

Creating Transaction and Screen Variants



Applies to:

Tested on SAP version ECC 6.

Summary

This article explain a way to create Transaction and Screen Variants to change screen layouts. And how to assign those transactions and screens variants to a group of users.

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Introduction

Transaction variants can be used to simplify transaction flow by:

- Inserting default values for fields
- Hiding and changing fields to read only
- Hiding and changing the attributes of tables of control columns
- Hiding individual menu functions
- Hiding entire screens

And a transaction variant is made up of a series of screen variants.

Screen variant contains field values and attributes for exactly one screen. A screen variant may be assigned to multiple transaction variants and it can also be called at runtime by a program. The different possibilities for calling screen variants guarantee great flexibility of use.

Transaction and Screen Variants

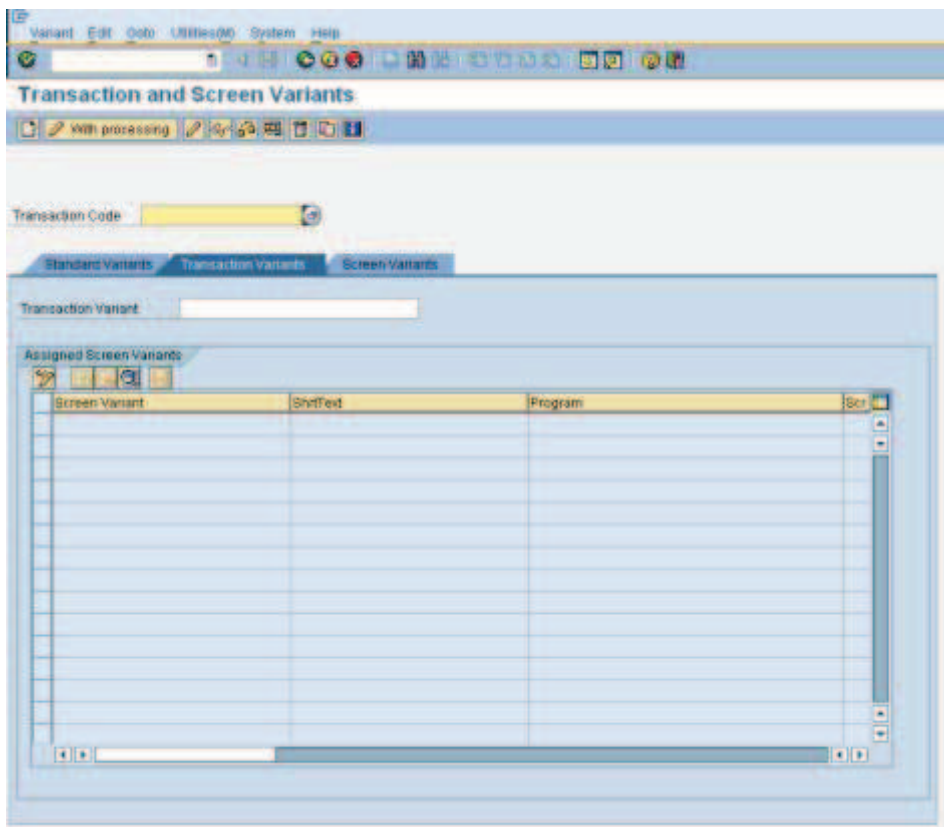
The purpose in the example is:

- Set default values for Order Type / Sales and Distribution / Distribution Channel / Division and change the fields to read only;

The screenshot displays the SAP 'Create Sales Order: Initial Screen'. The title bar includes 'Sales document', 'Edit', 'Goto', 'Environment', 'System', and 'Help'. Below the title bar is a toolbar with various icons. The main area is titled 'Create Sales Order: Initial Screen' and contains several tabs: 'Create with Reference', 'Sales', 'Item overview', and 'Ordering party'. The 'Sales' tab is active. The screen shows the following fields and values:

Order Type	ORB	Standard Order BRA
Organizational Data		
Sales Organization	BP01	
Distribution Channel	02	
Division	01	
Sales Office		
Sales Group		

To starting the process call transaction SHD0.



