Work smarter in SAP with these insider secrets

- The possibilities with an SAP ERP are almost endless but it's vast functionality can make it difficult to master. Instead of spending years on covering secret tips and tricks, we're going to supercharge your SAP ERP skills in just one course. Hi there, I'm Justin Valley. I've been training SAP for over 13 years and I'm excited to share the most helpful SAP ERP tricks that I've learned. First, we'll improve your experience and save valuable time by personalizing settings like your local layout and profile parameters then we'll look at features like creating personal lists and using lesser known command field shortcuts to help you navigate seamlessly through the software. From there, we'll hone your reporting selection criteria skills using search variants in the multiple selection tool. And finally, we'll perfect how you handle the results of those reports by covering everything from sorting and filtering to creating global layouts. So if you want to take your SAP skills to the next level, join me to maximize your talents in SAP.

What you should know

- [Instructor] Ready to enhance your SAP ERP skills? If so, this course is for you. We'll be taking a deeper dive into SAP ERP's functionality. To get the most out of this course, it's important to understand the fundamentals covered in SAP ERP Essential Training. Understanding the basics of how SAP ERP works will give you a solid foundation for improvement, and having SAP navigation and reporting skills will help you follow along with what's happening on the screen. The transactions and reports demonstrated in this course are done in the GUI of SAP S/4HANA 1709. Don't worry if you miss some details on the first watch. I'm providing a reference guide with some of the tips and tricks we're covering in this course. With all these foundations in place, let's dive in.

Customize local layout: Visual design

- [Instructor] The visual design in SAP is highly customizable. Some of the different themes can make SAP look like a completely different software. We want to find a visual design that's going to help you work most effectively. To change visual design, we'll start from the SAP easy access screen, we'll go to More, SAP GUI settings and actions, Options. Our current theme is set to the SAP Signature Theme. The number of available themes changes depending on your SAP version. We'll click the drop down and see that we have eight available themes in this system. Let's take a look at the Enjoy Theme. When we select a theme, the system gives us a preview. Let's say we want to try this out, so we'll apply our changes, and click OK. For our theme to change, we need to log all the way off. We'll click Exit and say that yes, we do want to log off. We also need to close our Logon launch pad. We'll now double click again on the SAP Logon icon. And we can see immediately that our theme looks different. Let's log back into the system. We'll double click our system, we'll enter client, the User ID, which is student001, and password. We can see that our SAP toolbar is completely different. Instead of many of the words on the buttons, it has icons. To get back to adjust our themes, we have to go to our customized local layout icon and click Options. I'm not a huge fan of the Enjoy Theme. It looks a little dated to me, but I know some people who really love it. One big benefit of the Enjoy Theme is that you can change colors for each system. To do this, we go to Colors in System, and choose the color setting we like. We'll try Blooming Desert, and click Apply. The font can also be changed if you have a strong preference to a font that may be easier for you to read. One note is that if icons get really small, it has to do with a high resolution setting. The simplest way to fix this is to use the SAP Signature Theme, which happens to be my favorite. The visual design in SAP is highly customizable, and you can

change it to how you work most effectively. I encourage you to experiment and see which of these visual designs works best for you.

Personal options

- [Instructor] Let's take a look at setting up some personal options in SAP. These personal options make life easier when you're working within the system. First, we'll look at showing technical names. Technical names are another name for the transaction code. To demonstrate, we'll drill down in the Logistics folder. We'll expand Materials Management, Purchasing, Purchase Order, Create, and then we see Vendor Supplying Plant Known. What we don't see here is the transaction code. To see our transaction code, we go to More, Extras, Settings, and we click the checkbox next to Display Technical Names. We press enter. And we'll drill down again. Logistics, Materials Management, Purchasing, Purchase Order, Create. Now we see next to Vendor Supplying Plant Known our transaction code, which is ME21N. This is much faster than drilling down through the menu every time you want to enter a transaction. Let's go into that transaction code now. This takes us in to our Create Purchase Order screen. I'm going to select Stock Transport Order. We're now going to look at why tooltips are important. Let's say we don't know what this red stop light is for. When we hover over it, we get no information. Let's turn on our tooltips. To do so we'll go to More, SAP GUI settings and actions, and then Options. From here we'll expand the Interaction Design, and go to Notifications. Under our Tooltip area, we see that it's selected as No Tooltip. We'll click the dropdown, and choose Medium (0.5 seconds). The Show tooltip on focus change setting shows a tooltip whenever you tab to a new field in SAP. We'll leave that off for now. To apply this, we'll click Apply, and OK. Now let's go back and hover over our red stop light. The tooltip is now showing us that we have a document header messaging and there's an error there. Tooltips can

be really handy when you're trying to understand what the system's trying to tell you. Lets look at one more setting. Let's turn on keys within dropdown lists. Keys within dropdown lists are useful if you're going to be dealing in certain transactions often. We'll again click the dropdown for our order type. In our dropdown list, we see Standard PO, Stock Transport Order, and Stock Transport Order Delete. To turn on our keys within dropdown lists, we go to More, SAP GUI settings and actions, and Options. Again in the Interaction Designs menu, we go to Visualization 1. Here within the controls menu, we'll click the Show keys within dropdown lists. We'll also select the Sort by keys within dropdown lists for most efficient keyboard input. This is going to work to sort out keys within the dropdown list alphabetically. We'll click Apply, and OK. Now when we click the order type dropdown, we see NB Standard Purchase Order, UB Stock Transport Order, and UD Stock Transport Order Delete. When we click in the field and type UD, we can see that our cursor automatically goes to the UD Stock Transport Order Delete. These keys within dropdown lists can save you clicks in transactions that you're using often. Setting up these personal options are extremely helpful to navigate efficiently and not need to use your mouse so much.

