

Creation and Use of Variant Transaction



Applies to:

SAP R3 4.6C, 4.6D, 4.7EE, ECC. For more information, visit the [Security homepage](#).

Summary

How to use screen variant, Transaction variant and then Variant Transaction to optimize Security of the SAP systems throughout the Landscape.

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Objective

SAP Transaction comes with some default settings. Settings is a very generic term and can be idealized as “Mandatory Fields”, “Optional fields”, “Selection options” etc. For better implementation of Security and control it becomes necessary to customize such “Settings” and provide users access to those modified, Administrator defined views of TCodes. It also helps to reduce the scope of changing SAP Default programs.

Scope

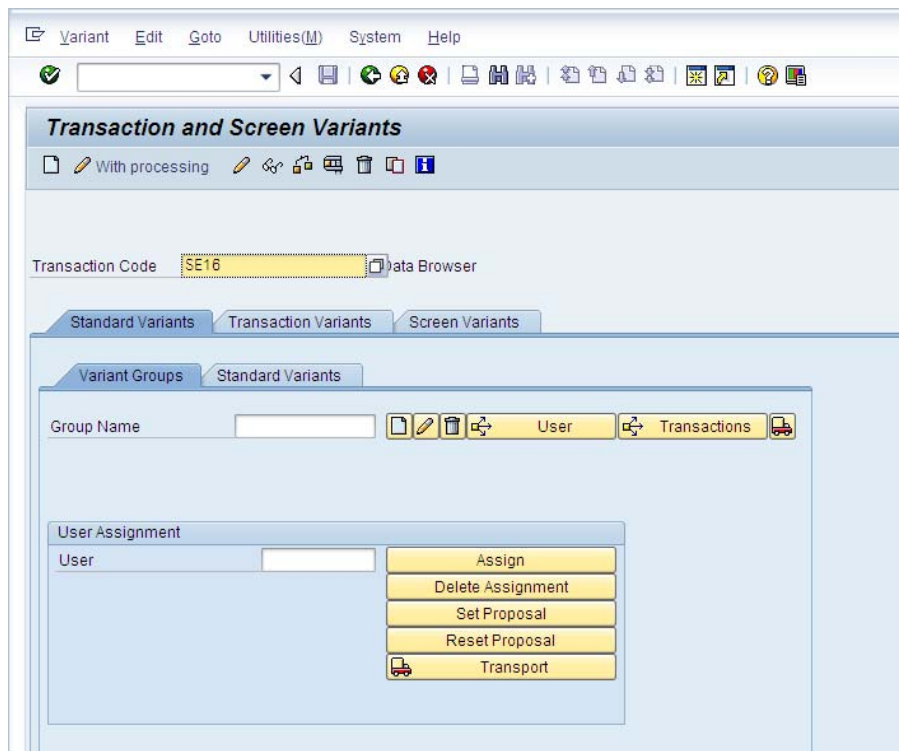
Changes to SAP Defined fields is possible by using the concept of Transaction variant and then create Variant Transaction by using that Transaction variant. For e.g. if you don't want the users to see the “Create” button in the TCode SE16 and provide them a modified screen for this, then the concept of Transaction Variant is very important. A new Variant Transaction (say ZE16) can be defined and provided to the users.

Thus we managed the first possibility of misusing ACTVT = 01 for all those set of users.