In the screen you have 3 tabs:

- **Standard Variants** – used to assign Transaction Variants to standard transaction; create and assign Variant Groups to specifics users;
- **Transaction Variants** – create Transaction Variants and assign Screen Variants;
- **Screen Variants** – create Screen Variants.

Creating the Transaction Variant

Like I said before, a Transaction Variant is made up a set of screen variants. You can create the Screen Variant first and then create Transaction Variant or create both at the same time while you are creating the Transaction Variant.

In our example we are going to create both in the same step.

In the initial screen inform which transaction code you wish to create the variant and then inform the name for the Transaction Variant. After that click button 'Create (F5)'

The screenshot shows the 'Transaction and Screen Variants' SAP screen. The 'Transaction Code' field is set to 'VA01' and the 'Transaction Variant' field is set to 'ZTV01'. Both fields are highlighted with red rectangles. A red arrow points to the 'Create Sales Order' button. The screen also shows tabs for 'Standard Variants', 'Transaction Variants', and 'Screen Variants', and a table for 'Assigned Screen Variants'.

The system will call TCode VA01, fill in the fields and press Enter.

The screenshot shows the 'Create Sales Order: Initial Screen' SAP screen. The 'Order Type' field is set to 'ORB' and the 'Standard Order BRA' button is visible. The 'Organizational Data' section shows fields for 'Sales Organization' (BP01), 'Distribution Channel' (02), 'Division' (01), 'Sales Office', and 'Sales Group'.

After, a configuration screen will be showed to confirm the screen entries. In this step you should flag of the fields you want to change 'W.content' for set the value as default and 'Output only' for read only.

Field	Contents	W. content	Output only	Invisible	Required
VBAK-AUART	ORB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TVAKT-BEZEI (Text)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Real Estate Sales (Border)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business Entity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales Organization	BP01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TVKOT-VTEXT (Text)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distribution Channel	02	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TVTWT-VTEXT (Text)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Division	01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Press 'Exit and Save' to finish the process.

In the new screen you can check your work and/or change it if you need.

Save the project and press 'Back (F3)' to return for the initial screen.

If you want change fields in others screens of transaction VA01 press button 'Continue (Enter)'.

Now, you have created the Transaction Variant with its Screen Variants. In our examples we need just Screens Variants ZTV01_0101. If there are others, you can remove from ZTV01 and delete it in the tab Screen Variants.

Screen Variant	ShrtText	Program	Scr
ZTV01_0101	Initial Screen	SAPMV45A	101
ZTV01_4001		SAPMV45A	400
ZTV01_4021		SAPMV45A	402
ZTV01_4400		SAPMV45A	440
ZTV01_4440	Header Frame	SAPMV45A	444
ZTV01_4701		SAPMV45A	470

Now check your work pressing button 'Test (F8)'.

Variant Edit Goto Utilities(M) System Help

Transaction and Screen Variants

With processing

Transaction Code: VA01 Create Sales Order

Standard Variants Transaction Variants Screen Variants

Transaction Variant: ZTV01

Assigned Screen Variants

Screen Variant	ShrtText	Program	Scr
ZTV01_0101	Initial Screen	SAPMV45A	101

Sales document Edit Goto Environment System Help

Create Sales Order: Initial Screen

Create with Reference Sales Item overview Ordering party

Order Type: ORB Standard Order BRA

Organizational Data

Sales Organization	BP01	São Luiz M Belos
Distribution Channel	02	Atacado
Division	01	Laticínios
Sales Office		
Sales Group		

Using Transaction and Screen Variants

You have many ways to use it. I am going to show 3 forms of use:

1. Creating a new transaction code;
2. Assigning the new Transaction Variant created to VA01;
3. Assigning to a sales document type.

Creating a New Transaction Code

You can create a new transaction code that use the new Transaction Variant created.

Call transaction SHD0 and fill in 'Transaction Code' and 'Transaction Variant'.

After go to menu Goto -> Create variant transaction

Transaction Code: VA01

Transaction Variant: ZTV01

Screen Variant	ShrtText	Program	Scr
ZTV01_0101	Initial Screen	SAPMV45A	101

In the new screen choose the new name for transaction and its description.