Changing password

- [Instructor] Changing your password in SAP is not straightforward. There are two places to change your password in the SAP GUI. The first is before you log in, from the SAP log in screen. To change it here, we enter our client, user, and password. Instead of pressing enter to log in, we click the New Password button. From here, we would enter our new password, repeat the new password, and press the Transfer button. We'll cancel for right now and the system automatically logs us in. The second way to change your password is after the login. To do so, we'll enter More, System, User Data. You can

also navigate to this screen any time using transaction code SU3. To change our password here, we'll click Password. The screen here is a little different. Because we're already logged in, we need to enter our old password. Then we need to enter our new password and a second time, repeat that password to confirm it. When we're finished, we'd press the Change Password button to confirm these changes. We should note that the password policy is set up individually by each company using SAP. There'll be a minimum and maximum number of characters, as well as rules about special characters and capitals. It's easy to forget where you can change your password in SAP. It's nice to remember that there are options to change your password both before and after login.

User profile address data

- [Man] Maintaining your personal address information in SAP is important. Especially at large companies. It helps with the audit trail, and it allows others in the organization to figure out how to contact you. To maintain our personal information we'll start at the SAP easy access screen. From here we'll go to more, system, user data. We should note that you can navigate to this screen anytime using transaction code S U three. By default we're takin to the address tab. First we can edit our personal details, like name or language. We'll update my language to En English. Next we'll scroll down for work center. The work center area has roll based information including job function and physical office location. Next is the communication section. The email address field is grayed out and most users will never have access to change this. This is done so the security in audit trail stay intact. Check with your system administrator if you need to change your email. We'll add our mobile phone number. I enter the number next to mobile phone. At the top of the screen we can see the last time our user profile was changed, it was changed by student zero, zero, one which is my log in ID, and it was

changed on November the third two thousand nineteen at twenty three thirty four. Let's save our changes by clicking save. We're taken back to our SAP easy access screen, and we have a success message that say's, user student zero zero one has changed. We've now maintained our user profile address data, so it's accurate, and so we can be reachable to others in our organization.

User profile defaults

- [Narrator] Maintaining user profile defaults is key, so the system is localized to your country and location. The defaults we'll look at include default language, decimal format, date format, time format, and time zone. To change this, we'll go to more, system, user data. We can navigate to this screen anytime, using transaction code, SU3. From the maintain user profile screen, we'll click the defaults tab. We can see that our log on language is set as EN, for English. This could be changed to any language you like. Next, we have decimal notation. Our decimal format is set to 1,234,567.89. This is the standard here, in the United States. Many European countries use the comma as a decimal separator and that can be found in the drop down menu. Next, is our date format. It's currently set to the Gregorian date, which is again the standard here, in the US, with the month first, followed by the day, and then the year. Again, the option to use the European standard, which is day, followed by month, followed by year, is available in the drop down menu. Next, we have our time format, which can be either set to 12 or 24 hour clocks. Ours is set as a 24 hour clock. One more aspect of time to look at, is personal time zone. Our time zone is set to Eastern Standard Time. We'll change it to PST, which is Pacific Standard Time. We should note, that large multinational organizations, that use SAP across many timezones, will often set this to UTC, which is Coordinated Universal Time. We can now save our changes. We're taken back to our SAP Easy Access screen, and we've received a

success message that the user, student 001 has changed. These user profile changes will stay like this, every time we log on to this system, with this user id. We will only need to change these if we move timezone or country.

User profile parameters

- [Instructor] Let's look at maintaining user profile parameters. This is one of my favorite tricks in the system for people who are going to use the same organizational data over and over. We're going to look at how to have these fields autopopulated. To demonstrate, we'll enter transaction va01. This brings us to our Create Sales Document transaction, and we can see our organizational data is completely blank including sales organization, distribution channel, and division. Let's assume we're going to be creating many sales orders, and this organizational data is going to be the same for every order. Let's look at how to have this information default in. First, we'll exit and go to More, System, User Data. We can navigate to this screen any time using transaction code SU3. From the Maintain User Profile screen, we need to enter the Parameters tab. In this screen, we enter our parameter ID in the left-hand column, our parameter value in the center column, and the short description will be autopopulated. Let's enter our division first. In the Parameter ID column, we'll enter SPA. Our parameter value is what we want our division to be defaulted as. We'll enter 10 for division 10. Next, we'll press enter. We can see that in our short description, division populated, and our division is going to be set with a parameter value of 10. Next, we'll enter sales organization. The parameter ID for sales organization is VKO. Our parameter value for sales organization we want to set to 1710. Again, we'll press enter. We can see that our short description has autopopulated to sales organization. Finally, we want to set our distribution channel. In the Parameter ID column, we'll enter VTW. Our

parameter value for the distribution channel we'll set as 10. Again, we'll press enter. Now we see the distribution channel has autopopulated in our Short Description column. We're now ready to save. We get a success message that our settings have changed. For these settings to take effect, we need to log off and log back on. We'll do this by clicking close and confirming that yes, we want to log off. Let's log back on. We'll enter client, user, and password, and now we'll enter back into our va01 transaction. We can now see under our Organizational Data that our Sales Organization is set as 1710, our Distribution Channel is set as 10, and our Division is set as 10. These fields are editable, but if you're usually working with the same organizational data, this can be a big time saver. This can be done for many other fields as well.