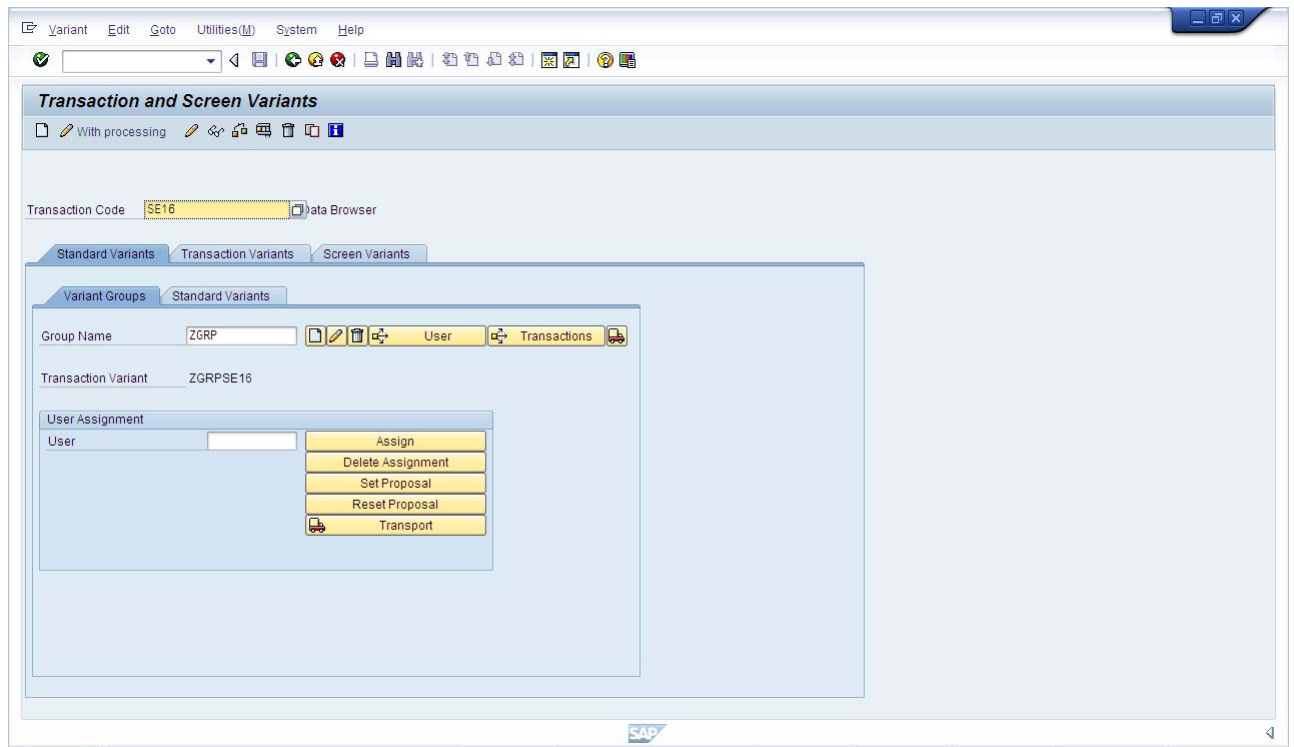
Technical Details

A. Creation of Transaction Variant

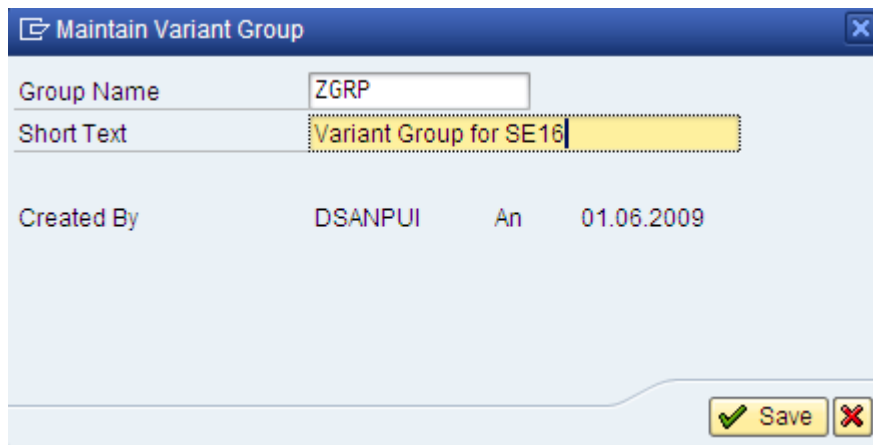
- TCode in use to create Variant Transaction is **SHD0**.
- Give the TCode (for e.g. SE16) and Go to tabs “Standard variants” and then to “Variant Group”



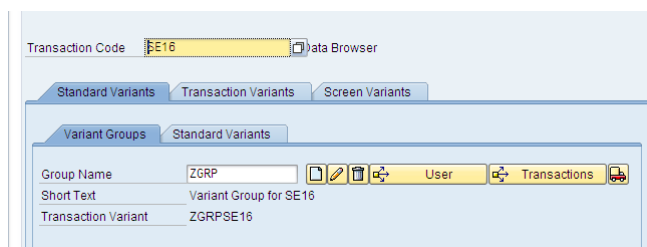
- Give a group name and press enter. System will automatically suggest the Transaction Variant.