Transaction code: ZNORB

Short text: New VA01

Start object:

- ☐ Program and screen (dialog transaction)
- ☐ Program and selection screen (report transaction)
- ☐ Method of a class (OO transaction)
- ☒ Transaction with variant (variant transaction)
- ☐ Transaction with parameters (parameter transaction)

Click continue and save it.

The screenshot shows the 'Create Variant Transaction' dialog box. The 'Transaction code' field is set to 'ZNORB'. The 'Transaction text' field is set to 'New VA01'. The 'Transaction' field is set to 'VA01'. The 'Transaction variant' field is set to 'ZTV01'. The 'Cross-client' checkbox is checked. The 'Classification' section shows 'Professional User Transaction' selected. The 'GUI support' section shows 'SAPGUI for HTML', 'SAPGUI for Java', and 'SAPGUI for Windows' all unchecked.

Transaction code: ZNORB

Package:

Transaction text: New VA01

Transaction: VA01

Transaction variant: ZTV01

☒ Cross-client

Classification

☐ Inherit GUI attributes

Transaction classification

☒ Professional User Transaction

☐ Easy Web Transaction

☐ Pervasive enabled

Service:

GUI support

☐ SAPGUI for HTML

☐ SAPGUI for Java

☐ SAPGUI for Windows

Now you can use the new transaction code.

The screenshot shows the SAP Easy Access menu. The 'Menu' menu is open, and the transaction code 'ZNORB' is entered in the search field. The 'Create role' button is highlighted.

Menu Edit Favorites Extras System Help

ZNORB

SAP Easy Access

Other menu Create role Assign users Document

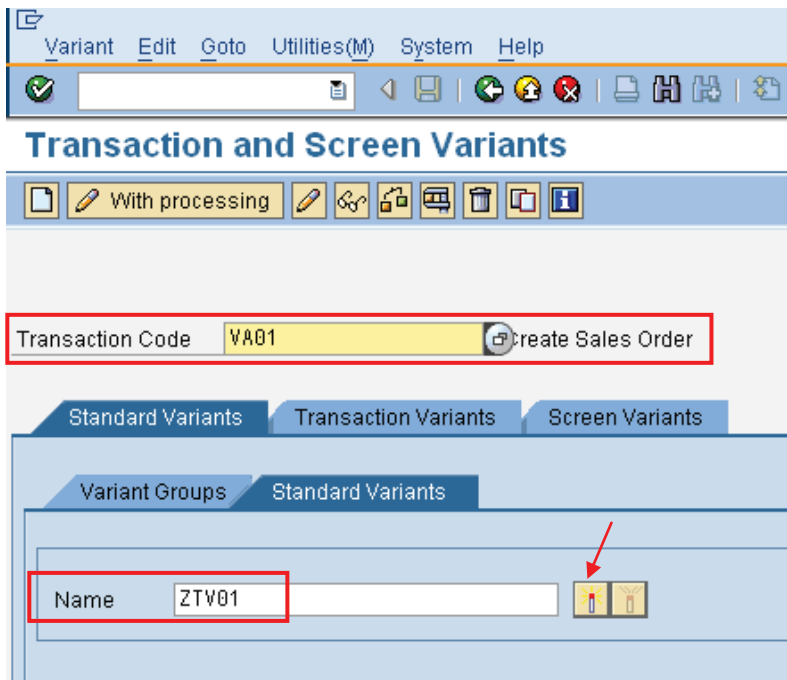
Assigning the new Transaction Variant Created to VA01

You can assign the new Transaction Variant created to standard transaction VA01.

Call transaction SHD0 and click tabs 'Standard Variants' and 'Standard Variants'.

Fill field 'Transaction Code' with VA01 and the field 'Name' with the Transaction Variant created.

After, click the button Activate.



Now every time you call VA01 the fields will be read only and with default values.

Assigning to a Sales Document Type

You can also assign Transaction Variants to sales document type.

Call transaction VOV8, choose the sales document type and select the Transaction Variant to be used with the sales document.

