Audit of Bank branch under Core Banking System

Points for discussion

❑ Common Software's used in Banking Industry ⬅

❑ Traditional auditing approach

❑ Core banking system

❑ Introduction to "Finacle" Software

❑ Auditing through CBS

❏ **Common Software's used in Banking Industry**

❏ Core Banking Software: Finacle by Infosys, BaNCS by TCS & Flexcube by Oracle

❏ <u>Add-on Softwares</u> for,
  - ❏ Risk Weighted Assets / Capital Adequacy Computation
  - ❏ Asset Classification and NPA Provisioning computation. Classification of Priority / Non-priority / Sensitive sector advances
  - ❏ Treasury
  - ❏ Capital Markets

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Traditional auditing approach

❑ Verification of documents physically

❑ Availability of hard copies for each transaction

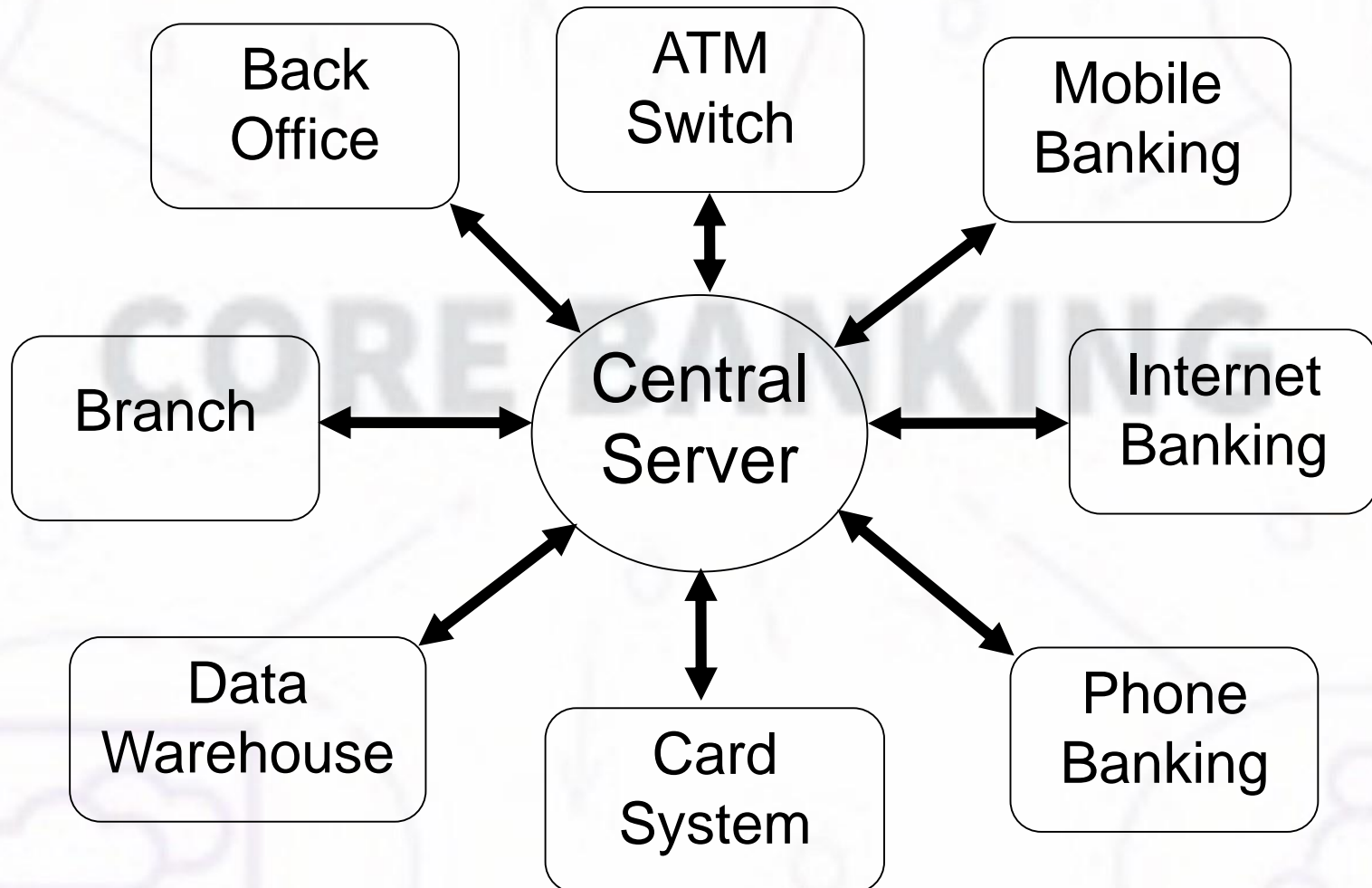❑ Verification of ledgers/registers

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What is Core Banking System?