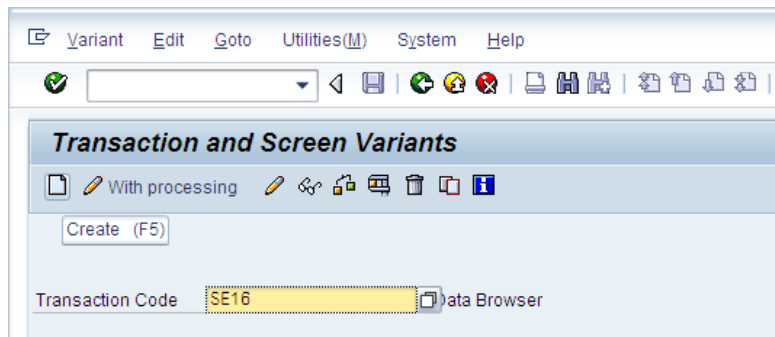
- Click on Create. A window will come to get the Text description from Administrator.



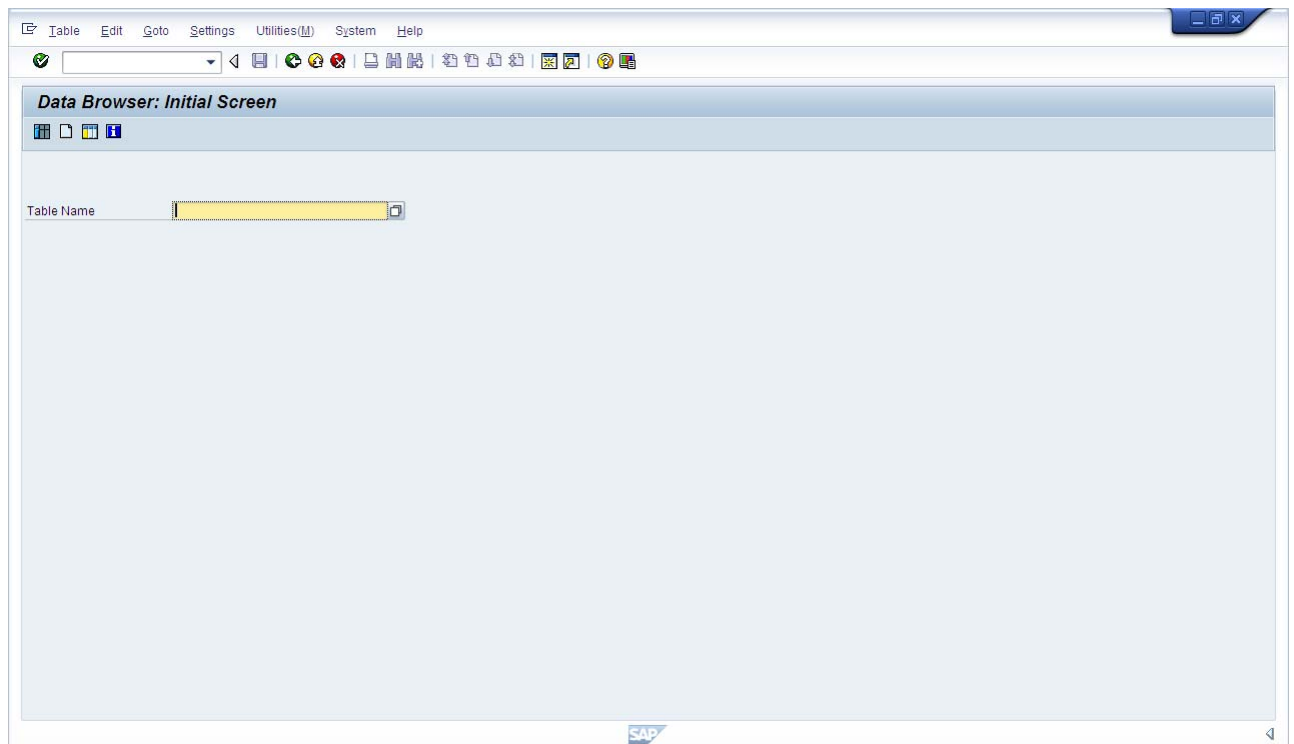
- After defining the Text description, save it.



- Click on the Create (F5) button to create the screen variant for the Transaction.



- Now system will go to that particular TCode where you want to capture the screen elements and assign them to screen variant.