The screenshot shows the SAP VOV8 transaction interface. The title bar indicates the current view is 'Change View Maintain Sales Order Types: Details'. The interface includes a toolbar with icons for navigation and a menu bar with options like 'New Entries' and 'BC Set: Change Field Values'. The main form is divided into several sections:

- Sales Document Type:** Includes fields for 'Sales Document Type' (set to 'DRB'), 'SD document categ.' (set to 'C'), 'Indicator', and 'Sales document block'.
- Number systems:** Includes fields for 'No. range int. assgt.' (set to '01'), 'No. range ext. assgt.' (set to '02'), 'Item no. increment' (set to '10'), and 'Sub-item increment' (set to '10').
- Transaction flow:** Includes fields for 'Screen sequence grp.' (set to 'AU'), 'Incompl. proced.' (set to '11'), 'Transaction group' (set to '0'), 'Doc. pric. procedure' (set to 'A'), 'Status profile', 'Alt sales doc. type1', 'Alt sales doc. type2', and 'Variant' (highlighted with a red rectangle).
- Display Range:** Includes fields for 'Display Range' (set to 'UALL'), 'FCode for overv. scr.' (set to 'UER1'), 'Quotation messages', 'Outline agrmt mess.', 'Message: Mast. contr.', 'ProdAttr.messages' (set to 'A'), and 'Incomplet.messages'.

Assign Transaction Variants to a Group of Users

You need change VA01 layout just for a few users. If you assign the Transaction Variant to transaction VA01 the changes will affect all the users that use the transaction. As a solution you can create a Variant Group and assign the users to the group.

Call transaction SHD0, go to tabs 'Standard Variants' -> 'Variant Groups', fill 'Transaction Code', choose a 'Group Name' and click button 'Create'.

The screenshot shows the SAP SHD0 transaction screen. At the top, there is a menu bar with 'Variant', 'Edit', 'Goto', 'Utilities(M)', 'System', and 'Help'. Below the menu bar is a toolbar with various icons. The main area is titled 'Transaction and Screen Variants'. There are three tabs: 'Standard Variants', 'Transaction Variants', and 'Screen Variants'. The 'Transaction Variants' tab is selected. Within this tab, there are two sub-tabs: 'Variant Groups' and 'Standard Variants'. The 'Variant Groups' sub-tab is selected. In the 'Variant Groups' sub-tab, there is a 'Transaction Code' field set to 'VA01' and a 'Group Name' field set to 'Z6VA01'. A red box highlights the 'Group Name' field and the 'Create' button. A red arrow points to the 'Create' button. Below the 'Group Name' field, there is a 'User Assignment' section with a 'User' field and a list of buttons: 'Assign', 'Delete Assignment', 'Set Proposal', 'Reset Proposal', and 'Transport'.

After that, a new Transaction Variant will be created.

Transaction Code: VA01 Create Sales Order

Standard Variants | Transaction Variants | Screen Variants

Variant Groups | Standard Variants

Group Name: Z6VA01 User Transactions

Short Text: User group for VA01

Transaction Variant: ZGVA01VA01

User Assignment

User: []

Assign
Delete Assignment
Set Proposal
Reset Proposal
Transport

Change to tab 'Transaction Variants' and just assign the Screen Variant created before.

Transaction Code: VA01 Create Sales Order

Standard Variants | Transaction Variants | Screen Variants

Transaction Variant: Z6VA01VA01

Assigned Screen Variants

Screen variant	Shorttext	Program	Scr.
ZTV01_0101	Initial Screen	SAPMV45A	101

Back again to tabs 'Standard Variants' -> 'Variant Groups' and assign the users to the group.

Put the user in the field 'User', press button 'Assign' to add to the group and press 'Set Proposal' to active the Transaction Variant for the user.

Variant Edit Goto Utilities(M) System Help

Transaction Code: VA01 Create Sales Order

Standard Variants Transaction Variants Screen Variants

Variant Groups Standard Variants

Group Name: ZGVA01 User Transactions

Short Text: User group for VA01

Transaction Variant: ZGVA01VA01

User Assignment

User: KRIOS

Assign
Delete Assignment
Set Proposal
Reset Proposal
Transport

Now, all the users that you have assigned to group will have VA01 changed based on the Transaction Variant.

Related Content

[Transaction Variants and Screen Variants](#)

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