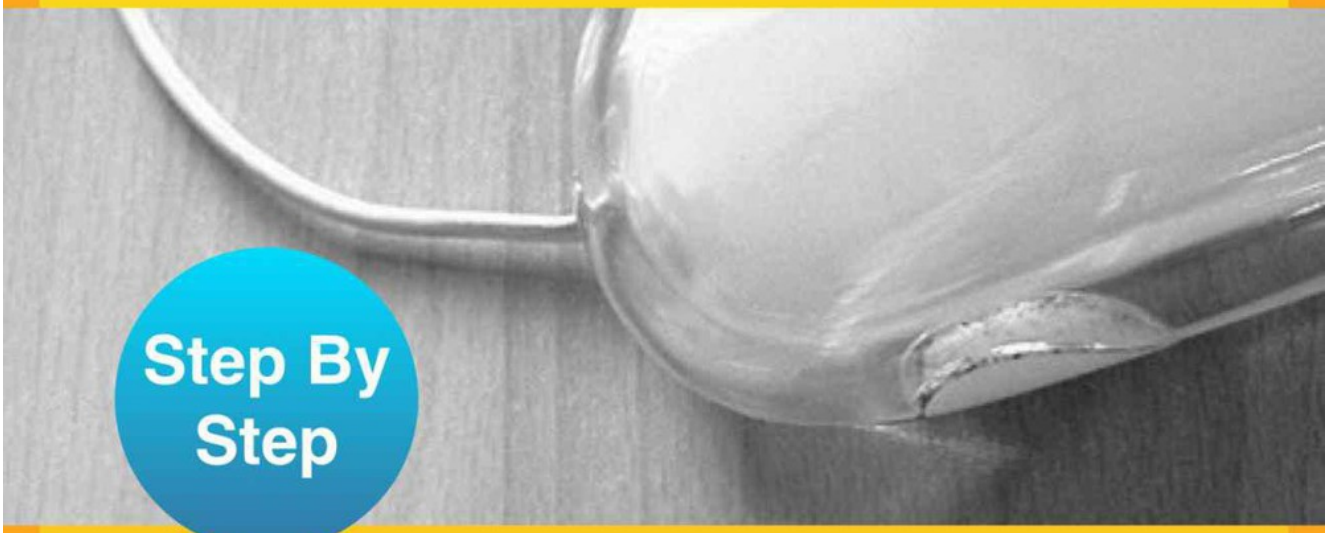
by Peter Moxon



Step By Step

The Beginner's Guide to SAP©

An Introduction To The Basics of Using SAP

- Navigation Basics
- SAP Main Screens
- How to Navigate SAP
- Setting Up Favorites in SAP
- Customizing SAP Screen Layouts and Settings
- Searching in SAP
- Working with SAP Reports
- Working with ALV List Reports in SAP
- Pre-Populating Parameters for SAP Fields

BEGINNER'S GUIDE
TO SAP

An Introduction to the Basics of SAP

Peter Moxon

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Peter Moxon was born in the UK in 1971 to proud Yorkshire parents and grew up in Leeds. He has worked for a multitude of corporations implementing and support business intelligence system and mobile app technology.

He has published video training courses at his website as well as publishing books through Amazon.

From Peter:

> *I love almost anything to do with modern day technology.*
>
> *I have run my own software and publishing company based in the UK since 2004 and have been working in the software industry for over 15 years.*
>
> *My work sees me mixing enterprise (SAP) work with digital publishing and more recently investing in and managing new business ventures involving mobile app development.*
>
> *There are two key parts of my job that really give me a 'buzz'.*
>
> *Building and introducing new solutions for my clients and showing them how they can go from zero to hero within their business in super fast time.*
>
> *I have a passion for teaching and mentoring. I find teaching the skills I have built up over the years and passing on my knowledge and "lessons learnt" to both new and experienced professionals really satisfying.*

For SAP enterprise work check out - http://www.saptraininghq.com for lots of free training material.

For digital publishing and mobile development, visit: http://www.nichespin.com

Contact the Author

As the reader of this book you are my most important critic and commentator. I would love to hear from you to let me know what you did and did not like about this book, as well as to what you think I could do in future books to make them stronger.

Please note that although I cannot personally help you learn SAP Basics on a one to one basis, I am available for corporate hire for project management, technical lead and mentoring programs.

Refer to my website http://www.saptraininghq.com to see all the training material I have available and to get a good overview of my expertise.

As you have bought this book there is a special discount coupon code included “disc20”. You can use this coupon code at https://academy.saptraininghq.com to save money on any of the courses.

Introduction of the Book

This book has been written with the complete novice, SAP super-user and consultant in mind. Whether you are just starting to use SAP systems, an experienced consultant or something entirely different, if you have to use SAP in any way, then this book is for you.

The first four chapters of the book will give you some history on SAP and introduce you to the various applications with the SAP Business Suite. From chapter 5 onward the book then follows a "***How-To***" style and will allow anybody to follow along and learn the basics. It is written in such a way that each chapter builds on the last so that you become familiar in lots of different aspects of SAP to enable you to understand what you will find in your own SAP system.

The principles and guidelines found in this book apply across all SAP modules within SAP.

The aim of this book is to help you understand the basics of using SAP systems and cut down on the time it takes to get up to speed with some of the SAP GUI powerful features.

Chapter 1: Becoming Familiar with SAP - The Company and its Products

This chapter will provide a comprehensive look at the popular Business Suite application / Enterprise Resource Planning (ERP) system known as SAP. It is suitable for individuals who are unfamiliar with SAP, or those who have minimal experience.

In this book, we will explore several introductory areas of SAP. We will focus on the historical overview to explain the evolution of SAP, starting from its original form to what it is today. We will also discuss the concept of real time processing and the architecture of SAP R/3 Business Suite. Afterwards, we will explore the SAP NetWeaver Technology platform, which will be followed by a discussion of where SAP fits in the present ERP software market and where it is headed in the future.

History of SAP

SAP began in Germany in the early 1970's as a project undertaken by five former IBM employees. They founded an enterprise, naming it System Analysis and Program Development, which they later changed to Systems, Applications, and Products in Data Processing. Now, SAP is the most recognized ERP product in the world.

The following essential elements formed the fundamental basis of the SAP concept.

- Real-Time Processing, which is an action that immediately affects enterprise-wide business processes.
- Standard Software Market product, which is a standard version of SAP software that is customizable during implementation.
- Integration, which is when data integration exists for the business processes of an enterprise.

Among the earliest versions of SAP was SAP R/1, which was a financial accounting system. The R in R/1 referred to real-time. In the early 1980's, SAP R/2 appeared as a mainframe business application. Later, SAP R/3 emerged in 1992 as the client server version of the software. The most recent version of SAP is SAP ECC, which stands for ERP Central Component, Version 6.

Real Time Processing

Real Time Processing was one of SAP's earliest and most attractive features giving the software a few advantages in the market. The processing facilitates immediate business transactions providing efficiency. The clients will experience a quicker order turnaround bringing products to the market faster. The processing provides accessible data to all those who need it, when they need it. This helps to reduce inaccuracies and obsolete information, while reducing data processing time.

The processing provides all forms of data across platforms and keeps up-to-date business records. This is a very valuable solution for an Enterprise handling high volumes of customers, resources, materials and data. The Real time processing provides efficiency in the processing of a business order and its shipment. The system will make determinations based on efficient and expedient requirements.

Real time processing was created to make data accessible to everyone in a company in order to enhance data processing transactions.

An example of a Real Time Processing Scenario: A purchasing manager enters a new supplier into his company's Master Data records of SAP. Once this is done, every authorized user, even those from other department areas, will have access to the new supplier's information.

SAP R/3 Structure

SAP R/3 encompasses the following three tiers of interaction:

- Graphic User Interface
- Functional Applications (Modules)
- Integrated/Relational Databases.

This breakdown can be further explained in terms of the three layers of the SAP client server concept: Presentation layer, Application layer, and the Database layer.

Presentation Layer

This particular layer refers to an application running on an end user's PC. This layer can also be referred to as "the front end." It is used within a networked environment, and displays information screens to the users. The users can then interact with the SAP system itself. It represents the client portion of the client-server relationship.

Application Layer

The application layer refers simply to that layer where applications are processed. Messages are then sent to the end user on the presentation layer.

Database Layer

The SAP system uses the data that is stored on the database layer. Data at this level is created and edited based on requests received from the application layer, then displayed on the GUI at the presentation layer. This layer is really the nuts and bolts of the SAP system.

Three-layered client-server architecture has a number of advantages the first of which is to utilize centralized data resources that helps reduce processing time. It also integrates various applications that provides a seamless business environment, and allows usage of different hardware and operating system (OS) on the server.

SAP NetWeaver Platform

In the progression from SAP R/3 to ERP 6, an important innovation emerged with the introduction of the NetWeaver Platform. This platform is an integration application that provides functionality for accessing SAP systems via an Internet browser rather than having to install the SAP GUI on a desktop. It forms the technological basis for four primary areas described below.

SAP NetWeaver forms the technical basis to four primary areas: User, Information, Process and Application integration. These representations show how users are able to collaborate and share information via a portal. What's important to note here is that this collaboration can be conducted in an on-demand environment anytime and anywhere you access the portal.

At the **PEOPLE INTEGRATION** level, users are able to utilize multi-channel access. **Information integration** provides the business intelligence and knowledge management capabilities that provide integrated work processes. **PROCESS INTEGRATION** operates as a data integrity broker pulling from master data sources and document workflow. The **APPLICATION PLATFORM**is the technical basis across all SAP applications. Customers can develop their own applications using the programming languages for ABAP and J2EE.

New technologies have opened up new channels of communication between customers and enterprises. NetWeaver allowed it to evolve and maximize the usage of the web. It now allows users to access the SAP system from different channels, including the portal, mobile phones, tablets, and other remote access points. It provides the technical basis for a SAP system and the required applications, which allows the business processes to be mapped across several business areas. This creates seamless integration across all participating and authorized departments in a particular business.

The Future of SAP

The current focus for SAP is an expansion into new markets, particularly small- and mid-sized businesses. They have increased acquisitions over the past several years, obtaining companies such as Business Objects and Success Factors; In order to leverage new technologies such as cloud computing and mobile capabilities. At present, SAP has around 47,000 employees worldwide and is the most recognized global enterprise software company on the market. SAP is now used by over 41,200 companies across 25 industries in 120 different countries.

Chapter 2: Introduction

Integration is a key feature of SAP. By leveraging the integration abilities of the SAP software, companies experience greater efficiency and productivity. How does SAP achieve layered integration, and how does it manage various business processes across the application? We will discuss those topics in this book. The topics covered include: SAP Software Packages, Configuration of SAP Modules, SAP Business Processes, Real Time Processing, and Client-Server Architecture.

Software Packages

SAP comes in several different versions that are suitable for different businesses, industries, and organizational processes.

Standard SAP

The Standard version is the off-the-shelf version of SAP. It has several advantages which are to maximize SAP's efficiencies and capabilities, leverage continuous optimizations and enhancements and reduce the cost of customization, maintenance, and additional development.

There are ways to configure it as part of the setup process, but for those areas where it cannot be configured, a business must either find a way to adapt or it must modify its operations in order to accommodate SAP and maximize its capabilities. Some organizations instead choose to customize SAP, but that can become costly and detract from its maximum level of efficiency.

Custom SAP

Custom SAP is also known as "Individual SAP." This version is the opposite of the standard package, in that it is developed for just one specific customer and tailored for their specific requirements. The customer bears the costs of this customization and has to cover all future costs for updates, modifications, and new developments. However, this version of SAP allows them to maintain their own unique operations rather than having to adapt to a standard version of SAP.

Industry Solutions

This type of solution is a compromise somewhere between the Standard and the Custom SAP packages, because the Industry Solutions version of SAP is semi-customized. It is not developed for one particular customer, but it is developed for a particular industry. As of 2012, SAP has developed 24 industry solutions, including popular categories such as manufacturing, automobiles, and utilities.

The Industry Solutions version is essentially a version of the standard software, but with expanded functionality that is mapped to the common business processes of a specific industry. It is not developed for one customer; but, it is more affordable in many ways than the Custom

version of SAP. It leverages pre-defined products already tailored to a particular industry, and reduces training costs by not having to learn a completely custom-designed system.

