

## **Auditing SAP Using CAATs for Order to Cash**

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### **Abstract**

SAP ERP assists company's e-operation, promote effectiveness and efficiency of business operations. It has been to examine computer audit and information security for SAP ERP. But practice less discussed how to use CAATs (computer-assisted audit techniques) to audit SAP ERP. In practice, Order to Cash (OTC) process is a high risk area. When internal audit department execute internal audit for OTC in the ERP, the script can be constructed through audit plan. Therefore, this article explains how to use CAATs to execute OTC audit for SAP ERP.

**Keywords: CAATs, internal audit, ERP**

### **SAP audit**

SAP OTC is a process involved customer sales order creation and satisfying customer requirements via delivery. In the OTC process, it comprises customer Inquiry, Quotation for customer inquiry, Sales Order creation, Post Goods issue, Delivery, Billing to customer, and Receipt of money. OTC integrates finance and sales in SAP ERP. This process gives integration between customer master record, sales organization, sales offices, distribution channels, divisions and plants. When company operation integrates in SAP ERP, it faces different risk for company.

When the internal control does not design completely or does not execute, company will face the threat and risk. For example, customers have bad debt losses caused by poor credit. Inventories asset losses caused by theft.

### **The audit plan**

To illustrate how execute OTC audit plan, we use customer credit limit set as an

example. An audit plan includes audit objective, audit procedure, data source and audit flowchart. Audit Objective is to establish the audit objectives for possible threats or high risk operation. Audit procedure describes audit items for the audit objective. Data source usually includes company document and system table. Audit flowchart shows the audit step and how to use CAATs command. Further, we explain the audit process for appropriateness to set customer credit. In the table 1 we set the audit objective as whether it is appropriate to set customer credit limit, hence, the audit procedure is to audit which inappropriate users change customer credit limit.

According to audit procedure, the data source needs tables of SAP ERP system that include CDHDR, CDPOS, KNKK. CDHDR is the table that change document header, we can understand what type of document be changed and when the document be changed by specific user. The relative fields describe in the table 2. CDPOS include changed document items by CDHDR, CDPOS describe field by changed by specific table and change type for field. The relative fields describe in the table 3. KNKK is that table manage customer credit, in these table we can understand the customers' credit limit. The relative fields describe in the table 4.

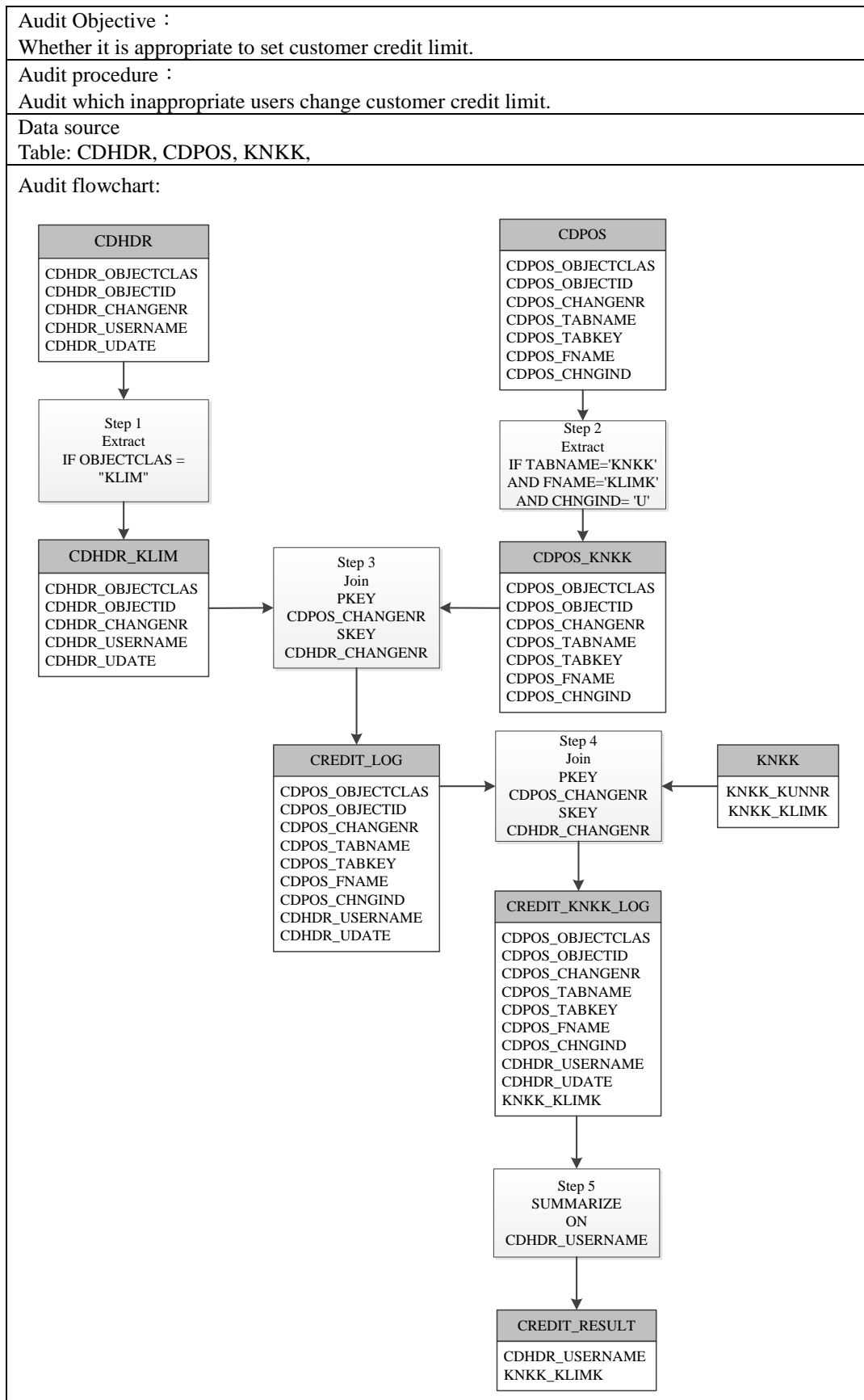


Table 1 audit plan

Column	Data Type	Not Null	Description
OBJECTCLAS	character	Y	Object class
OBJECTID	character	Y	Object value
CHANGENR	character	Y	Document change number
USERNAME	character		User name of the person responsible in change document
UPDATE	date		Creation date of the change document