Setting a default printer

- [Instructor] Setting up the default printer in SAP in the user profile default screen is really helpful to get physical outputs from our system, and it's one of the first things to do when working in a new SAP system. To do this, we'll start from our SAP easy access screen and go to "more," "system," "user data." We can navigate to this screen anytime using transaction code SU3. From the "maintain user profile" home screen, we need to click the "defaults" tab. From here, we need to change our output device under "spool control." To do this, we'll search for available printers using the match code button. I'll remove everything from the output device search field and click "start search." At large organizations, there can be many output devices to find here. In this system, there's only two: local and LP01. We'll choose LP01. Next, we want to check the "print now" option. If left unchecked, the system retains printing requests in the spool system until they're released for printing all at once. We'll also check the "delete after output" box. This indicates whether lists are to be deleted immediately after printing. Otherwise, what has been requested to be printed stays in the

spool system until an expiration date. We'll now click "save." We're taken back to our SAP easy access screen, and we get a success message that our user Student 001 has been changed. For this default printer change to take effect, we need to log off and log back onto the system. Our default printer will now be set, and we can have physical copies of data from transactions and the reports that we run.

Navigating using SAP function keys

- Function keys are an advanced way of navigating around SAP. Function keys are the keyboard shortcuts that can be used on any given screen. Every transaction has different SAP function keys available. Let's take a look. We'll start on the SAP Easy Access screen. To see available function keys, we'll right-click. We can see that we have a big list of function keys here. The list we see has the function keys and the associated keyboard shortcuts. For example, to get to Help, we would press F1, or to log off, we would use Shift + F3. Now let's take a look at function keys inside a transaction. Let's enter transaction code va03 and press enter. To see our available function keys, we'll right-click. We see that Possible Entries is F4 so we'll click out and press F4. This brings up our Sales Document search screen. We'll close out of this. Next we'll look at how function keys can help you navigate between transactions. We can see right now that we're in transaction code va03. Let's right-click again to see our possible function keys. We see that we can list all our orders using transaction code Shift + F1. Let's click out, and on our keyboard we'll press Shift + F1. We can see that our function keys actually brought us to a new transaction. In this case, it's transaction code va05, which is our List of Sales Orders transaction. As we can see, function keys provide many options and shortcuts within different transactions. My suggestion is if you find yourself in a transaction frequently, start experimenting and see what function keys might be of use to you.

Using the system information dropdown

- [Narrarator] Many screens in SAP can look very similar. It can be hard to keep track of which transaction you're in, especially when in multiple sessions. The System Information dropdown is a fantastic navigational aide. To open the System Information dropdown, we have to expand it. We'll click Open System Information. The HS4 (1) 150 is our system information, but it's not really helpful. Let's click it to see our options. Here we can see our Client, User, Application Server, the Program, the Transaction, the Response Time, the Interpretation Time, and the Round Trips or Flushes. I set this, most frequently, to the Transaction. Right now, it's showing that we're in our Session Manager, which is the transaction for the SAP Easy Access screen. Let's enter another transaction to show how it works. We'll enter va01. We can see that our System Information bar now shows us that we're in VA01. Let's open a new session with the new transaction. To do this, we'll enter /o to open a new session, and then mm03. We can now see that we're in MM03 transaction, which is Display Material. If we tab between our different sessions by clicking Alt + Tab, we now have a handy reference point to know exactly which transaction we're in. The other time this can really come in handy, is when working in multiple clients. We could be working in testing, and a production client, for example. To set this to Client, we'll click the VA01, and now choose Client 150. If we were in multiple clients, whenever we tab between our sessions, we could see which client we were in, specifically. The System Information dropdown is a fantastic reference point when we're working across multiple sessions in our SAP system.

Copying and pasting in SAP

- [Instructor] Copying and pasting in SAP can be quirky. The ways to do it are not always consistent. First, let's look at how to copy and paste in a report. We'll enter transaction code va05, then press enter (keyboard key clicking). This brings us to our list of sales order report. We'll leave our selection criteria open and execute. (mouse clicking) To copy in a report results screen we simply left click and hover over the data we would like to copy. (mouse clicking) We then press Ctrl + C to copy it to our clipboard. (keyboard keys clicking) We can see the data that we've copied has now been turned into a grid. Let's go to WordPad to paste our data. Now, we'll press Ctrl + V to paste. (keyboard keys clicking) Copying and pasting works completely different when it comes to dealing with fields and transactions. To demonstrate, we'll go back to our system we'll enter /n to enter a new transaction. (keyboard keys clicking) And then enter transaction code va01. (keyboard keys clicking) And press enter. This brings us to our create sales document transaction. Let's say, we want to copy the sales organization field. We'll try it with our mouse. (mouse clicking) When we click, nothing happens. When we're in the transaction we have to use the code Ctrl + Y. (keyboard keys clicking) that turns our mouse cursor into a plus sign, which is commonly called a precision cursor. We can now highlight sales organization. (mouse clicking) Again, to copy we use Ctrl + C (keyboard keys clicking). And when we go back to WordPad (keyboard keys clicking) we can paste the information here with Ctrl + V. (keyboards keys clicking) In normal transactions we're, usually, going to need our precision cursor to copy and paste. Again, the shortcut for that is Ctrl + Y. As a general rule, the copy paste functionality is usually much more robust in reports than in transactions.