SAP Configuration

Upon beginning the implementation phase of SAP, customers can start selecting the components that fit their particular needs. These components are also referred to as modules. During this configuration process, the SAP system is enabled, allowing customers to map SAP functions to their business processes without having to engage in any customized programming. The company's own organizational structure is implemented, including client data, company codes, and other relevant information.

The critical elements of the SAP configuration are as follows: Implementing the organizational structures of the enterprise, mapping business processes and functions and the settings can be mapped and configured without writing code.

The less critical, but important elements of the SAP configuration are defining approval procedures, creating appropriate material types, and configuring portal integration.

An implementation guide is used to conduct configuration in the SAP system. It maps the setting options that are sorted by a business area.

The first step is for a company to gather its business requirements and processes. Then map those to the SAP settings during the configuration process, going from end-to-end, working with each organizational unit and applicable business function. Following the completion of configuration, the system must be tested as the company moves closer to the date that SAP will go live.

Sometimes, standard configurations are not compatible with a business' processes. The requirements can be implemented using the development environment provided by SAP, using ABAP (Advanced Business Application Programming) or JAVA. In that instance, using SAP's development environment, companies can fulfill their own programming requirements.

SAP also offers options for extending its system with custom developments when SAP alone is not sufficient. These are products that come from SAP partners and can be integrated via the technical platform within SAP called NetWeaver.

Integration

The best way to understand the benefits and advantages of SAP's integrated system is by looking at the execution of any transaction and understanding the ripple effect it has across various business areas, for example when an end user creates a purchase order. The creation will impact several departments, such as accounting and logistics areas. Through SAP, that ripple effect is experienced in real time. The creation of the purchase order is mapped end to end, from the originator of the purchase order to the users who need to act on that data in accounting, logistics, and elsewhere.

These real time capabilities enhance functionality with the integration provided by SAP. All roles involved in a transaction are working with the most accurate, up-to-date information available. The important part is ensuring that each person and department has access to the data. Another example to consider is the sale process. When a salesperson processes an order, that order has a ripple effect through inventory, production, and finance. Through SAP, that effect is virtually instantaneous.

SAP Architecture

Recall that SAP has a 3 layer client-server architecture. The *Presentation layer* presents SAP to the user on the computer at the workplace; The GUI lives within the presentation layer. The *Application layer* is also known as the server, and it is where the SAP applications reside. *The Database layer* stores and maintains all of the data used by the SAP system.

These layers work together seamlessly within the SAP system. An Example:

An end user on a workplace computer uses SAP to call up a customer record. That request is transferred from the computer to the application server. The application server receives the request, and carries out the processing by requesting the customer record from the database layer. The database layer passes the record on to the application server, which then serves it to the end client by displaying it on their screen.

While there are many advantages to this process, some disadvantages still exist. For example, if the server fails, then the clients are unable to work, due to hardware failure. Therefore, this system must be on a network infrastructure that is stable, secure, and has a 99% uptime.

Chapter 3: SAP Products

Based on all of the functions that SAP provides, some people might think that the solutions presented by SAP are sold individually: One module to cover accounting, one for human resources, et cetera. SAP is actually a packaged product, with modules built into each package that are aligned to provide enterprise-wide solutions for a variety of industries. In this section, we will discuss the packages available, and the modules they contain.

SAP Business Suite

The SAP Business Suite is SAP's core product. It consists of various solutions and components. These are not all "core" applications. However, the core applications are contained within the SAP ERP component.

Also part of the SAP Business Suite is SAP NetWeaver. This program is the foundation of the technical basis for SAP applications and business processes. It is the platform that runs all of the applications and tasks, allowing for integration of users, information, and application activities.

SAP ERP: Enterprise Resource Planning

The SAP Enterprise Resource Planning module, or ERP for short, has three key components: Accounting, Human Resources, and Logistics.

The SAP ERP components of the SAP Business Suite are segmented across the Enterprise platform. In earlier versions of SAP, these components were known as modules. These applications are widely recognized as core or essential components of SAP ERP, and are considered to be stand-alone SAP software products.

It is possible to see how SAP attempts to manage and effectively maximize an enterprise's operational and functional capacity. If a company wishes to customize one of these areas, they must absorb the additional expense of doing so.

One of the tools in SAP ERP is the easy-access screen. It provides an at-a-glance look at the core areas in SAP ERP and allows the execution of SAP functions of the desired component. Each selection in the easy-access screen is a grouping of business processes that are mapped to transactions and functions within the system.

SAP ERP Accounting

The SAP ERP Accounting application has been changed from earlier versions to include new tools, like the SAP financial supply chain management or cash flow management. There is also a completely revised general ledger accounting system, which now provides functionality for accounting and controlling. In addition, fulfilling day-to-day accounting functions, the SAP accounting application maps financial reporting requirements that are applicable in many different countries, languages, and currencies.

The important functional areas of the SAP ERP Accounting applications are the following:

- Financial Accounting captures and provides business transactions into the system, including allocating documentation of transactions. This will handle all financial transactions.
- Controlling is the managerial accounting function that focuses on the cost of accounting, performance, and investments.
- Treasury creates and plans the financial means, and ensures payments.
- Financial Supply Chain Management fulfills the important tasks of safeguarding liquidity and solvency of the enterprise.

There are several specific areas that are encompassed by these general functions, forming a comprehensive accounting system that manages and maximizes growth and financial stability: Financial accounting, budgeting, banking, and financial reporting.

SAP ERP Human Resources

The human resources application in SAP is also referred to as the Human Capital Management solution, or HCM. Earlier versions of SAP called this section the Human Resources module. This component is a critical part of SAP, as it integrates the enterprise's talent management and human capital resources within the company's operations and organizational structure.

There are several functions that the enterprise can perform on SAP regarding its human capital activities. Planning and analytics, global HR payroll, recruiting, performance and succession management, learning, scheduling and deployment, HCM service delivery, and managers employee, organizational, and competency data.

Generally, SAP enables an enterprise to manage and administer these activities in the following ways: Managing employees via a personnel administration system, creating payrolls for managerial accounting, managing applicant data and recruitment, and managing employee time and work schedules.

SAP ERP Logistics

The SAP ERP Logistics application governs the production and supply capabilities of the enterprise. This application is often considered the most critical element of the SAP package, and for good reason. If production is slow, inefficient, or hampered in some way, a company can experience significant financial losses. The SAP Logistics application is responsible for helping companies produce their products and maintaining those products for future sale and distribution. It also manages procurement activities related to the purchase of goods and services in the production process.

The logistics component supports all areas of the supply chain, including business processes, supplier management, customer management, and product production. These activities can be summed up as follows:

- Procurement is the integrated purchasing and materials management functions: Supporting goods and services that must be procured, managed, and paid for.
- Production Planning is for discreet and process-oriented manufacturing: Encompasses sales and operations. Sales and Distribution is the actual sale of the goods and services produced.

The SAP ERP Logistics area supports all business areas that belong to the supply chain, which includes all business processes that concern suppliers and customers, as well as the production of products.

These functions represent the most basic functional capabilities of SAP. Other applications available encompass areas such as quality management, warehouse management, and inventory management. All of which fall under the purview of the logistics component.

Other SAP Business Suite Components

Additional components to the SAP Business Suite provide another level of depth in SAP's capabilities. These components include the following: SCM: Supply Chain Management, CRM: Customer Relationship Management, SRM: Supplier Relationship Management and PLM: Product Lifecycle Management.

SCM is a Supply chain management logistics area, and is mapped to business functions in order to provide a seamless work environment. The capabilities of the SCM component to SAP allows an enterprise to maximize their supply chain activities, and provides advanced functions for complex business processes. These include transportation, collaboration, planning, optimization, production, and warehousing activities.

CRM is a customer relationship management component and is dedicated to every activity related to customers. It tracks and manages all phases by which employees engage and communicate with customers, including three critical areas: Marketing, sales, and service. It helps to analyze data to help an enterprise learn more about its customer base: Who they are, what they want, and how they are currently trending.

Often, information on customers is only available to sales employees. In SAP, however, customer information is universally mapped across the entire system, lending itself to marketing and product development functions. This compatibility and cross-referencing provides important insights into customer trends and helps companies develop future promotional strategies.

SRM is important and cost-effective for businesses to maintain good, productive relationships with suppliers. It is also important for businesses to be able to identify suppliers that are the most competitive in terms of quality and delivery time. Through SAP's SRM component, it is possible for an enterprise to select the right supplier for their particular operations.

The workflow process managed by SAP allows an enterprise to strategically plan, control, and optimizes their relationships. This function integrates with the purchase and procurement processes, and supports management of contracts and suppliers. It takes the supplier relationship through a step-by-step process from start to finish, from qualification, purchasing, source determination, and invoicing.

PLM is the lifecycle of a product that spans several key events: Conception, drafting, production, and customer service. These are some landmarks in the timeline. The PLM functions in SAP help map these functions while tracking inventory, product shelf life, and maintenance of master data such as recipes and product specifications. There are also functions related to the quality and integrity of an enterprise's product.

From the outset, the SAP PLM functions provide maximum integration and collaborative tools to enable colleagues to work together within an organization, teaming up all of the development partners that are working on a particular product. Within the PLM capability area, collaborators can share project plans, technical specifications, drawings, product structures, and maintenance requirements, all as part of the collaborative process.

Industry Solution

SAP offers pre-defined versions of their software known as industry solutions. These components are driven by the collective best practices for successful enterprises in a given industry. Some examples of offerings from SAP include solutions for the automotive industry, manufacturing companies, retail, government and financial service providers. These industries all require specialized functionality in terms of compliance, reporting, and customer management, among other areas. By the end of 2012, SAP offered 24 industry solutions to customers.

Chapter 4: SAP System Basics

In this chapter, we will be looking at the overarching infrastructure of the SAP system itself, and learning the basic settings and orientation regarding SAP that will form the foundation of daily tasks for each particular user.

Organizational Structure

Each user of a SAP system working in a particular department within an enterprise must provide input to SAP for the area of the business in which they perform transactions. For that to occur, a user needs to know something about their organization's units. Each enterprise has its own structure, which reflects how workflow and business processes are conducted. Typically, an organizational chart or capture document informs the user of where they fit within an enterprise.

Organizational structures represent mapping enterprise organizational units in the system and determines the Master Data requirements for each organizational unit like a company code, plants, and storage locations.

However, occasionally, not all functional areas are displayed within a general chart, leading many companies to create charts for specific areas of the company. For example, one chart might contain all of the processes for logistics, while another chart exists for purchasing, and another for accounting. Here is how a user might interact with these units within the SAP system:

Client: Users are required to enter or select a client when first logging in to a SAP system. Any changes made at the client level apply to all organizations below it, as this client level represents the enterprise. The client data field always uses a 3 digit numerical identifier.

Company Code : This level is where the accounting functionality is mapped into SAP. This level can contain various company codes, uniquely identified throughout the enterprise. These units can represent subsidiaries in different locations, whether it is different countries or different states. These are uniquely identified throughout the enterprise using 4-digit alphanumeric identifiers.

Plant Units: This level is where goods and services emerge. It is a central organizational unit in the logistics process and contains activities such as production, sales, inventory, and shipping. Basically, anything that makes an enterprise "go." These units can ONLY be assigned under one corresponding Company Code, and only once. These units use 4-digit alphanumeric identifiers as well.

Storage Units: While this level appears at the bottom of the logistics organizational chart, it

still represents a very critical process. It allows an enterprise to differentiate between certain material stocks within a plant by managing inventory. Each of these storage locations is directly assigned to a plant, and each one is distinguished using a 4-digit alphanumeric identifier.

SAP Master Data

SAP Master Data is the resource pool by which users draw from in order to perform tasks, execute transactions, and conduct business. Once created, master data is available throughout an entire SAP system to anyone who has the necessary authorizations. For example, master data might be a customer's address or, on the logistics side, it might be material specifications for a product. Master data plays a critical role during the implementation of SAP and in daily work tasks, as it warehouses all of the critical data needed to perform transactions.

SAP offers several solutions for the purpose of managing an enterprise's master data. As many applications and users have access to the same data, again depending on authorizations and need for access, the system avoids redundancies by properly handling master data. Redundancies only occur when systems from different manufacturers are launched within the same enterprise.