- Give the Table name and press enter. It will show the following window where you need to provide the short text for the Screen Variant. Click on Enter to get the

Confirm Screen Entries

Screen values 0230 Program SAPLSETB

☒ Copy settings Name of screen variant: ZGRPSE16_0230 ☐ GuiXT scrip
☐ Do not display screen Screen variant short txt Data Browser for Customer

Field	Contents	W. content	Output only	Invisible	Required
Table Name	DD02L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Exit and Save Menu functions GuiXT [Navigation Icons]

- Click on "Menu Function" to maintain the Menu entries of the Variant.

Deactivate menu functions (Shift+F4)

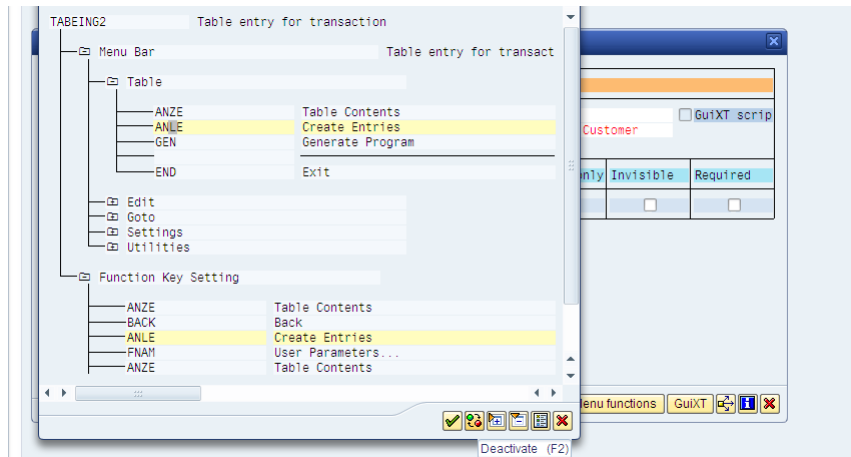
SAP

- Select the Object name "**ANLE: Create Entries**" and click on the button "**Deactivate**". Now the Create button of **SE16** will be **deactivated**. Deactivated rows will be highlighted in "**Yellow**" colour. For more information, check the colour legends.