Using SAP help effectively

- [Instructor] There are two really useful ways to use SAP help functions. There are different help options for more general

information or for help in specific fields. First, we'll look at help for general transactions. This is called the SAP Help Portal. To get there from the SAP Easy Access screen, we'll click More, Help, SAP Library. This opens our default web browser and takes us to the SAP Help Portal. From here we can search for the help we want. Let's assume we want to create a sales order. We'll type, create sales order. And press enter. Our results are below and we want to find the create sales order instructions for the product and version we're working on. We'll scroll down, and the Create Sales Orders guide is what we want. This is the product we're using, SAP S/4HANA, but the version 1909 is not the version we're using. To see more options we'll click, Show all results. We'll scroll down and choose the Create Sales Order for version 1709. This gives us instructions for the geneal steps on how to create a sales order in our system 1709. Let's go back to our SAP system. Let's assume we want some more specific help. For instance, what does this specific field mean? To demonstrate this we'll go into transaction code va01 and press enter. We'll continue to create a sales document type for order type OR, a standard order. This brings us to our Create Standard Order Overview screen. Let's assume we don't understand what the field, Billing Block means. To get more information about this field, we click in it and press F1. This brings up our Performance Assistant screen. Our Performance Assistant screen gives us the definition of Billing Block in an SD Document where it says it indicates if the entire sales document is being blocked for billing, our procedure, and an example. You may want to apply a billing block to certain documents so the prices can be checked before further processing. This help is really useful in unfamiliar transactions where we need to understand what a field means. To recap, the two best help methods in SAP are the SAP Help Portal which gives us general information, where we have to search by the help we want, or the SAP Performance Assistant, where we click on a field and press F1 for specific information regarding that field.

Create SAP desktop shortcuts

- [Instructor] When there's transactions you're going to use every day, it can be a big time saver to create an SAP desktop shortcut, so you can click straight to that transaction. Maybe you're in charge of purchasing, and you want to create a desktop shortcut to create a purchase order. To do this, we'll navigate from our menu tree in the SAP Easy Access screen. We'll expand logistics, materials management, purchasing, purchase order, create. We see the ME21N Vendor Supplying Plant Known to create a purchase order. That's where we want to create our desktop shortcut. To do this we'll right-click on the ME21N, and choose create shortcut on desktop. SAP prompts us with the security message to see whether we're allowed to make changes. We'll say allow, and we get a success message, that says our shortcut has been created on the desktop. Now we'll log out. We're taken back to our desktop. We now have a new icon. We click on it once, and it shows it's our shortcut to the Vendor Supplying Plant Known. We'll double-click, window prompts us to ask what app we'd like to use to open this. We'll choose SAP GUE for windows. We get another SAP GUE security message, and we'll allow. Next we get our login screen, our username is auto populated with student001 and I'll enter our password. Next we'll press log on. We'll expand our screen, as we can see, after we logged on, we're brought directly into the ME21N, which is the create purchase order screen. Desktop shortcuts are very handy when you're always using the same transactions, and want to open them straight from the desktop.

Setting SAP start transactions

- [Instructor] Now we're going to set an SAP start transaction. This is a really useful trick for folks that would start most days in the system at the

same transaction and want to remove an extra step. Let's assume that we create sales orders almost every day, first thing. We create sales orders using transaction code VA01. To set our start transaction, we go to More, Extras, Set Start Transaction. In the transaction code field, we'll insert VA01. Then press Continue. We get our success message that shows that our transaction VA01 has been set as the start transaction. Let's log off to see if it worked. Press Exit, and confirm that yes, we want to log off. We'll now log back in, choose our system, and press Log On. We'll put 150 for our client, our User ID, which is student001, and then enter our password. Now, when we log in, we skip the SAP Easy Access screen and go directly to Create Sales Document in transaction VA01. The less clicks and key strokes, the better. SAP start transactions are great when you're always starting in a same transaction, and you want to save your valuable time.

Using the SAP transaction search menu

- [Instructor] What do you do if you don't know a transaction code? Well, if there's a transaction you haven't used in a long time and you can't remember the T-code, there's two ways to find a T-code within SAP. Let's say we want to create a material, but we forgot the transaction code. The first way is to use the Find button from the SAP Easy Access Screen. We'll click the Find icon and it brings up the Find in Menu Tree pop-up screen. In the Find field we'll type Create Material. Under the type of search we have the In Technical Name and In Texts both checked. That means we're going to search in the technical name and in the texts. Now we'll click Find. Our search has worked and we're brought to the MM01 Create Material transaction. I don't love this search as what you write has to be an exact match for as it's written in the system. The second way to search is by using a transaction code called search_SAP_menu and press Enter. This brings up our enter transaction code or menu text search screen. In the Enter

Search Text again we'll enter Create Material and press Continue. Our search has returned three results. The one we're looking for is the top one, MM01, which is Create Material. To go there directly from this screen, you can type /n for new transaction and then MM01. We're now brought into the Create Material initial screen. Sometimes we need to find the transaction code needed to execute or run a report. These two tactics will help you find them.

Searching using wildcards

- [Instructor] To use SAP effectively, we have to find the data we want to work with. Whether it's a business partner number or a material number, it's impossible to have all these things memorized. Wildcards allow a search when we only have partial information. Let's search for a business partner. To do so, we'll enter transaction code BP and press Enter. In the Maintain Business Partner screen, we have a worklist to the left. This is going to allow us to search. We're going to find our business partner by, we'll choose Name. We know that we need to find a business partner that has Penn, P-E-N-N, in the name because they're from Pennsylvania. So we'll type Penn and click Start. We get an information pop-up that says, "No business partner found." This is where our wildcards come into play. We'll type asterisk, then Penn, then asterisk. What this means to the system is that there can be anything in this business partner's name before Penn and there can be any characters after Penn as well. Now we'll click Start. We can now see that our search returned results with partner 1000290 and the description is West Penn Hardware. We can use wildcards in any searchable fields in SAP. These wildcards are a lifesaver when we don't want to go line by line. They save us a ton of time.