NOTE: Unlike transactional data, which can change, master data is the backbone of performing many transactions within SAP. It should therefore be entered with an elevated sense of care and diligence. All business processes can access master data, meaning that if one error occurs, it can be replicated across several processes and cause a chain reaction of problems.

The SAP Master Data Governance is an out of the box application used to create and maintain Master Data centrally. SAP Business Objects/Data Services/ and Information Steward profiles, integrates, cleanses, and monitors the quality of data. SAP NetWeaver MDM is a platform to consolidate and distribute Master Data across the enterprise.

SAP Navigation Basics

The following section covers some basic navigation. Users will learn how to connect to the server using a SAP log-on. There will also be an explanation and description of the SAP screen interface, along with instructions on how to log-on and log-off of the SAP system and how to examine the status bar for relevant information.

How to Log On to SAP

Initially, the system must establish a connection between the PC and the server via a network. To establish this connection, users must locate and click on the SAP log-on icon. The system administrator who installs the SAP graphic user interface (GUI) onto the user's computer should place the icon for the log-on on the desktop. If it is not there, users can usually find it under the Windows Start menu by clicking Start, opening the Programs section, then the SAP Front End, then choosing the SAP logon option.

Clicking on the logon option will bring up a menu referred to as the log-on pad. This log-on pad lets the user select one of the pre-configured SAP systems. Then, the user can click on the logon button.

Note that most enterprises deploy several SAP systems other than the one a particular user might utilize on a regular basis. These other systems are usually in existence for development or testing purposes.

Once a server-client connection is established, the initial logon to a SAP client requires separate steps. The system administrator should provide each user with 3 critical data elements: A client number, a user name, and a password. The language is typically set by default, but users can enter a language code if they desire. The language code for English is EN.

The user account is client-dependent, and a user will need different usernames and passwords for each client. In addition, the system administrator may implement certain password rules for a SAP system.

Here are some common password rules that administrators use:

- Users can use a combination of letters, numbers, and special characters
- Passwords must be a certain length; the default is usually a minimum of 6

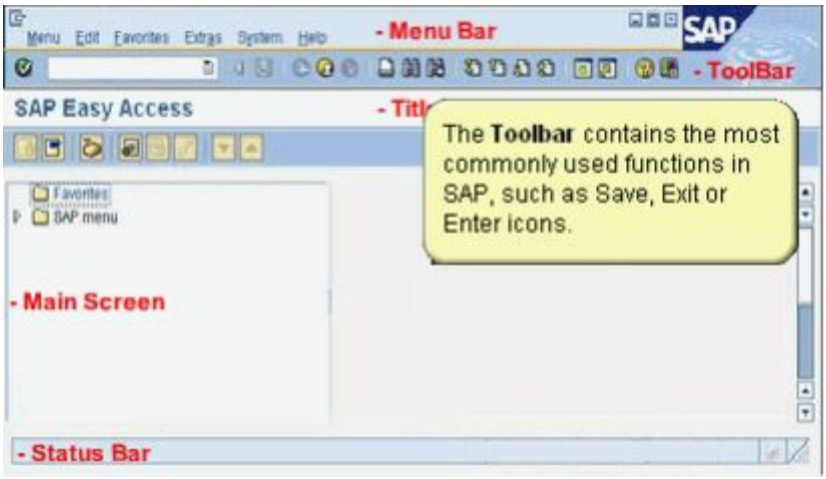
characters
- Forbidding the use of exclamation points or question marks
- Requiring the first three characters to be different from that of the user name
- Requiring characters in the password to be unique
- Disallowing the use of spaces
- Disallowing the use of the letters SAP or PASS
- Requiring a password to differ from the prior 5 passwords used before

The SAP system usually prompts a user to immediately change a password upon their first login unless specifically configured not to. This system allows a user to have a password they chose rather than relying on one developed by an administrator. To change a password, the user must enter the password twice during setup.

SAP Interface

Upon logging in, users will see the GUI they will be working in. This includes the easy access menu, which is used to let users navigate to the areas of the SAP system in which they are assigned to perform tasks. The SAP screen contains many buttons and fields to work with.

In order to figure out what each element is, users can hover their mouse icon over each part of the screen to receive a brief description. There are a number of elements, including a menu bar, extras, and favorites. Here, users will find the administrative and functional activities they will be performing using the SAP system. Many of these menu items can be changed for easy access to the items used most frequently. The only fixed portions are the system and help items, which are always visible. Commonly used features include the navigation buttons and the addition of favorites.



The standard menu bar is located below the menu bar; it contains icons for executing important functions in SAP, such as "save" and "execute." Icons are contained on every SAP screen, though ones that are not currently active will be grayed out and unusable.

Here are a few of the common icons:

- **Enter icon**: confirms entered data, used to progress between screens
- **Save icon**: saves changes
- **Back icon**: allows users to navigate to previous screen
- **Exit icon**: closes the current transaction without saving data
- **Cancel icon**: cancels the transaction, but let's user remain on the same screen
- **Print icon**: print a document, report, or list
- **Search icon**: a function used to find data values
- **Session icon**: used to open a new window, which allows a user to have several

SAP sessions open at the same time.

Title Bar

This bar indicates the structure of the transaction the user is currently engaged in. For example, if the user is executing a transaction for an activity in production, the title bar will represent this fact. If it is a procurement activity, the title bar will represent a procurement transaction.

Command Field

This field allows a user to enter a transaction code directly into the system, enabling the user to navigate the system without the use of a menu tree. This field is for frequent users who do not need to use the menu in order to get the required transaction codes they need to execute. If a user knows the code, they just key it directly into the command field and press enter.

Status Bar

Located at the bottom of the screen, this tool displays system information, warnings, errors, and activity feedback. It provides data showing the system, the client, the user name, the program, and the transaction code the user is currently engaged in. It also provides system messages upon completion of transaction tasks.

Logging Off

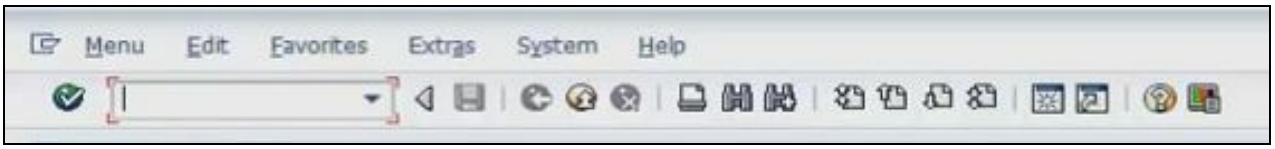
There are a few different options for logging off of the SAP system: Click on the “close menu” item located in the upper left corner of the screen; select alt+F4 on the keyboard; or, Click the “X” icon on the right hand corner of the screen.

A pop-up screen will appear confirming that the user wants to log off and notifies them that unsaved data will be lost. This occurs with every log-off for security purposes. Clicking yes terminates the session.

Chapter 5: SAP Main Screens - Step By Step

Upon logging into SAP, the user will see an initial main screen that contains all of the necessary tools and options to navigate the SAP system itself.

There are 5 basic elements to the main screen that will be discussed in this section: Menu Bar, Tool Bar, Title Bar, Main Screen, and Status Bar.



The Menu Bar

The menu bar appears in every screen on the SAP system, and always resides at the top of the screen. It can be used to perform administrative tasks and functional activities, and can offer different options depending on what action a user is trying to perform. Moving from right to left across the screen, options are present on the menu bar.

Help

This is primarily used for global SAP support, such as the library and glossary of terms. The help options in this menu change depending on which SAP package the enterprise has installed.

System

Contained in this menu are the global functions that allow a user to open and close separate SAP windows. This menu also allows the user to check the system's status, access other applicable tools and services, and to modify the user's system profile. The user can also send system messages from this menu.

Extras

This menu allows a user to adjust their display settings and initial actions within the SAP system. It also contains the Display Documentation feature, which is used to review information about a specific transaction that the user tries to perform.

Favorites

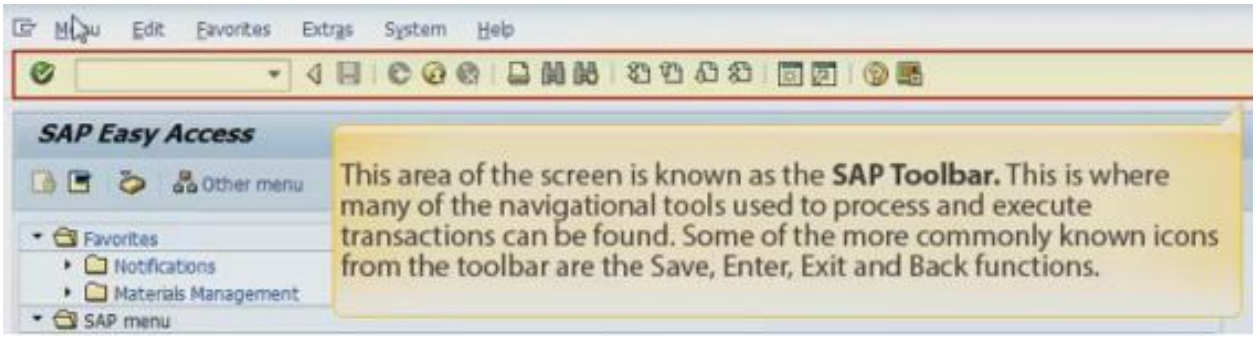
The Favorites menu allows the user to organize and save system tasks that are repetitive and frequently used. This menu also allows users to upload and download these tasks onto the personal desktop, to allow for backups of these favorites onto other machines.

Edit

The Edit menu allows users to manage tasks and transfer other items to the desktop.

Menu

Users can navigate to different areas of the screen under this menu, and can perform tasks such as assigning roles to a particular profile and accessing the Business Workplace for collaborative purposes. The Business Workplace has an inbox and outbox, that allows for the sharing of folders and information with other users on the system.



SAP Toolbar - From right to left

The navigational tools used to process and execute transactions are all located in the SAP toolbar. There are a number of functions controlled in the SAP toolbar.

Screen Layout

This feature allows users to modify their system settings according to their own personal preferences. They can configure security, screen display, and font settings here.

Help Icon

The “Help” Icon differs from the Help in the menu bar in that it is designed to provide in-application support. To be used effectively, the user must be in an actual transaction. Using the Help function while executing a particular function will launch the “Performance Assistant”, providing the user with information directly related to the transaction that users are currently running. This helps users who occasionally get stuck during a transaction and forget something they need to know about a particular task in order to proceed.

Shortcut Icon

Clicking on the shortcut icon brings up a screen that lets the user add shortcuts directly to his or her desktop. This screen contains options about how and where the shortcut should be applied. Once the shortcut window opens there are options that allow you to determine how and where the shortcut is applied.

Page Navigation Icons

The page navigation icons allow the user to navigate to different pages of a transaction when that transaction is lengthy. Users can go back and forth, or scroll the page up and down.

Lookup Icons

These icons permit a user to search for specific terms via a keyword search.

Save/Exit/Cancel/Back Icons

These navigational icons are used virtually every day, with just about every transaction that a user encounters. They are covered further in the navigation section. Generally, users should understand that they will be saving, exiting, and cancelling transactions frequently within SAP, and that they have the option of going back to a screen they have already left if they need to do more with it.

Command Field

The command field allows a user to enter a transaction code directly rather than using the menu tree to access a transaction.

Enter Icon

Among the most frequently used icons in SAP, the enter icon is used to enter data and process it exclusively. It is an integral part of the navigation process.