❑ Accurate & Error free delivery of services

❑ Better Efficiency & Performance

❑ Centralized Database

❑ Transactions take place at various locations

❑ Updation of Central Database on Real Time Basis

❑ Report Generation at Back-End

❑ Access Control

What is CBS – An Overview

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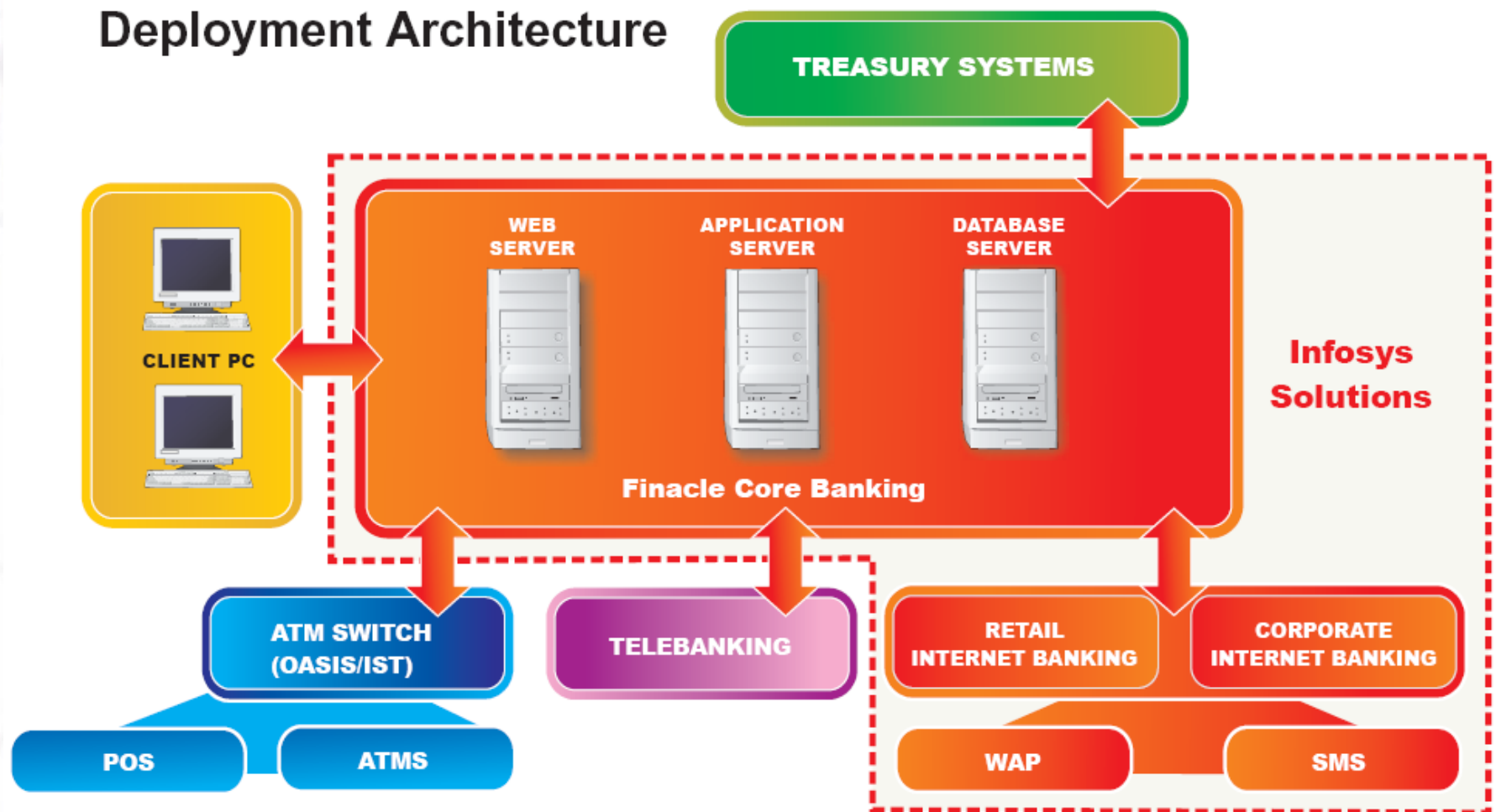
❑ Auditing through CBS