Table 2 Fields in the CDHDR

Column	Data Type	Not Null	Description
CHANGENR	character	Y	Document change number
TABNAME	character	Y	Table Name
FNAME	character	Y	Field Name
CHNGIND	character	Y	Change type (U, I, E, D)

Table 3 Fields in the CDPOS

Column	Data Type	Not Null	Description
KUNNR	character	Y	Customer Number
KLIMK	number		Customer's credit limit

Table 4 Fields in the KNKK

### **Audit flowchart and script**

Audit flowchart shows how to use CAATTs command and data source to achieve audit objective. In the case, we use ACL command to construct the audit flowchart and script. The step 1 in the audit flowchart is to extract change document is Credit Management, hence, the table CDHDR extract the field CDHDR\_OBJECTCLAS as KLIM. The extracted table name as CDHDR\_KLIM. Step 2 is to find the table name as KNKK, field name as KLIMK, and change status as update that mean extract record of the update of credit limit from CDPOS. The extracted table name as CDPOS\_KNKK. Step 3 is to merger CDPOS\_KNKK and CDHDR\_KLIM to get who change credit limit. The merger table name as CREDIT\_LOG. Step 4 is to merger CREDIT\_LOG and KNKK to get the amount of credit limit. The merger table name as CREDIT\_KNKK\_LOG. Step 5 is to classify which users change credit limit to provide manager to analyze which users is inappropriate to change customer credit limit. Table

5 show all script for the audit object.

Table 5 Script for Auditing inappropriate users change customer credit limit

```
SET SAFETY OFF
COM Step 1 Extract CDHDR_OBJECTCLAS = "KLIM"
OPEN CDHDR
EXTRACT RECORD IF CDHDR_OBJECTCLAS = "KLIM" TO "CDHDR _ KLIM" OPEN
COM Step 2 Extract the table name as KNKK, field name as KLIMK, and change status as update
OPEN CDPOS
EXTRACT RECORD IF CDPOS_TABNAME='KNKK' AND CDPOS_FNAME='KLIMK' AND
CDPOS_CHNGIND= 'U' TO "CDPOS_KNKK" OPEN
COM Step3 Merger CDPOS_KNKK and CDHDR _KLIM to get who change credit limit.
OPEN CDPOS_KNKK
OPEN CDHDR _KLIM SECONDARY
JOIN PKEY CDPOS_CHANGENR FIELDS ALL SKEY CDHDR_CHANGENR WITH
CDHDR_UPDATE CDHDR_USERNAME PRIMARY TO "CREDIT_LOG" OPEN PRESORT
SECSORT
COM step 4 merger CREDIT_LOG and KNKK to get the amount of credit limit
OPEN CREDIT_LOG
OPEN KNKK SECONDARY
JOIN PKEY CUSTOMER_NO FIELDS ALL SKEY KNKK_KUNNR WITH KNKK_KLIMK
PRIMARY TO " CREDIT_KNKK_LOG" OPEN PRESORT SECSORT
CLOSE SECONDARY
SET FOLDER /Audit result
COM Step 5 classify which users change credit limit
OPEN CREDIT_KNKK_LOG
SUMMARIZE ON CDHDR_USERNAME OTHER CDHDR_MANDANT
CDHDR_OBJECTCLAS CDHDR_OBJECTID CDHDR_CHANGENR CDHDR_USERNAME
CDHDR_UPDATE CDHDR_UTIME CDHDR_TCODE CDHDR_PLANCHNGNR
CDHDR_ACT_CHNGNO CDHDR_WAS_PLANND CDHDR_CHANGE_IND CDHDR_LANGU
CDHDR_VERSION TO "CREDIT_RESULT.FIL" OPEN PRESORT ISOLOCALE root
OPEN CREDIT_RESULT
EXPORT FIELDS CDHDR_USERNAME COUNT CDHDR_MANDANT CDHDR_OBJECTCLAS
CDHDR_OBJECTID CDHDR_CHANGENR CDHDR_UPDATE CDHDR_UTIME
CDHDR_TCODE CDHDR_PLANCHNGNR CDHDR_ACT_CHNGNO CDHDR_WAS_PLANND
CDHDR_CHANGE_IND CDHDR_LANGU CDHDR_VERSION XLSX TO
"C:\AUDIT_RESULT\REDIT\REDIT_RESULT" WORKSHEET CREDIT_RESULT
SET SAFETY ON
```

## **Conclusion**

When using CAATs execute internal audit, the audit plan can assist internal auditor to construct their audit object and audit procedure for high risk operation. More important, clearly build the audit flowchart can assist to construct script to understand the script logic, to reduce the error of script, to review the correctness of script logic and to review whether lack necessary table. Therefore, after script completely construct through audit plan, audit analysis will be more accurate. With continuous auditing, analysis report periodically provides to managers and internal auditors provide improvement recommendations for controlling high-risk operation.

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