Creating a personal list

- Many transactions in SAP can be repetitive, where we're selecting the same options over and over again. Creating personal lists and fields can simplify our day-to-day work. Let's create one now. We'll enter transaction code VA01. And press enter. This brings us to our create sales documents screen. Let's assume there are only three types orders we're going to create on a regular basis. Let's click our match code button to see our available options for order type. We see we have 25 entries here. But we only regularly use three of them. Let's create a personal list. To do this, we'll select the entries we do use. We'll choose OR for standard order and then press insert in personal list. We'll do it again for RE for returns. Insert in our personal list. And finally, we'll do CR for credit memo request. And insert in our personal list. Now we'll close. This time, when we choose our match code button again, we see we're open to our personal value list, with only three different types of entries found. We can edit this personal value list at any time by highlighting our entry and clicking "delete from personal list". Also, if we want to return to our global list, we click the globe icon. And again we see all 25 entries from our global list. These personal value lists make our lives easier because they simplify our available options in fields in our frequently used transactions.

Using command field shortcuts

- [Instructor] For regular users of SAP, the command field gets a lot of attention. We're going to look at typical command field shortcuts and then some of the more advanced ones. Let's start with the common ones. We'll enter transaction mm03, and press Enter. Our material's already populated with the material that I was just in. We'll click Select Views and choose Basic Data 1. And continue. We see that our cursor is in the TESTRAW1 Material field. We're going to use the Control and / buttons together. That puts our cursor directly into the command

field. Now we want to open a new transaction from the same session. To do this, we'll press / + N for new transaction and then enter our transaction code. We'll use va01, and press Enter. Now, let's open another transaction but in another session. To get our cursor back in the command field, we'll press Control + /. We'll enter / + O to open a new session, and then enter BP, that's transaction code for Business Partner, and press Enter. We can now see that our Create Sales Document and Maintain Business Partner transactions are open in two different sessions. Next, we'll use the shortcut for Overview. We'll press / + O, and press Enter. This brings up all the sessions we have open. To delete a session, we choose it, and then press Delete Session. We're now left only with our Maintain Business Partner session. We could also generate a new session. We'll go back to / + O, and press Enter. From here, we'll press Generate. This opens up a new session for us straight at the SAP Easy Access screen. Next, we're going to use a shortcut that's going to call a transaction in the same session where the initial screen is skipped. This shortcut is the asterisk. So we'll do / + * and then mm02. It brings us directly into our Select View screen, skipping the first. This last shortcut, I must advise you use with caution. This will log us off the system directly without a warning message. It's really useful when it's Friday afternoon and you want to get off your system as quickly as possible. But it will not prompt you to save. So make sure all your information has been saved prior. To do this, we press / + N, EX, and press Enter. You can impress your friends and coworkers with these command field shortcuts. But please, make sure your work is saved when you're using them.

Finding customized transaction codes

- [Instructor] Most of the time SAP transactions are used out of the box. Company's business processes are mapped in the line to standard SAP transactions, but sometimes a business has special

requirements. When this happens, custom transactions are developed and their associated transaction codes always start with a Y or a Z. In large organizations, sometimes it's difficult to figure out what custom transactions have been developed. To find out, we can use transaction code se16 and press Enter. This is the data browser transaction. This transaction is used to look up information in tables. Depending on your company, you may not have access to this transaction code. We want to look up the table called tstc and press Table Contents. This table has a record of all the transactions in the system. To search here we'll use our multiple selection button. In our select single values, we'll use Y and then the asterisk and then Z and the asterisk. This is telling our system to search for all transaction codes that start with Y or with Z and have anything after them. We'll press Copy and now we can execute. Our search has returned 53 results. That means we have 53 custom T-codes in this system. The first column is the actual custom T-code. As we can see, they either start with a Y or with a Z. The last column has a description about what each of these custom transactions do. This is a really handy way of seeing exactly what custom SAP transactions your organization is running.

Using the multiple selection tool

- [Instructor] SAP reporting functions are only as powerful as the selection criteria we enter. The selection criteria is how we narrow down our reporting results. Let's take a look. We'll enter transaction called va05 and press enter. This brings us to a list of sales orders report. To start, we won't enter any selection criteria, and we'll execute the report as it is. With no selection criteria, our report returns 99 results. Okay, let's narrow this report down. To do so we'll go back. First, we're going to enter our sold-to parties that we want to include. To do this, we use our multiple selection tool. We press on the multiple selection button and it brings up multiple selection for sold-to party. First, we want to include

two sold-to parties. We'll include party 17100001 and 17100004. We'll press the copy. Now we can see our multiple selection icon has changed. When we hover over, it shows multiple selection active. Now we can execute our report. With our new selection criteria, our report has been narrowed down from 99 entries to 29 entries. Let's get even more specific. We'll go back again to our selection criteria screen. Now we want to enter a document date range for when these sales orders were created. Again, we'll press the multiple selection tool, this time next to the document date field. We'll choose the select ranges tab, in our lower limit we'll enter March one 2018, in our upper limit we'll choose May first 2019, and copy this in. Let's execute this report again. Our new date range has limited our results down to 20. Let's get even more specific. We'll go back to our selection criteria screen. This time we want to exclude values. We want to exclude two materials from our report results. To do this, we'll go to our multiple selection tool next to material, and choose exclude single values, we'll enter material rm15 and stock underscore item. Similar to excluding single values, we can also exclude ranges. This is especially useful for document numbers that are assigned in order or date ranges we want to exclude. Let's copy our excluded values into our material field. We now have a new icon next to material. Let's hover over, and it shows that our material is not equal to a multiple selection. Let's execute to see the list of sales orders remaining. With all of our selection criteria, we've narrowed our report results down to 17 entries, making these results much easier to work with. Reporting in SAP is powerful when we can be as specific with our selection criteria as possible. And the multiple selection tool is very important in achieving that.