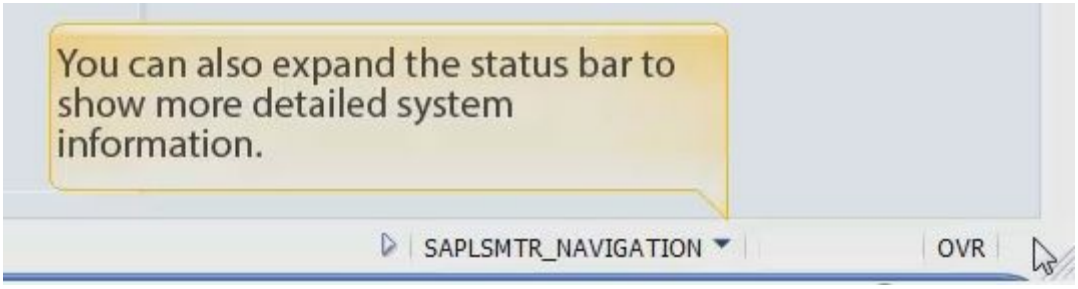

SAP Easy Access
Other menu
Create role
Favorites
Notifications
Materials Management
SAP menu
Office
Cross-Application Components
Logistics
Materials Management
Purchasing
Purchase Order
Purchase Requisition
Outline Agreement
RFQ/Quotation
Master Data
Environment
Inventory Management
Excise Duty
Logistics Invoice Verification
Physical Inventory
Valuation
Material Requirements Planning (MRP)
Service Entry Sheet
Service Master
Foreign Trade/Customs
Material Master
Product Catalog
Sales and Distribution
Logistics Execution
Production

Main Screen

Also known as the menu tree area, the main screen is where a user can access SAP transactions and all of the information related to enterprise business functions. It contains everything a user needs in order to find transactions that a user needs to utilize within their SAP system.

For example, a user can drill down into a particular menu. Once the menu option is selected, the user will click through the menu system to locate a particular transaction code (T-code). This code allows them to launch the business activity they want to use. It is similar to the command field, but is a little slower. After getting familiar with this system, the user could start recalling the T-codes for use in the command field in the future.

Status Bar



In the bottom right corner of the screen is the status bar. This area displays system messages and notifications, including warnings, from the SAP system. There are two ways to expand the status bar. The initial expansion button shows a preliminary piece of information, while the extended expansion view provides a detailed status about where the user is within the system. This status bar is very important for those who juggle several SAP sessions simultaneously.

Chapter 6: How to Navigate SAP

Two primary ways exist for users to access SAP functional data. Each of them starts with executing a specific transaction code.

Using the Menu Tree

There are a few steps to using the Menu Tree to find the transaction code “t-code” you want to use. To navigate the Menu Tree, click on each small triangle to the left of each option in the Menu Tree until the desired transaction code appears. With each click, the menu expands with further options.

After finding the desired transaction, double click on it within the menu tree to bring up the screen for that transaction. After double-clicking, the transaction appears along with a tool bar. Simply use the back button on the tool bar. This allows a user to navigate back to the menu tree if they have not started on a multi-page transaction.

Note The same triangles on the left can be used to collapse the menu tree back down when finished.

Extras Menu

In order to learn the second way to access SAP functional data, the user must first change certain settings via the Extras menu.

The user should open the Extras menu, and then click on the “Settings” option. By clicking on the “Display technical names” option and then clicking “Continue,” the user will find that the next time they navigate the Menu Tree, the t-codes will appear next to each desired transaction. This helps users learn the t-codes if they are unfamiliar with that business process or transaction.

Command Field

After a user has learned the t-codes by reviewing them on the Menu Tree, it is possible to take a short cut in executing them by using the Command Field. The user simply needs to type the desired t-code into the Command Field and press the “Enter” icon, and the transaction launches. Again, the Back button is used to navigate back to the prior screen.

Chapter 7: Setting Up Favorites in SAP

Favorites are a quick and convenient way to get into a business transaction. Setting up Favorite Transactions allows users to organize transactions that they anticipate they will use on a regular basis.

The Favorites Menu option is at the top of the SAP screen. Users should click on it to open and see the options under that Favorites Menu. One option to organize Favorites is to use folders. Users can create folders by clicking the "Insert Folder" option from the menu. A screen appears allowing the user to name the new folder. The user types in the name, and then clicks the Continue button. Upon returning to the Menu Tree, the user should see the new folder under the Favorites Menu Tree.

Another way to create a folder within the Favorites Menu is to right click on the Favorites folder in the Menu tree. The Insert folder option appears; all a user needs to do is click on it and perform the same procedure for creating a new folder as discussed above.

After creating a number of folders with which to organize the user's favorites, a user needs to start populating those folders with applicable transactions. This is done using the Favorites menu once again.

The Insert transaction item allows a user to put a transaction in the desired folder. The user must type in the desired transaction code. If a user inserts a transaction and clicks "continue." It then appears within the Notifications folder the user set up previously.

Instead of using the Favorites menu to add transactions, users can also use the right-click methods described earlier to perform the same function, identical to how a user adds folders to the Favorites section.

There is a third option for adding t-codes to the Favorites Menu Tree. This third option is useful for users who do not already know the particular t-code they want to add. The user simply needs to navigate the Menu Tree to the desired transaction and then either right-click that transaction or just drag and drop it to the appropriate folder under the Favorites Menu Tree.

If the user decides to right-click, the correct option to select from the drop-down box is the

Add to Favorites selection.

If using the right-click option, the transaction appears in the Favorites folder. The user then simply needs to drag and drop it into the correct folder they want to use for organizing that particular transaction.

Using Favorites is a great way to make the SAP system even more efficient and effective. Organizing those favorites through the use of folders is also helpful for making it even easier. Users can add as many folders as they want to organize their Favorites Menu Tree.

After adding each of the desired transactions to the Favorites Menu Tree, all the user has to do is open it and double-click whatever transaction they want to use in order to launch that transaction.

Chapter 8: Customizing SAP Screen Layouts and Settings

SAP users can customize their screen layouts and displays to their own personal preferences. The options for customization range from simple things such as modifying cursor actions, to enabling accessibility for users who suffer from different types of impairments.

To get started, the user should select the Change Layout icon on the Menu Bar and select the Options item from the drop-down menu. This is the SAP Graphic User Interface (GUI) Options window, and from here, the user can exercise several options for customizing his or her visual display and system orientation.

The first option is the Visual Design area, which allows users to change their SAP system themes. "Theme" refers to the look and feel of the system, including font type and size. Remember that, while users can exercise any of several options for modifying the screen layout, the "Restore Defaults" button will always allow them to go back to the original

settings.

The “Theme/Preview” Settings option provides several visual display selections to choose from. Users simply need to click the drop down for a Theme and make a selection. Users can also change their font settings. This feature is helpful for those who want to adjust their font size to be more readable for their particular circumstances.

The colors of the screen display can also be changed by selecting the “Colors in System” option. After setting up the fonts and colors, another way to customize the system is using the “Interaction Design” options. These options allow a user to modify their system interactivity according to their own personal preferences, and determine how the system will respond to certain events.

Several options are available, including adjustments to keyboard settings, screen display, or how users receive warnings and other system messages.

The “Keyboard Settings” window lets the user set up the behavior of the cursor and activate access keys.

The “Notifications” options provide selections for customizing the notification settings to determine how and when a user receives messages from the SAP system.

“Accessibility” settings allow a user to activate features for the visually impaired, such as a screen reader and captioning. There are also “language” settings, which can allow a user to set up the SAP system to recognize multiple languages.

The “Local Data” feature allows users to manage their local data storage in SAP. These settings determine the limits and parameters of a user’s historical data usage. The Local Data feature contains a “History” menu item, which allows users to modify their local data history settings: Including an option for clearing the history.

Another option is titled “Traces”. This lets a user perform and setup system diagnostic tools for analysis purposes. The Traces option is usually not used except in situations required by the Support team if a user is having trouble with the SAP GUI. The “Session Traces” option allows users to perform a number of different diagnostic traces on specific components of the SAP GUI.

There is also a “Security” option for managing the security settings on the GUI. These settings

include access options to the client PC and from the SAP system. This option also is not usually utilized by regular users, but is available if the support team requires access to it.

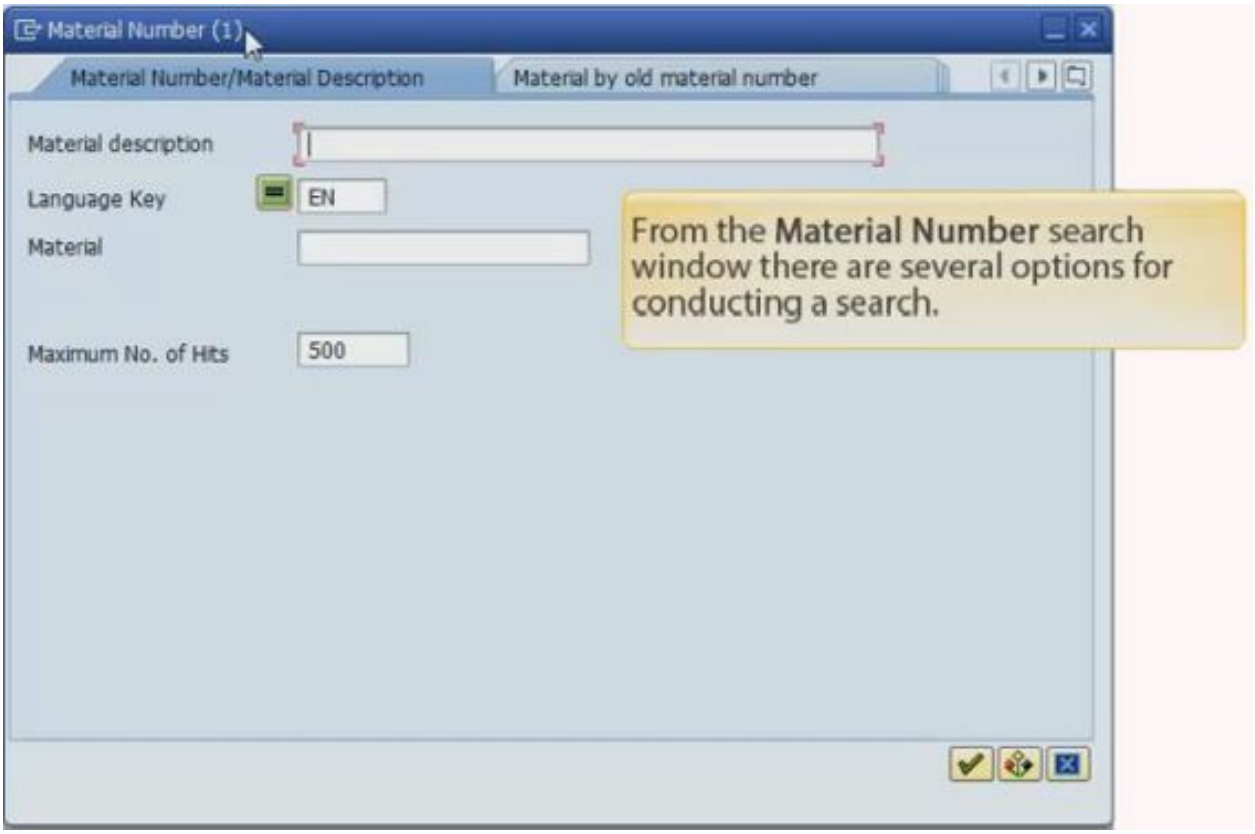
The “Front End Print” option allows a user to configure settings that affect printing and log files from the SAP system.

Chapter 9: Searching in SAP

The SAP system is very large, frequently requiring users to search for information they need for different tasks and transactions. Therefore, there are several ways to search for this data.

Hypothetical #1: A user needs to find a specific material in order to update its master record. The user is unsure of the exact material number. However, they know the material is in the "casing" category. Here, we will see how the user goes about finding this information.

The user starts by entering a transaction code into the command field and launching it. The user does not have the material number. However, the match code icon that is highlighted can be used to launch a number of different material search options.