Finacle – Core Banking Software

❑Overview and Implementation Structure

❑Advantages of using Finacle

❑Security controls

❑General key map

❑Menu options

❑Generation of Reports through Finacle

Finacle - Overview

❑ Banks using Finacle are
- ❑ Bank of Baroda
- ❑ Bank of India
- ❑ Union Bank of India
- ❑ Canara Bank
- ❑ Federal Bank
- ❑ IDBI Bank
- ❑ ICICI Bank
- ❑ Axis Bank
- ❑ ABN Amro
- ❑ Vijaya Bank
- ❑ UCO Bank
- ❑ DCB Bank

Finacle – Implementation in Bank

Deployment Architecture

TREASURY SYSTEMS

CLIENT PC

WEB SERVER — APPLICATION SERVER — DATABASE SERVER

Finacle Core Banking

Infosys Solutions

ATM SWITCH (OASIS/IST)

POS — ATMS

TELEBANKING

RETAIL INTERNET BANKING — CORPORATE INTERNET BANKING

WAP — SMS

CA Roopesh Rajagopal, Kochi

Finacle - Advantages

- ❑ Facilitates anywhere banking
- ❑ Menu driven platform with easy navigation
- ❑ Multiple functionality
- ❑ Customization and Parameterization
- ❑ Multiple level security
- ❑ Easy report generation
- ❑ Supports work flow for transaction processing
- ❑ Better audit capabilities

Finacle – Security Controls

- ❑ OS Level
- ❑ Database level
- ❑ Application level
- ❑ Menu level
- ❑ Dual control for all transactions
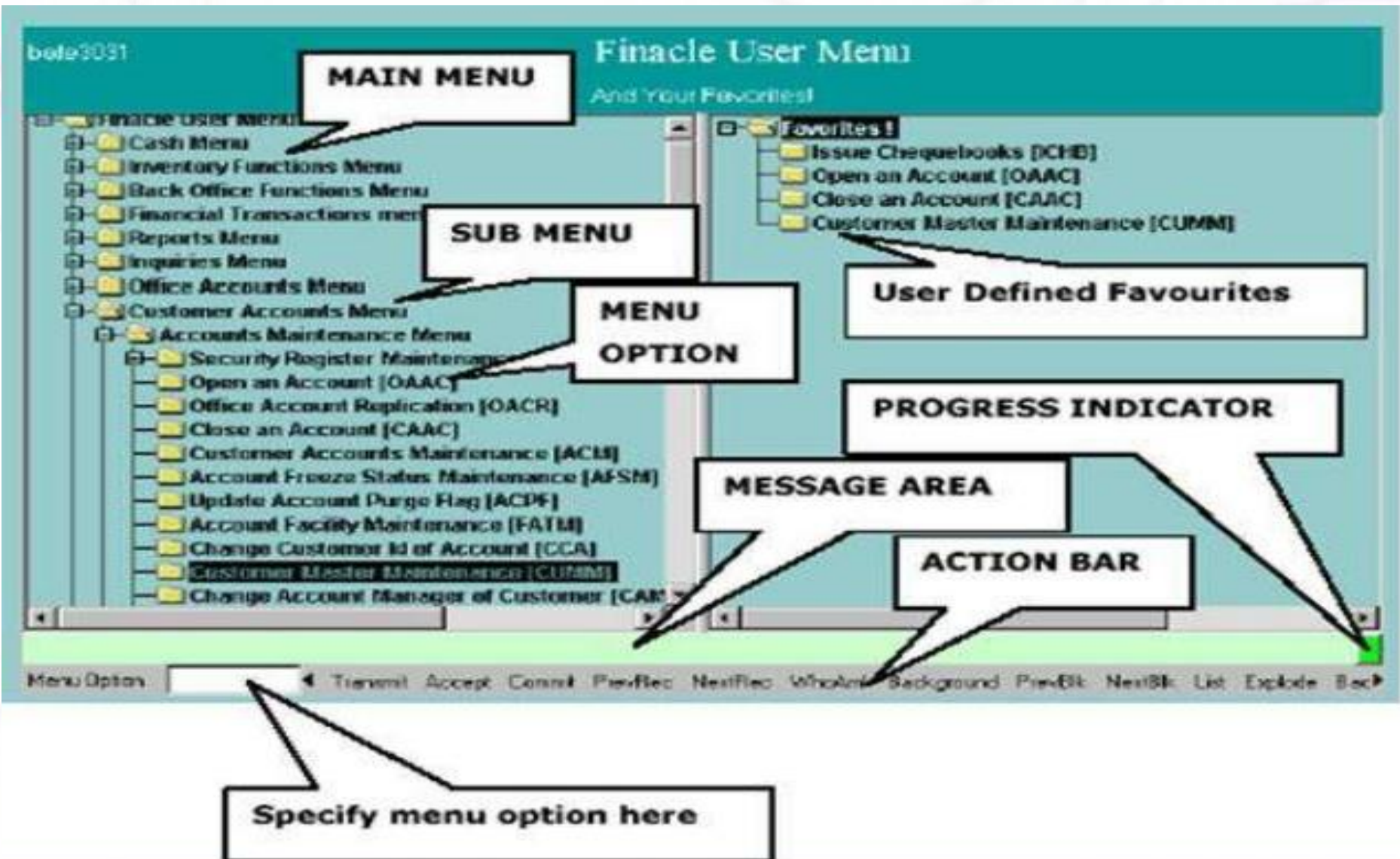- ❑ Controlled error handling through exceptions