Create a search variant

- [Instructor] Our business needs will sometimes dictate that we run reports with the same criteria over and over again. A handy time-saving

tool for running reports with the same selection criteria is called a search variant. Let's enter transaction code VA05. And press enter. This brings us to our list of sales orders report. Let's assume we need to run this report on a weekly basis to see how many orders come from one customer for a specific material. We'll enter our sold to party, which is 17100001. And our material, which is SM0001. Next, we'll add our sales organization. We'll scroll down to our organizational data. And enter 1710 in sales organization. Next, in distribution channel, we'll enter 10. We're now ready to save this variant. To do so, we'll go to the top of the screen and click save as variant. This brings up our variant attributes screen. For our variant name, we'll enter GD orders. And in description, we'll use Georgia Distribution serv ord, which is short for service orders. Next we'll choose protect variant. This ensures that only the person who created the variant is able to change or delete it. We're now ready to save our variant. We'll click save. Our system gives us a success message saying that variant GD orders has been saved. To ensure this works, let's go back to our SAP easy access screen by pressing exit. We'll re-enter the transaction with VA05 and press enter. We now have a new button as we've created a variant. It's called get variant. We'll press it now. And we see our variant name, GD orders, with a short description we created called Georgia Distribution service orders. We'll click it and select choose. We can see that our sold to party and material have now been populated. And when we scroll down, in our organizational data our sales organization and distribution channel have been populated with the information from our variant. We're now ready to execute our report. We can see that our sales order report using our variant returned 11 entries. Our sold to party and material are exactly as we entered in our search variant. Search variants can be big time-savers for reports we run frequently with the same selection criteria.

Deleting a search variant

- [Instructor] Search variants are really handy for running reports with the same selection criteria, over and over again. But what happens when we no longer need a search area? Let's look at how to delete a search variant in SAP. Let's enter transaction code VA05, and press Enter. This brings us to our list of sales orders selection criteria screen. Previously, we've created a variant for sales orders by specific customer for a specific material. Let's assume that that customer has gone out of business and we want to delete our search variant for them. To do so, we'll go to More, Goto, Variants, Delete. We'll choose to delete our variant called GD ORDERS, which is the Georgia distribution service order variant. We'll click it, and click Choose. SAP gives us a pop up asking whether we'd like to delete this variant in all clients, or only in the current client. As this customer has gone out of business, we'll choose in all clients, and select Continue. We get another pop up from the system, confirming that we want to delete this variant, and we'll choose Yes. The system gives us a success message saying the variant GD ORDERS has been deleted. When we go back to our menu and choose More, Goto, Variants, our delete option is now inactive because there are no other variants to delete. When our business needs change and we no longer need a search variant, we can delete them and keep our variant lists free of clutter.

Running reports in background

- Let's talk about running reports in the background in SAP. Now when and why would we want to do this? Running reports in the background is nice because it does not disrupt your session and you can continue to work. Big reports can take many minutes and disrupt your workflow. Let's enter transaction code VA05 and press Enter. This brings us to our list of sales orders report. We're going to leave our selection criteria empty. And now to run this in the background we'll choose More, Program, Execute in Background. This opens our background print parameters screen. Under Windows device we'll choose Microsoft print

to PDF. In our properties our print time is set to immediately. We're good with this so we'll click Continue. The start time screen now pops up and we'll choose Immediate for an immediate run. We'll now click Save. We now receive a success message that the background job was scheduled for program SD sales document view. We can now continue working and doing whatever we want in the system but when we're ready we'll enter a new transaction to get our results. We'll enter /n for new transaction and then sp01 and press Enter. This brings us to our output controller spool request selection screen. This transaction is auto-populated with our created by which is student 001 which is our login and created on November 4th, 2019, which is today. We can now execute. Our list of spool request results returns with our request that was made on November 4th, 2019, at 3:16 p.m. The title is A List of Local SD Sales. We could print this report directly by pressing the print directly button or we can view by pressing the ABAP list button. This brings us to our list of sales orders which has 99 sales orders included. Running reports in the background is really useful when running a bunch of reports that have a lot of data. It doesn't interrupt our work but it gets us the information we need.

Sorting reports

- [Narrator] Sometimes, we need to manipulate our report results to make our data more meaningful. The sort function is a great way to move numerical, or date fields to see data in order from oldest, biggest, smallest, or newest. Let's sort a report in our system. First, we need a report with some data. We'll enter transaction code VA05 (keyboard typing) and press enter. This brings us to our list of sales orders report. We'll run this report, enter a selection criteria by pressing execute. Our results turned out 99 entries. To make our data a little easier to work with, I'm going to optimize our column width. To do that, I'll right click in the report and choose optimize width. In our first sorting scenario, we want to see the order line item with the largest net

value. We'll click in the column titled net value, right click and choose sort in descending order. (keyboard typing) We can see a little red arrow in the net value item column. That shows that our sort is descending, because the arrow is pointing down. We can see that our largest order is for $110,000 because it is at the top of our sorted list. In our next scenario, we want to see the oldest order in our system. To do this, we'll go to the document date column, click in the column, and then choose the sort in ascending icon. (mouse clicks) The oldest order in our system is from March 4th, 2018. We can also sort by multiple fields at once. To do this, we click the change layout icon. We then choose the sort order tab. We'll remove our document date sort by clicking on it, and then clicking on the right arrow to move it back to our column set. Now we'll move our net value over to our sort criteria by clicking it and choosing the left arrow. We'll also move the order quantity over to our sort criteria by clicking it, and moving it to our left. We want both of these columns to be sorted in descending order. To do so, we'll click the radio button under the descending icon. The system reads these instructions in order from top to bottom. The system will sort by net value first, and then by order quantity. If two net values are equal, then the order quantity will be sorted descending. We'll click adopt to apply our sorts. Order number 99 and order number 115 both have a net value of 2500. But the system displays order 99 first, because the order quantity of 50 is more than 40, and we set the quantity to sort descending. Sorting is a powerful way to manipulate reports that have quantitative data in SAP. Especially when we want to see the data that is oldest, biggest, smallest or newest.