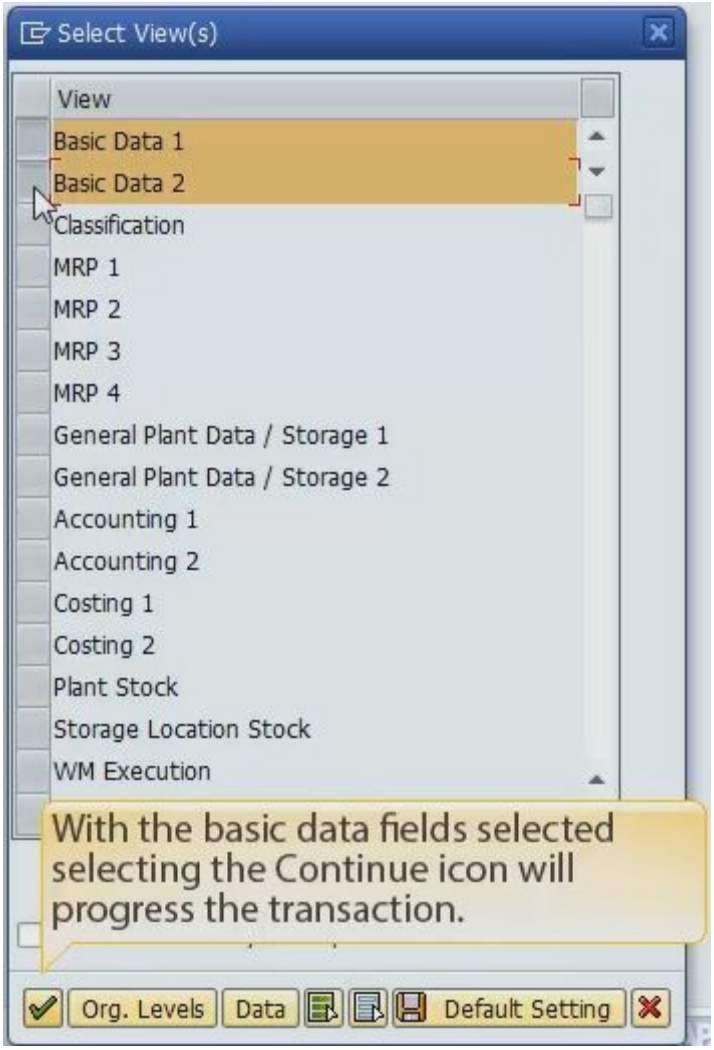
This screen is the Material Number search window. There are several options from here for conducting a search. The tab strips near the top of the screen, provide a number of distinct search criteria, such as searching via material or a bill of material (BOM). Also there are navigation buttons in the upper right corner. These buttons allow the user to scroll over to access more tabs to find a search criteria that best suits the user's purpose. The far-right icon is a drop down menu that also provides all of the search criteria options available.

Given the information the user in this hypothetical has available, which is that the material in question is a “casing” material, the user is going to search via Material Description. That will therefore be the search criteria.

The wildcard feature is particularly helpful. When typing in search criteria, placing an asterisk (*) before a word such as “casing” will cause the system to search for all materials identified with the term casing. After entering “* casing” into the material description field, the user clicks the “Continue” icon in the lower right corner.

A list of casing materials appears, and the user can identify which one they need to work with. After locating it, the user clicks on the one he wants, which brings it back to the “Filter” field on the original screen.

Now that the user has the appropriate material number, they can continue to execute the transaction by clicking the Continue icon.



Here, the user wants to modify the data information under Basic Data fields 1 and 2. The user

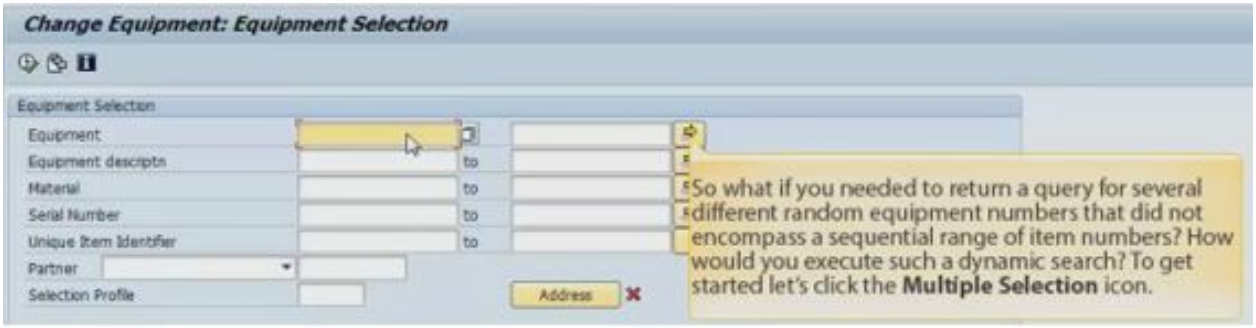
highlights those records and presses Continue again, showing the Basic data 1 and Basic data 2 tabs for the user to utilize in modifying the material.

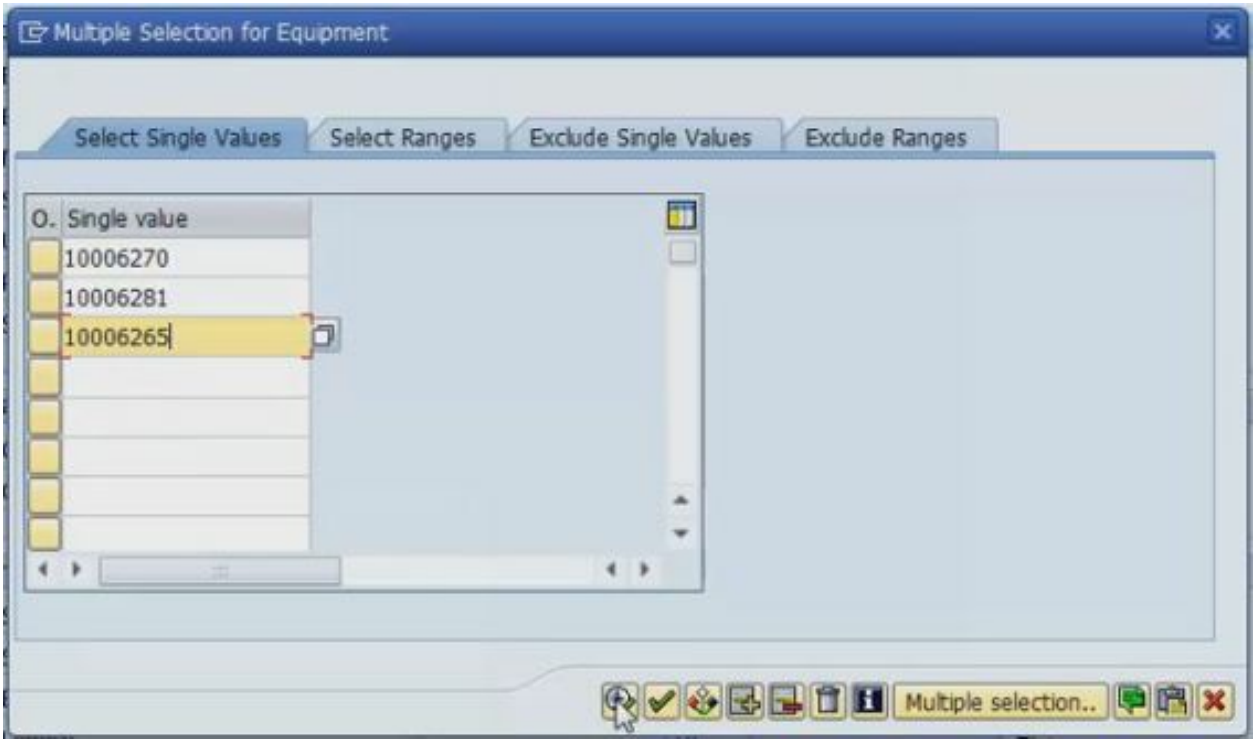
Keep in mind that other features in SAP allow users to perform dynamic searches.

Hypothetical #2: The user is looking for specific pieces of equipment to put together a report. The user executes a transaction number to start finding the equipment. The match code feature appears once more. This is used to execute the search.

Assume the user does not have specific equipment numbers. However, the user knows the equipment is located at the Atlanta location. Therefore, the user can refine their search according to the criteria by using the location fields. The user can employ the wildcard search feature again to search for the desired equipment. After typing in Atlanta in the "City" field and pressing continue, the search results appear, and the user can pick and choose the desired equipment numbers. After selecting the right numbers, the user can click Continue. The user can now execute the transaction with the correct equipment numbers.

Hypothetical #3: The user needs to return a query for several different random equipment numbers that do not encompass a sequential range of item numbers. How does the user execute such a dynamic search?





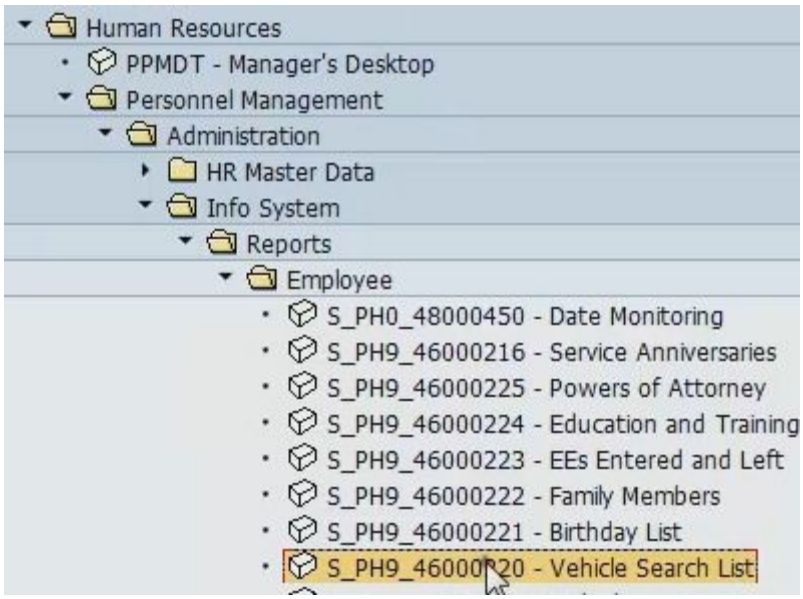
The user starts with clicking on the Multiple Selection icon. The Multiple Selection window opens, allowing the user to enter several random equipment numbers. After making several entries, the user clicks the Copy icon to add the entries to his query. The user then clicks the "Execute" icon from the Equipment Selection screen to execute the transaction for the selected equipment numbers.

The search returns data for the three equipment queries the user entered. The search functionality in SAP is very powerful. It is used in many transactions throughout the whole SAP system.

Chapter 10: Working with SAP Reports

This chapter covers how to locate SAP Reports and how to export them to an Excel spreadsheet. It also demonstrates how to save a report variant and filter report data.

SAP has a number of report features. Each functional area has a "Report" launch somewhere within the Menu Tree. Users can find the applicable report by opening the Menu Tree in the preferred areas. Here, we will drill down within the Human Resources area to find the desired report.