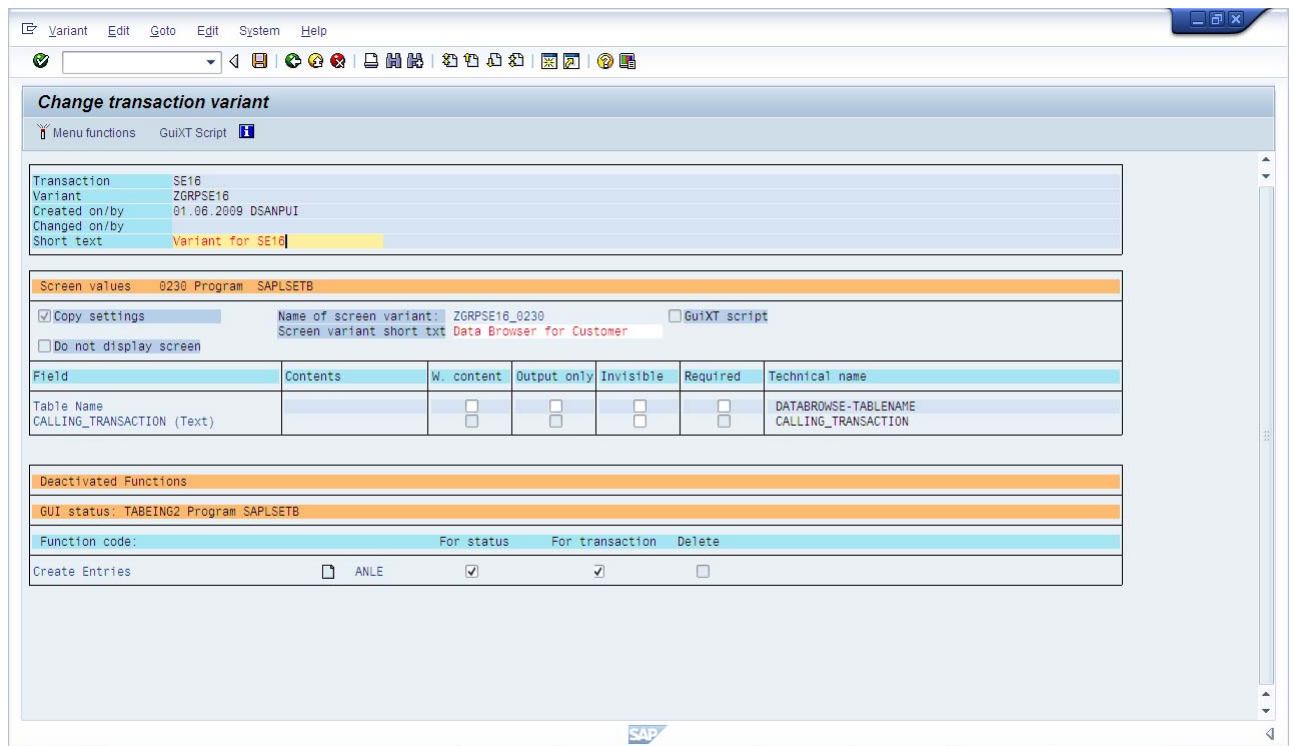
Color Legend

- Standard Display
- Active function
- Inactive Function
- Variant: Deactivated Function

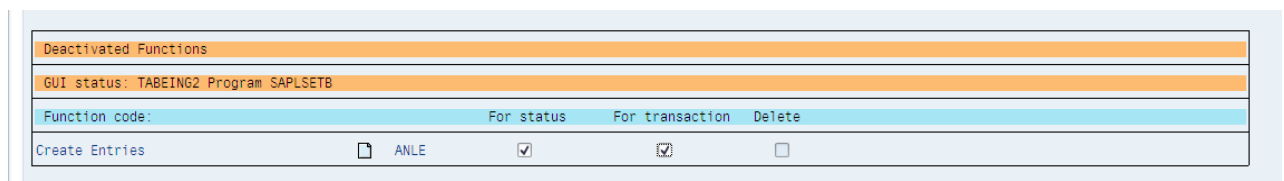
- You don't need to select each row containing ANLE. Deactivation is carried out for all entries where ANLE is found. Please check below picture.



- Click on "Exit and Save" to leave the window. Following screen will appear. Give a short text.



- Please ensure to mark the Deactivate option for Transaction also.



- Save the Variant. Since it is enhancement of Repository, you need to include this new into a Package. If you have already created your own package (Y/Z namespace), then use that. Thus we will be able to ignore using SAP default packages. Include within a Change Request.

Prompt for transportable Workbench request

Transaction variants (cr) ZGRPSE16

Request <SID>K9nnnnnn ☒ Workbench request

Short Description DO NOT TRANSPORT - TEST WORKBENCH

Own Requests

- For successful completion of the task, you will get the confirmation as usual.

Transaction Variants and Screen Variants Were Saved

B. Creation of Variant Transaction by Using Transaction Variant

Now we need to create a “**Variant Transaction**” for this **Transaction Variant** just created.

- Go to TCode SE93 and enter the Variant Transaction Code to be created (for e.g. ZE16) and press Create button.

Maintain Transaction

Transaction Code ZE16

Display Change Create

- Provide relevant Short Text description as the Transaction Attribute. Also select the option “Transaction with Variant (Variant Transaction)”. Click on continue (or press Enter).

Create Transaction

Transaction code: ZE16

Transaction attributes

Short text: Data Browser - Customer Version

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)

OK Cancel

- In the next screen, the Mandatory Fields are “Transaction” (to be used to inherit the options if the new TCode) and “Transaction variant” that we created in the previous section. Try not to use “Cross Client” maintenance selection.

Create Variant Transaction

Transaction code: ZE16
Package: ZTTEST

Transaction text: Data Browser - Customer Version
Transaction: SE16
Transaction variant: ZGRPSE16
☐ Cross-client

Classification

☐ Inherit GUI attributes

Transaction classification

☒ Professional User Transaction
☐ Easy Web Transaction Service:
☐ Pervasive enabled

GUI support

☒ SAP GUI for HTML
☒ SAP GUI for Java
☒ SAP GUI for Windows

- Save and Exit.
- Now we can replace SE16 by ZE16 in all the roles and ensure more secure environment both from the view of Security Administrator and Auditor.

Related Content

[SAP Note 330067](#)

[SAP Note 46625 SHD0: Different execution of variant transactions](#)

[SAP Note 574518 No authorization checks after variant transaction](#)

[SAP Note 558000 Skip first screen in variant transaction](#)

[SAP Note 161577 Variants in variant transaction maintenance](#)

[SAP Note 602304 SAP Menu: Authorization check for variant transaction](#)

[Standard Variant](#)

[SAP NetWeaver Application Server ABAP Security Guide](#)

For more information, visit the [Security homepage](#).

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