Filtering reports

- [Instructor] Filtering is a very useful tool to narrow report results when the report has been run too broadly. It allows us to drill down and see the more narrow results that we define. To filter, again, we need some data. We'll enter transaction va05 and press enter. This brings us to our

list of sales orders report. We're going to execute this report without any limitations by pressing Execute. We've run our report and it's returned 99 entries, or 99 sales orders. Let's make a filter. We can filter by as many fields as we like. Filtering is a two-step process. First, we have to decide what we want to filter by. Let's say we want to see all sales orders to a specific sold-to party, or customer, that are for up to 1,000 US dollars. First, we click the Set Filter icon. Our first step is to Define the Filter Criteria. From our column set list, we'll choose Sold-to party, and press the left arrow to move it into Filter criteria. Next, we'll choose Net Value and press the left arrow. We're now ready for step two, which is defining our values. We'll click the Define Values button. For our Sold-to party, we'll enter business partner number 17100001. Our Document currency comes over with our Net Value criteria. It's set to USD for US dollars, but we could change this if we wanted. In our Net Value, we said we wanted to have all sales orders included up to 1,000 US dollars, so we'll enter a range of zero to 1,000. We can now press Execute. To get a better look at our data, we'll optimize our width by right-clicking and choose Optimize Width. We have 15 sales orders that meet our filter criteria. We can see that all our sold-to parties are the same. We can also see that all of our net values are between zero and 1,000 dollars. If we wanted to keep our filters active but adjust them slightly, we could again click the Set Filter button. With an active filter, we get a new icon. It's called the delete filter icon. When we click it, it removes all active filters. Filtering is similar to narrowing your report search criteria, but, in this case, it's done after you've already run the report. Filtering is a really useful tool to drill down within your report datasets.

Totaling and subtotaling reports

- [Instructor] Totalling columns and reports help us understand our data from an aggregate standpoint. It can help us understand the performance of whole areas of the business instead of just on a line by

line basis. Let's look at how well our sales department is doing so far in 2019. To do this, we'll enter transaction code VA05 and press Enter. In our selection criteria, we'll enter OR for order type, which is a standard sales order. We'll also enter data in our Document Date. We'll make a range starting January 1, 2019 to today's date, which is November 5, 2019. We'll run our report by pressing the Execute button. To make our data easier to work with, we'll optimize the width of columns. To do this, we'll right-click and choose Optimize Width. Again, we want to see the total net value of sales orders from our company in 2019. To do this, we'll click in the net value column, and click the sigma icon, which totals our column. We've totaled our net value, and our column shows us this with a sigma next to the NV. We can also see at the bottom of the report that our total net value for 2019 is $20,475 US dollars. Now we want to see which product we sold the most of in 2019. To do this, we'll click in the Material column, and we'll click the sigma over sigma icon, or subtotal. The Material column has now been grouped by material. Now we can see subtotals. For example, our material FG-MAT-0 makes up $10,250 of our sales in 2019. Material RM15 on the other hand only makes up $80 US dollars in sales in 2019. Totaling and subtotaling can lead to great insights when looking at data from a comprehensive viewpoint.

Freezing columns

- [Instructor] Freezing columns helps us in reports when there is a lot of data on the screen and we want to keep our eyes on a specific column. Freezing columns in SAP works very similar to the freezing function in Excel. To get some report data, let's go to transaction code VA05, and press enter. We're going to execute our report with open criteria. To better demonstrate freezing columns, we want a lot of columns on our screen. To do this, we'll choose select layout and, then, choose the orders schedule layout. Our scroll bar has become active, meaning we have a lot of columns hidden to the right of our

report. We want to look at our data as it relates to the Sold-to party, our customers. To move our Sold-to party all the way to the left, we'll choose change layout and from our display columns list, we'll choose Sold-to party, and then click the double-up arrow, which will move this column to the top. And, then, we'll click adopt. Now, to freeze this column, we'll right click and choose Freeze to Column. The black solid line denotes this column is frozen in the report. We can now see, that as we scroll to the right, our Sold-to party stays frozen. To unfreeze our column, we can right click it again and choose unfreeze, or we can go to more, settings, columns, unfreeze columns. One more trick that's really helpful to make the data easier to consume in a large report is the optimize width function. To optimize the width a report, right click anywhere in the data and choose optimize width. Our report is now much more compact. In fact, we've got everything on one screen without needing to scroll left or right. The optimize width function and freezing columns can really help make report results easier to understand when you're working with large data sets.

Drilling down in reports

- The drilling down function in SAP reports transforms data from being passive, where we're only taking in information, into data we're able to change. Let's take a look at a report. We'll enter transaction code VA05. And press Enter. This takes us to our list of sales orders report. We'll run our report with open criteria by pressing Execute. To make our data easier to work with we'll optimize the width of columns by right clicking, and choosing Optimize Width. In our first row, we've got a large order for a net value of $8300. Let's say we wanted to look directly at that order. The drill down function is based on the primary component of that report. In our example, we're in the list of sales order report. So, our drill down is going take us into the sales order instead of it taking us into information about the sold to party or the material. We drill down by double clicking anywhere on that row. We're taken directly into our

change order transaction VA02. That means we actually edit our sales order directly from this screen. To get back to our report results, we'll click the back button. One more trick, if you want to drill down into some other master data that might be referenced in a report. Click on the line you to drill down into. We'll choose the first line. And then go to More. Environment. Master Data. From here, we could drill directly into this orders Customer Master, the partner address, or the material master. Drilling down is really useful when you're reporting and you want some more specific information. Or you need to actually change the data that is showing in the report results.