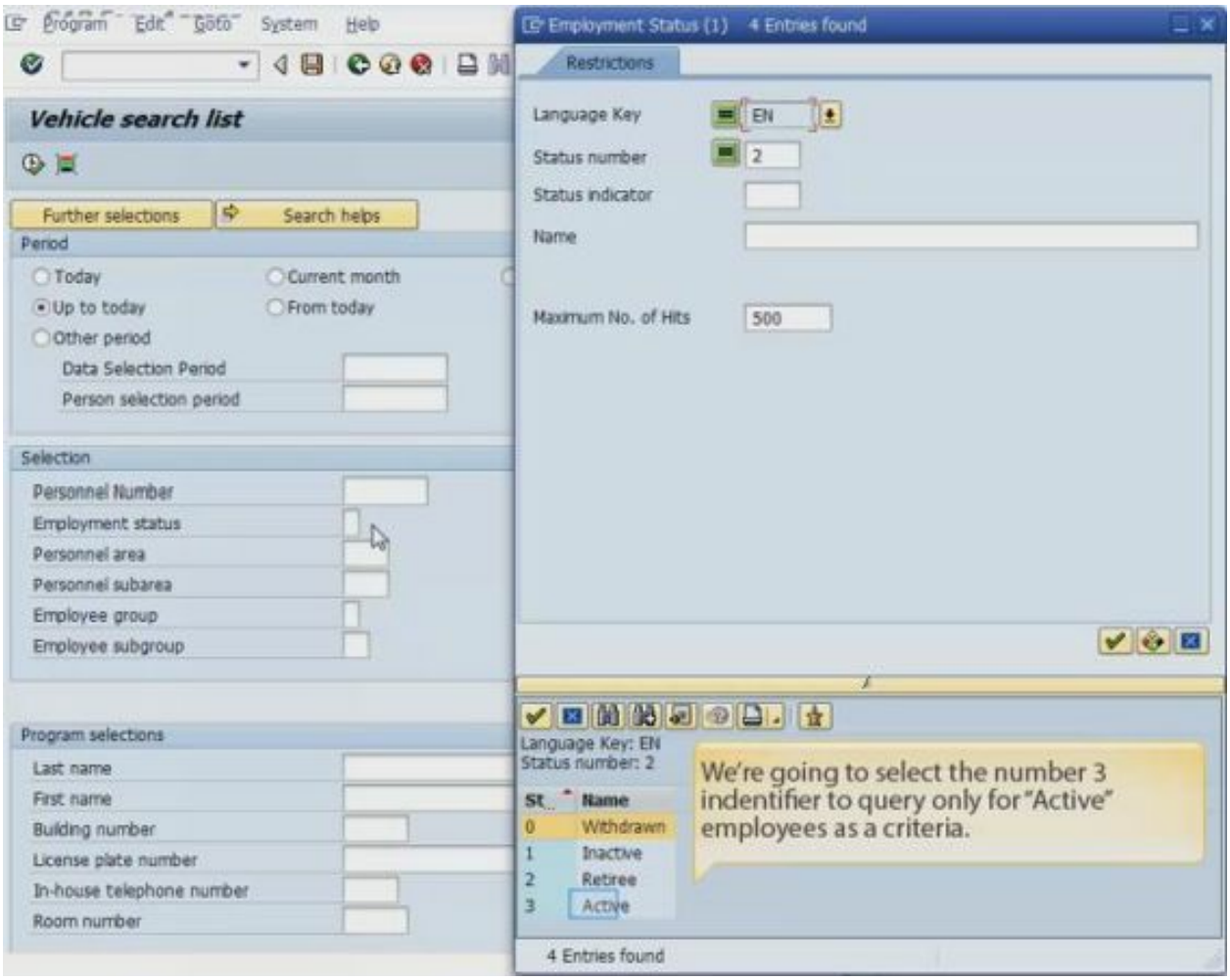


The user starts with opening the Human Resources Folder, followed by Personnel Management, Administration, Info System, Reports, and Employee, bringing up the following selection of a report.

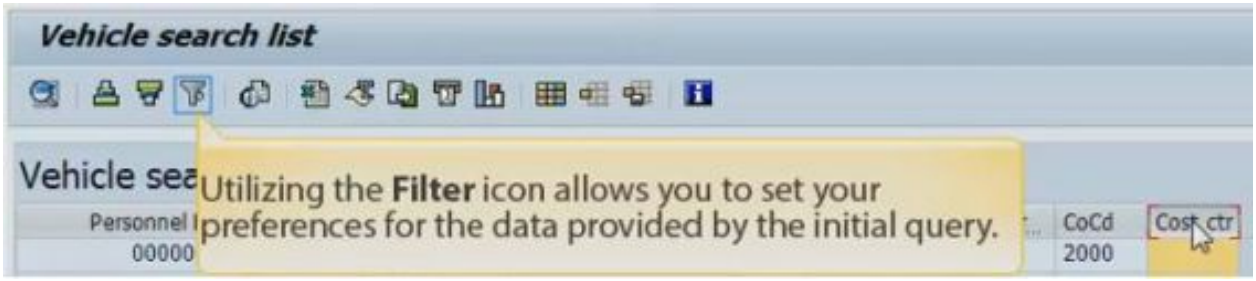
In this example, we will launch the Vehicle Search List report in order to demonstrate some of SAP's basic reporting functions.

Upon double clicking the Vehicle Search List report, the initial screen allows the user to set the parameters for the report they want to run.

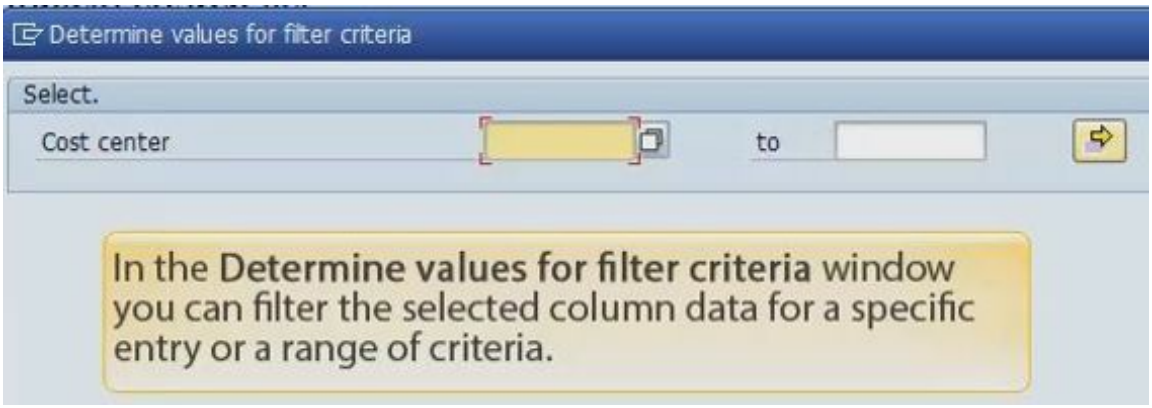
The user can set parameters such as a particular date range. They can also use the match code feature, which here will be used to search the Employment Status field. The user wants to select a number referring only to Active employees in their search. After clicking Continue, the user returns to the Vehicle Search List screen and can click Execute once all of the desired criteria are set, which launches the report.



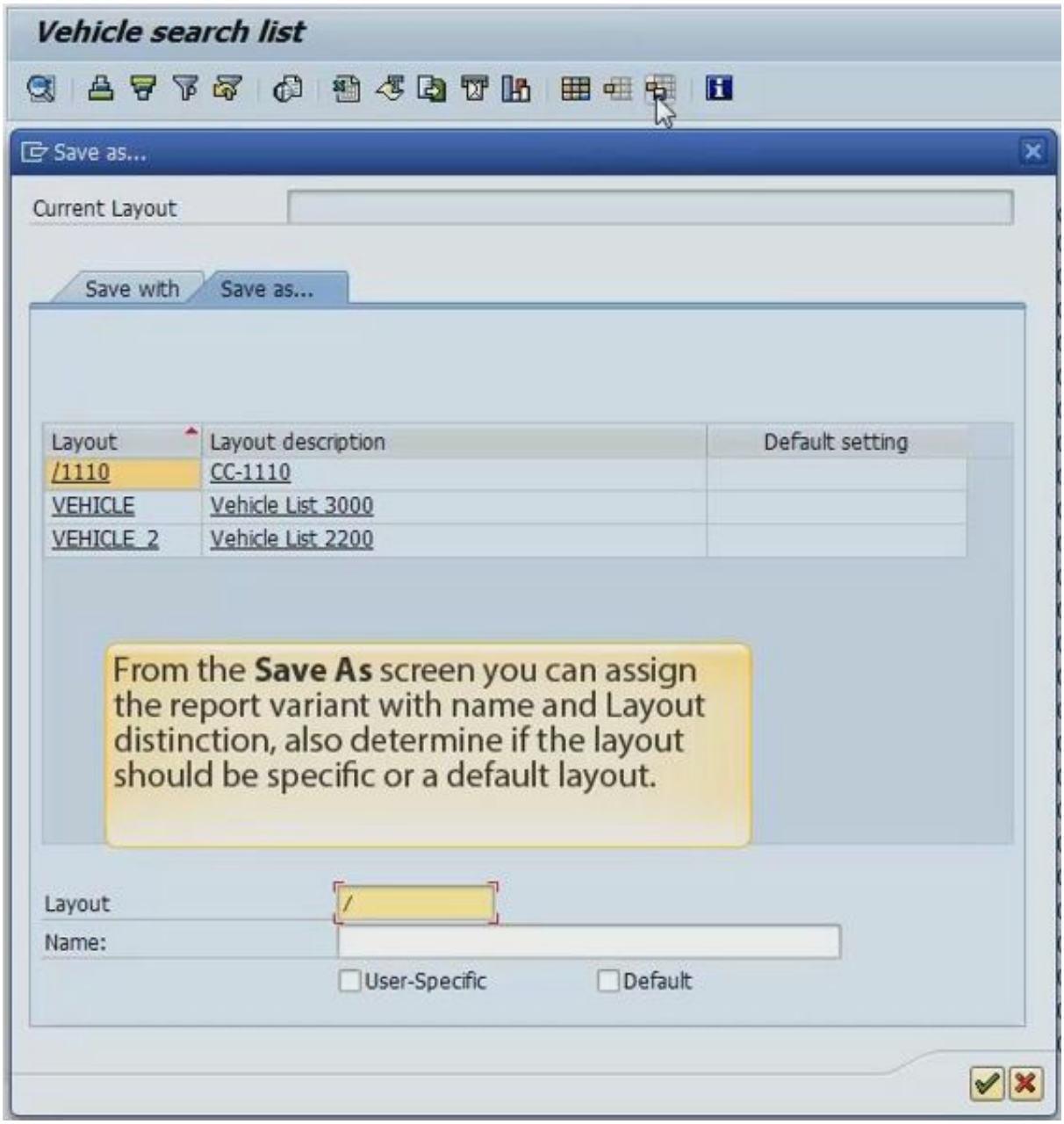
Upon receiving this output, the user can still refine or modify the report as needed. The user filters the Cost Center column to refine their data selection. To do this, the user clicks on the field heading for Cost Center, then uses the Filter option to set preferences for the data that the initial inquiry provided.



Clicking Filter brings up the "Determine values for criteria" window. The user can filter the selected column data for a specific entry or a range of criteria. After entering the desired entry or range, the user clicks the Continue icon. The prior report returns, with only the desired criteria displayed.



After filtering the report data to bring up only the needed results, the user can save a report layout that they can use again in the future for other data queries. To do that, the user clicks on the "Save Layout" button.



The user is taken to the “Save As” tab. There, they can assign the report variant with a name and a Layout distinction. They can also determine if the layout should be specific or a default layout. Upon filling in the desired fields, the user clicks “Continue”.

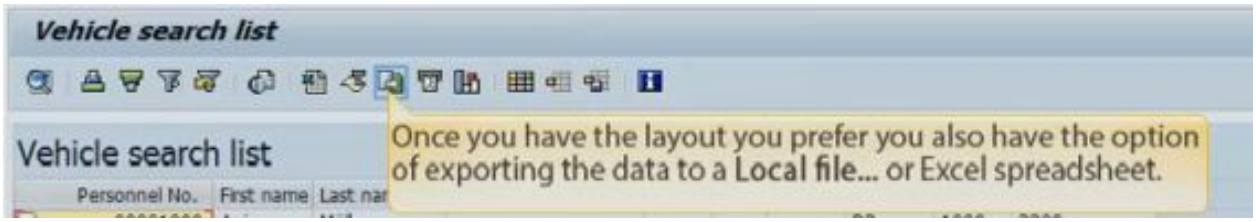
Users might need to modify and save multiple report layouts using separate and specific data criteria. For example, a user might need to find all of the vehicle license plates beginning with the letter S.

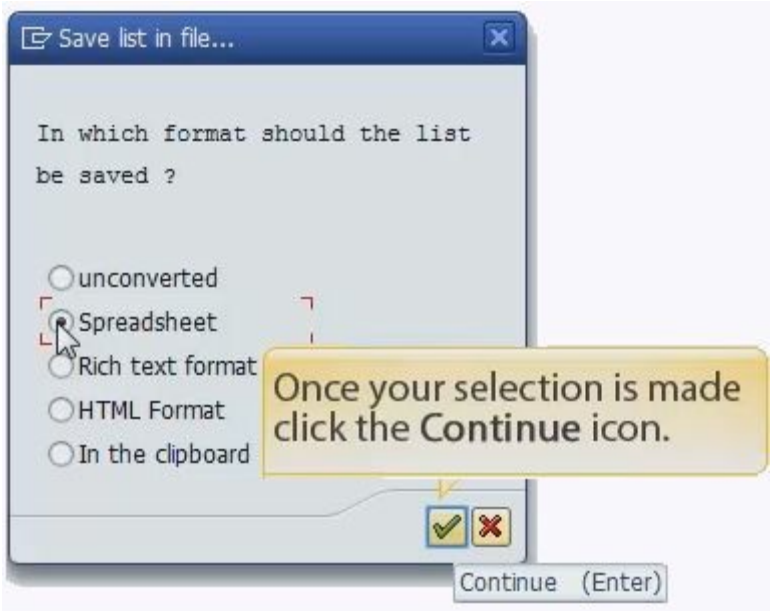
To do that, the user highlights the license plate number field and presses the Filter button and use a wildcard character in the search feature to narrow the search to all licenses that begin with S. Upon clicking Continue, the report shows records that meet both of these criteria.