Create a global layout

- [Instructor] Layouts in SAP define how report results are presented to us once they are run. Creating and saving layouts can take a little bit of upfront work to make report results as useful as possible. Functionality in SAP allows us to save the layouts globally. This means a layout you create can be shared with your colleagues and vice versa. Let's create a layout. We'll go into transaction va05 and press Enter. We're going to leave our selection criteria open, and press Execute to run this report. This is a list of all the sales orders in our system. SAP lays out our report results in what it assumes is going to be useful for us. But this is not always the case. Let's change our layout. To do this we'll press the Change Layout icon. Our layout is currently a standard one that's created for this report from SAP. It's called 1SAP Order dash Items. The first thing we want to do in our report is add columns. We'll add the Sold to party name by clicking it from the Column Set. And then pressing the Left Arrow. We'll also add the Material Description column. We'll select it and again choose the Left Arrow. Now we're going to change the order of our display columns. We want our Sold to party name to be right after Sold to party. To do this we'll click the Sold to party name, and click the Up Arrow until it's next to Sold to party. We'll do the same for Material Description and move it next to Material, by clicking it and pressing the

Up Arrow. Next we'll assume we want the total net value every time we run this report. To make that active we'll click the checkbox in the Summation column. Next we'll add some sorts. To do this we'll click Sort Order. We want to see our newest orders first. To do this we'll select Document Date, and click the Left Arrow to add the sort criteria. We want the Document Date to sort descending to show the newest orders first. We can also change the filters or view by clicking the Filter and View tab at the top of the screen. Next, we'll go into Display. There's many display options we can choose here. My favorite is the With optimum column width which I'll check to make active. We're now ready to adopt our changes. To do this we'll click the Adopt button. We can see that our columns have been added, both Sold to party name and Material Description. We can also see that our Document Date column has been sorted descending to show our newest order first. Now we'll scroll down to the bottom of the screen. Our white rows at the bottom of the screen show us our total net values, 1,683 euros and 260,495 U.S. dollars. We're now ready to save this layout. To do these we go to our Save Layout icon. In our Save as screen we're going to change this layout's name. We'll enter /LIL. SAP requires the forward slash to show that this layout was user generated. We'll change the name to LinkedIn Learning. The User Specific is left unchecked. That means that this is going to be a global layout available to all users in the system. The default means that this'll be the default layout used whenever this report is run. We're now ready to press Adopt to save our changes. We get a success message in the bottom of the screen to show that our layout has been saved. To Show that our layout has been saved we'll click Select Layout. We can see that our layout has been saved, and it is marked as the default setting. This is a global layout that anyone in our organization with access to this report can use. Taking the time to set up global layouts allows powerful visibility into the report data that matters most to your organization. They ensure everyone has the same important information and can collaborate on business decisions from an informed place.

Deleting a layout

- [Instructor] When reporting needs shift, certain layouts can become unnecessary. Let's look at deleting a layout that is no longer useful. To do this, we'll enter into transaction VA05 and press enter. We'll run this report with open selection criteria by pressing execute. To delete our layout, we'll go into more, settings, layout, administration. Let's say we want to delete our LinkedIn Learning layout. To do so, we'll click the check box to the left, and choose delete layout. By deleting that layout, we no longer have a default setting. Let's set one now, by clicking next to 1SAP, and choosing define default setting. We're now ready to save our layout changes. To do this we'll press save. We get a confirmation saying that our layout changes have been saved. Business priorities change. Layouts that once provided value, may no longer be worth keeping. Deleting layouts is straight forward when they are no longer useful to your organization.

Sharing reports

- Sharing report results can be really important at companies where not everyone has access or has the knowledge to run the required report. Let's take a look at how to share report results. We'll enter transaction code VA05 and press Enter. We'll now run our report by pressing Execute. This brings us to our list of sales orders with 99 entries. The mail recipient function which is reached by clicking the envelope icon can work to directly email a recipient at your organization. One thing to be aware of is this functionality is often not set up at companies. The other way to share the results is the export the report to Excel. To do this we'll go to More, List, Export, Spreadsheet. From the Select Spreadsheet screen choose what format is going to work best with your version of Excel. We'll leave ours as the XLSX type. Next we'll click Continue. This brings up a Save As

prompt. We'll save this file as Sales Orders November 5th. Before clicking Save, we'll click Desktop and choose Save. SAP prompts up with a security screen. The system is trying to create the file. That's great, so we'll click Allow. Another SAP security screen comes up. The system is trying to execute the program to display the file. That's also fine, we'll click Allow. Our saved Excel report automatically opens in Excel. We can now attach this to an email and share with a colleague. There are a few ways to share report results in SAP. The most consistent and easiest to work with is saving as a spreadsheet and then sharing manually.

Printing reports

- [Instructor] Report data is sometimes best viewed on a hard copy, printout format. Let's look at printing reports in SAP. To do this, we'll enter Transaction Code VA05 and press Enter. This takes us to our list of sales orders report. We'll leave our selection criteria open and press execute to run the report. To print, we'll choose more, list. We could print directly from this screen. For our purposes, we'll choose print preview. We're happy with how everything looks here, so we'll chose print. Our output device is set as local. Under Windows device, we'll choose the drop-down menu and select Microsoft print to PDF. Our print time is set to print immediately, which is exactly what we want. We'll now press continue. This brings up our save print output as. We'll choose the desktop and save this as our list of sales orders and press save. We receive a success message that our spool request has been sent to the SAP printer, the local printer. Let's go to our desktop. We'll minimize. And we see we have our list of sales orders PDF created on our desktop. Let's double click and we'll choose Microsoft Edge. We can now see what the hard copy of this PDF report would look like when it's printed out. Printing reports in SAP is flexible enough to give us the output we need in a format that's useful to us.