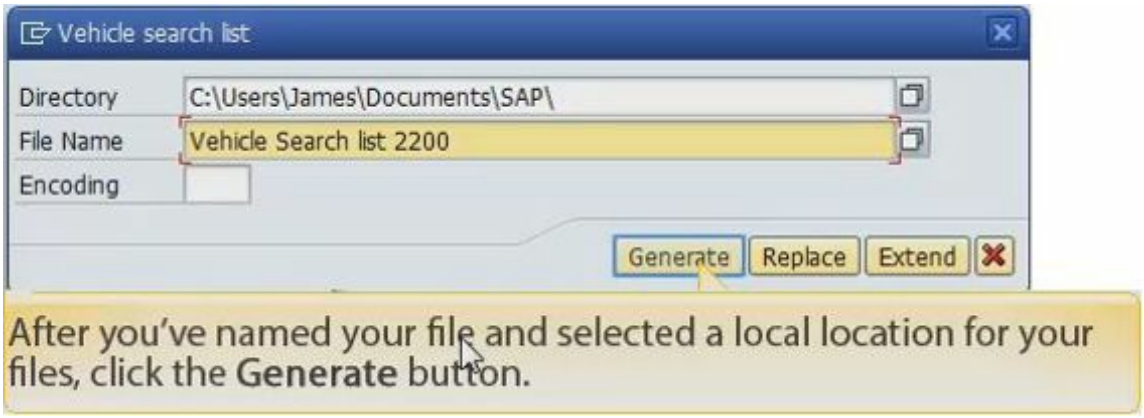
Upon generating this new selection criterion, the user can assign and save a separate layout using the Save Layout icon. Upon returning to the Vehicle search list, the user can use the Select Layout button to select any previously saved report variants, which can then be applied to the initial data query.

The user returns to the report that was saved from the Cost Center filter. Upon opening the preferred layout, the user also has the option of exporting the data to a local file or Excel spreadsheet.

The “Save list in file” window appears, and the user has a number of options. The user selects “Spreadsheet” and clicks the Continue icon. This opens a screen where the user enters the directory and the file name of where the spreadsheet will be saved, and then clicks Generate. Remember to check the status bar at the lower left hand corner of the screen. This bar shows SAP system messages, including one indicating where the file was transferred and exported onto the local hard drive.




Save list in file...
In which format should the list be saved ?
unconverted
Spreadsheet
Rich text format
HTML Format
In the clipboard
Once your selection is made click the Continue icon.
Continue (Enter)


Vehicle search list
Directory
C:\Users\James\Documents\SAP\
File Name
Vehicle Search list 2200
Encoding
Generate
Replace
Extend
After you've named your file and selected a local location for your files, click the Generate button.

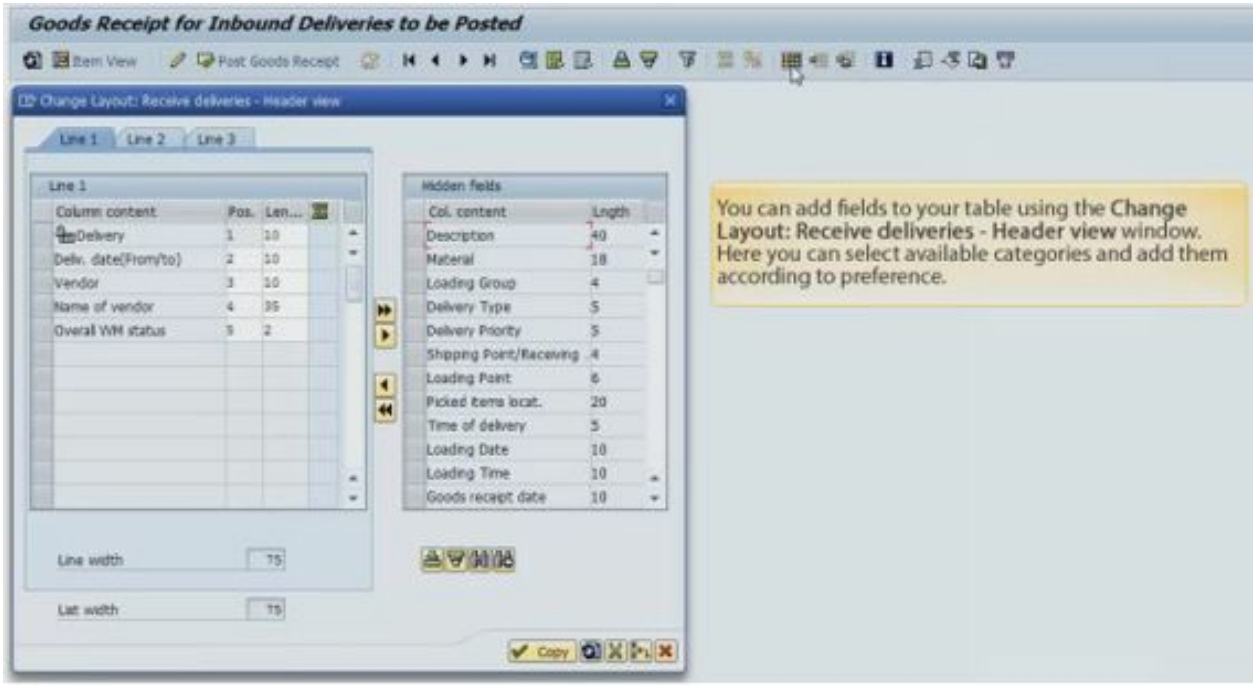
Chapter 11: Working with ALV List Reports in SAP

ALV stands for ABAP List Viewer. ABAP is a programming language used for customizing SAP. However, that will not be covered in this chapter. The ALV allows users to manipulate data that is outputted to the screen in an ALV report. It displays the data elements into a table format, and tools within the ALV functionality allow that data to be filtered, sorted, and exported to spreadsheets. In the scenario for this chapter, we will execute a transaction for listing Inbound Deliveries for Goods Receipts. This, of course, can be done via the Command Field for those who know the transaction code, VL06I.

The user then selects the "For Goods Receipt" button. A selection screen appears for the user to run reports.

First, the user composes a list using the inbound delivery numbers. To do that, the user inputs some values into the Inbound Delivery fields. These values limit the data that comes back in the ALV report. Upon entering the data, the user clicks on the Execute button to run the report, which generates data.

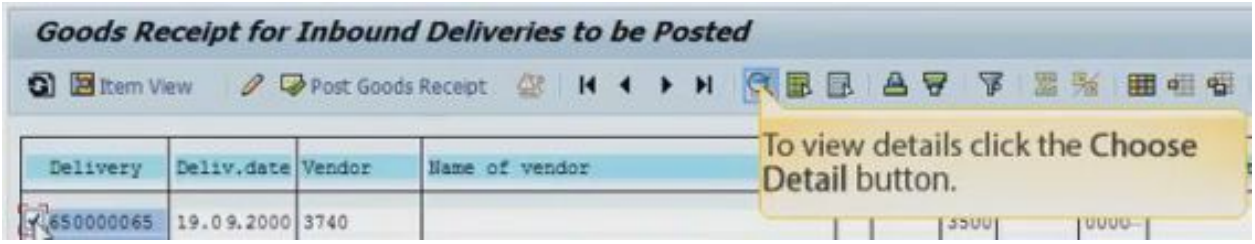
To modify this list, the user selects the Change Layout icon on the toolbar.



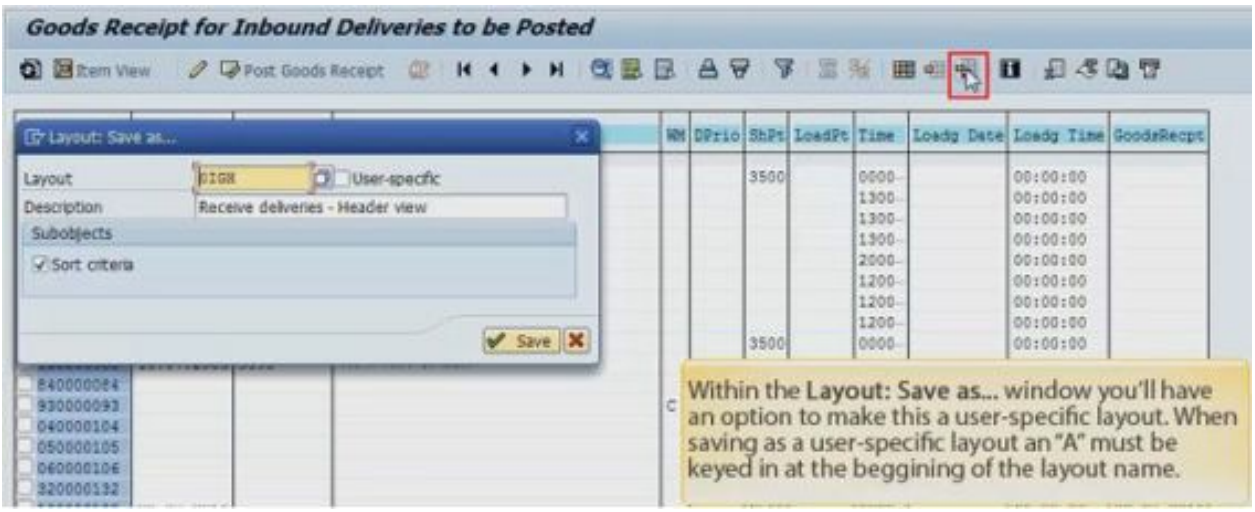
These are the available or hidden fields that can be added to the report. The left hand side

displays the fields already in use. The right hand side shows the fields that can be added. The user highlights the desired fields and transfers them over. Once they are copied over, they will all be added to the report.

The user can then highlight and show details on each line item entry on the report. The user simply has to click the check box to the left of each item he wants to view details for, and then select the "Choose Detail" button from the toolbar.



Remember to use the back button to navigate back to the previous screen. From there, the user can use the Save Layout icon. This allows the user to save the report layout so that he can come back to it in the future and see exactly the same view, rather than the original few fields shown in the first report.



One of the options for the Layout: "Save as" screen is to make the layout a user-specific layout. If the user selects that option, the letter "A" must be used at the beginning of the layout name. Upon naming the report and selecting the desired options, the user returns to the report screen. There, the user can also click the "Item View" button to view specific relating data, such as material numbers and purchasing documentation.

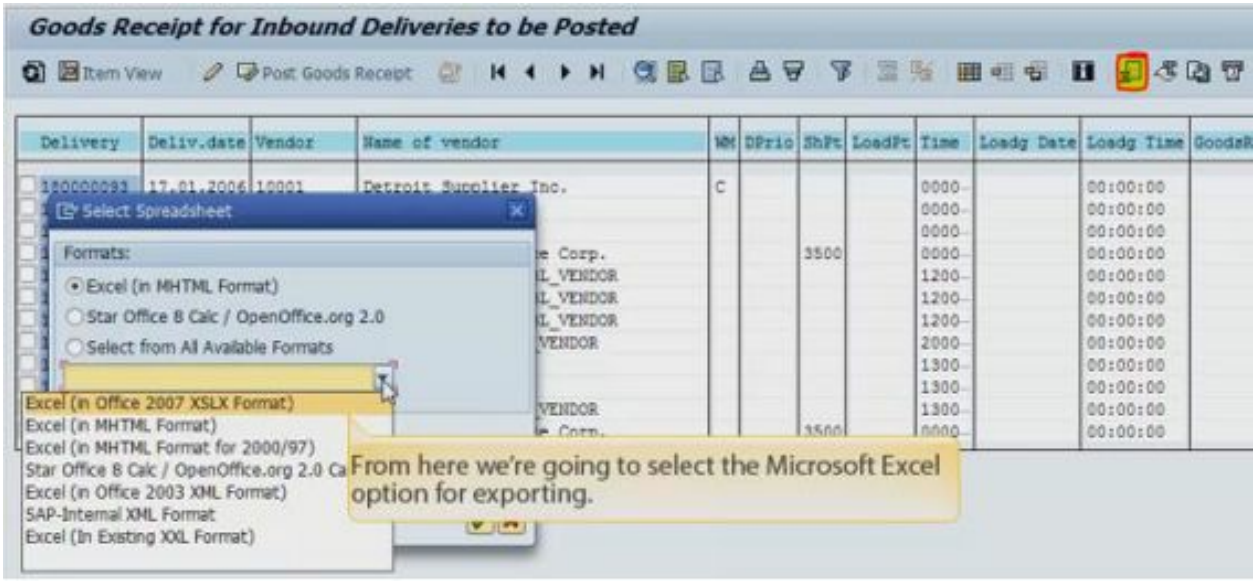
The "Header View" button returns the user to the previous screen. However, that screen has now returned to its initial state. This result is due to the layout being saved as "user specific." This specification means that the layout must be applied for it to re-appear. The user must click

Select Layout and access the user-specific layout for it to apply.

A list of layouts the user can access appears, and the user simply must select the applicable one and click Continue. Upon returning to the user-specific layout, the user can then try arranging data in different ways by using tools such as the "Descending Order" icon. This is done by clicking on the column the user wants to sort the data by, and then selecting the "Sort" in Descending Order icon from the toolbar.

The Filter icon is also functional here, allowing the user to sort and arrange column data. The user can specify a date range for filtering. Upon entering this range, the user clicks Enter. Upon clicking Enter, only those transactions occurring between those date ranges will be displayed in the report that is generated.

ALV reports can also be exported to a number of different file formats. The Excel spreadsheet is among the most popular, and is accessed via the Spreadsheet button. The user selects the format they want to export the data into, and then clicks Continue. The Save As window appears, allowing the user to name the file and put it into an appropriate directory on the local hard drive.



The data populates in the spreadsheet, and the user can then manipulate the data according to their needs. The data from the ALV report can be further manipulated and exported to multiple spreadsheets as the user needs. Upon finishing with the report, the user then utilizes the Back button to return to the SAP Easy Access Screen.

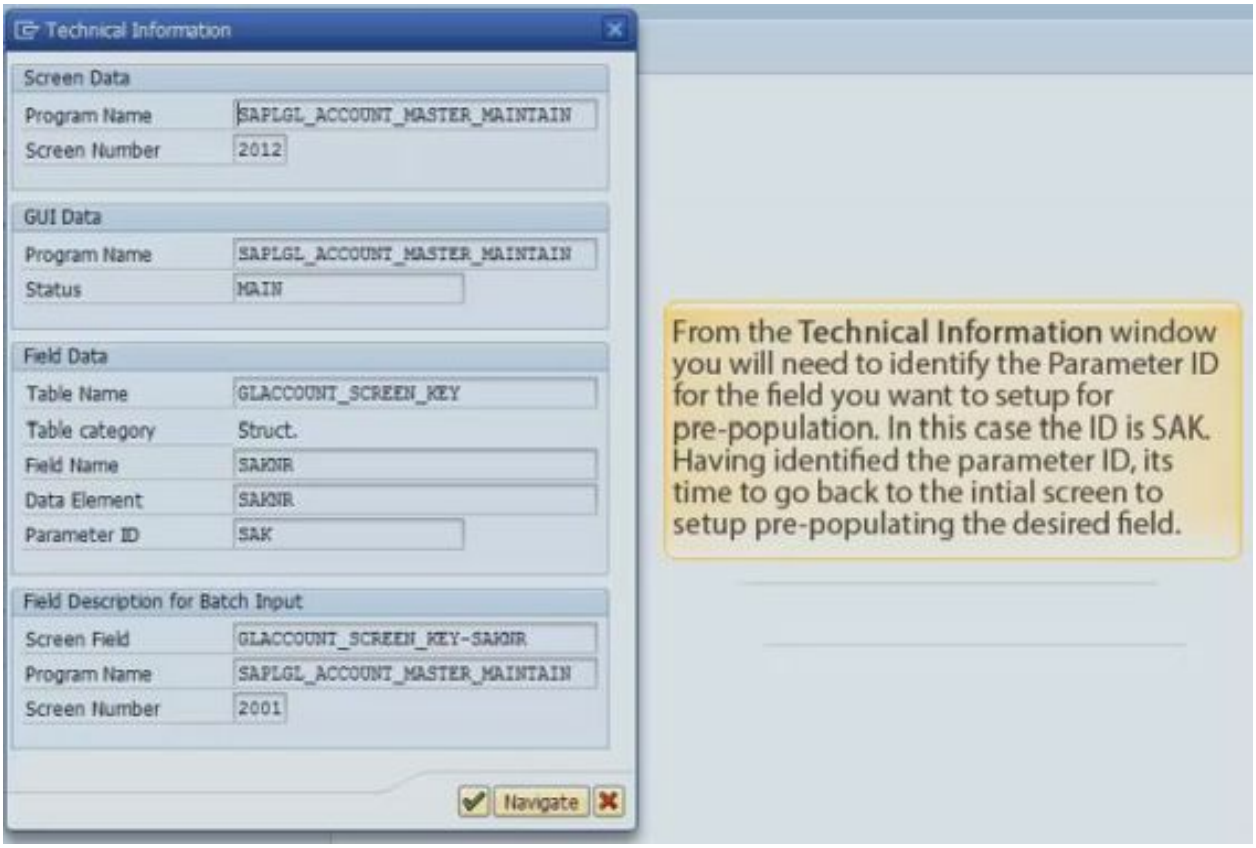
Chapter 12: Pre-Populating Parameters for SAP Fields

In this chapter, we will cover how to pre-populate fields in a transaction that a user utilizes on a regular basis in order to avoid having to fill them in every time the user needs to utilize them. First, the user needs to pick a transaction in which he wants to setup pre-populated fields. As covered in previous chapters, a transaction can be accessed via either the Menu Tree or the Command field. Here, we will demonstrate using transaction FSP0, setting up the G/L Account Code as a pre-populated field.

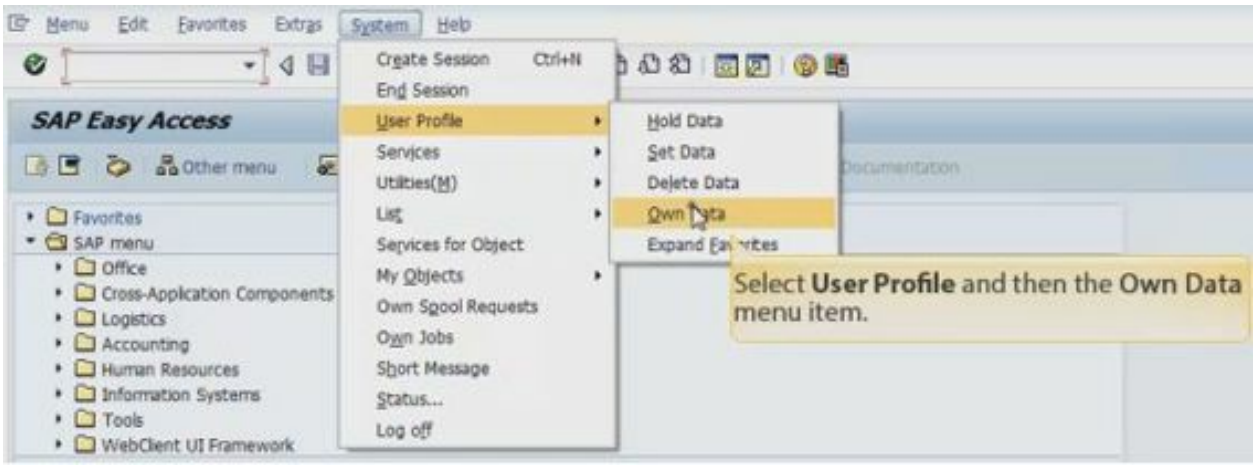
Using the match code search from previous chapters, the user finds and selects the desired G/L account code from those available.

Upon inputting this necessary data, the user presses the F1 key on the keyboard to call up the Performance Assistance Help window. This screen provides a brief explanation of what the G/L account code is used for. From there, the user selects the Technical Info icon.

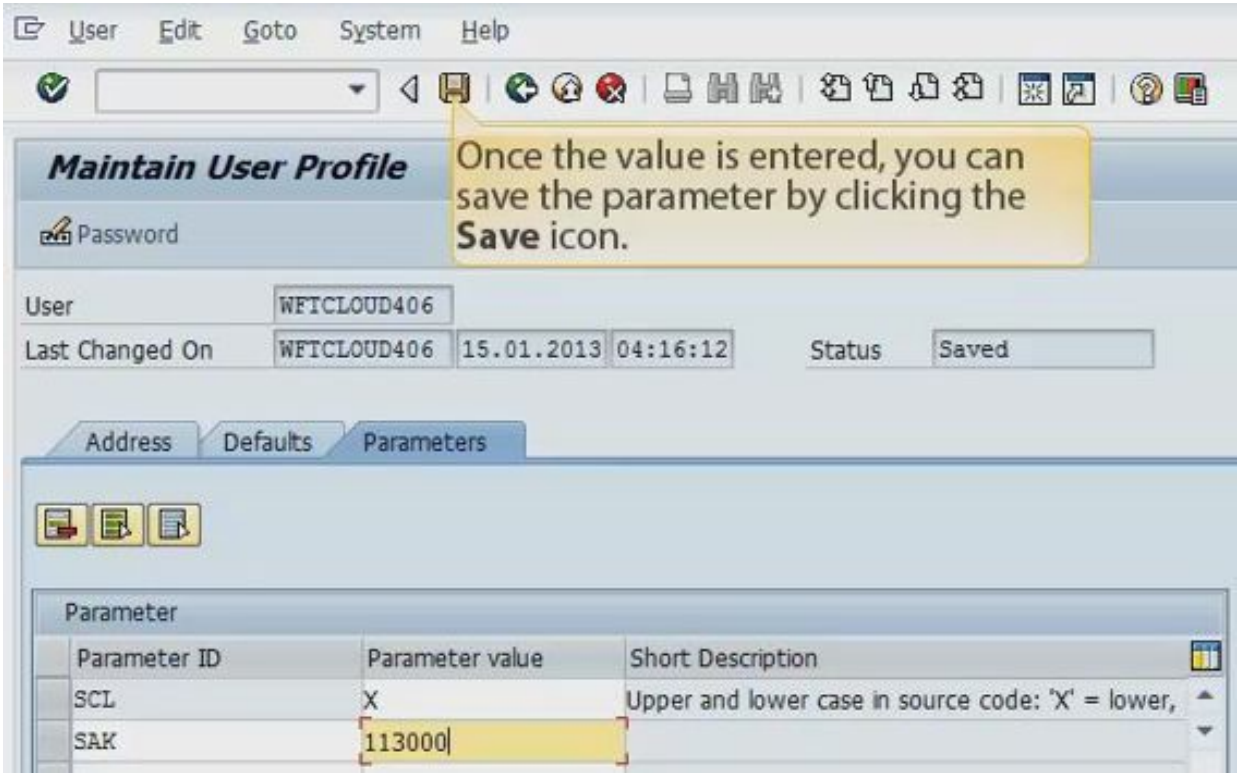
The Technical Info icon brings up the screen, containing the Parameter ID for the field the user wants to setup for pre-population.



Upon getting this information, the user should go back to the initial screen to set up the pre-populated field for the G/L account code. The user returns to the Easy Access screen, and then selects the System menu option. From there, navigate to User Profile, and Own Data.



To set up parameters used for pre-populating fields, the user navigates to the "Parameters" tab. Here, the user inputs the parameter ID obtained. The user should also enter the parameter value they want to be pre-populated in that field. Then, the user clicks Save and the pre-populated parameter is applied.



Remember to check the Status bar at the bottom of the screen to check for the system message confirming that the data has been saved. After setting the parameter, the user can return to the transaction and check to ensure it is running properly.

Users can set up as many parameters as they wish, including commonly used items such as a sales organization field, company code, or cost or profit center fields.

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