Finacle – Menu screen

Finacle User Menu		
Menu Block		**Favorites !**
Main Menu -> Sub Menu -> Menu Description [Menu Code]		User Defined Favorites

MESSAGE AREA								(A)
Menu Option	(B)	Btn.1	Btn.2	Btn.3	Btn.4	Btn.5	Btn.6	Btn.7
		Action Bar						

A = Progress Indicator
B = Field to Specify Menu Option

Finacle – Menu screen

Finacle – General key map

Physical Key	What does it do
F1	Field level help.
F2	List. This key lists the codes that may be used in a particular field.
F3 & ESC	Quit/ Back. Quits and takes the user back to where he started when in action.
F4	Accept. After the user has completed the input, this key can be used to accept the data.
F5	Background Menu
F6	Next Block
F8	Copy Record
F9	Display Signature
F10	Commit/ Save. This is very important key and this concludes the transactions.
F11	Next field
F12	Previous Block
CTRL+F3	Show key map
CTRL+E	Explode. This key is particularly useful for the further inquiry.

Finacle – Menu options

Verification	Menu Code
Account Scrutiny/Ledger Inquiry	ACLI
Customer Master Inquiry/Maintenance	CUMM/CUMI
Account Master Maintenance / Inquiry	ACM / ACI
Transaction Inquiry/Maintenance	TI / TM
Account Criterion search	ACS
Fin. Tran. Inquiry – Criterion Search	FTI
Inquire on Transaction (Office Accounts)	IOT
Interest Table Maintenance	INTTM
Account Balance Inquiry-Component details	ACCBAL
Audit file Inquiry	AFI
Foreign Bills Inquiry – Criterion Search	FBI

Finacle – Menu options

Verification	Menu Code
Financial Transaction Inquiry Report	FTR
Clearing Zone maintenance	MCLZOH
Guarantee Inquiry	GI
Query on Documentary Credits - Criterion Search	DCQRY
Security Register Maintenance	SRM
Account Lien maintenance	ALM
TDS Inquiry	TDSIP
Loan General Inquiry	LAGI
Loan Overdue Position Inquiry	LAOPI
Account Turnover Report	ATOR

Finacle – Menu options

Verification	Menu Code
TOD Inquiry – Account specific	ACTODI
List of Pending and Dishonored Bills	FBPADB
Printing of Office Accounts	ACLPOA
Exception Report	EXCPRT

The list is only for guidance and the menu codes may not be applicable in all the banks.

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Auditing through Core Banking System

- ❑ Understanding the Core Banking Software
- ❑ Review of Internal controls in CBS
- ❑ Review Transaction Flow & Audit Trails
- ❑ Flow of accounting entries
- ❑ Apply Exception Approach
- ❑ Determine Sample Size based on review
- ❑ Carry out substantive procedures in & around CBS
- ❑ Documentation of Audit Procedures
- ❑ Prepare report on Audit Findings and prepare final Report

Basic data collection before auditing through CBS

- [ ] Services offered by the branch
- [ ] Details of the products sold by the bank
- [ ] List of the different schemes/ scheme codes used for products
- [ ] Interest rate schedules & changes during the year
- [ ] Delegation of the financial powers of the branch
- [ ] Last audit report - Concurrent, Internal & Statutory
- [ ] RBI Inspection reports if any
- [ ] List of user work class in the system
- [ ] User manual for CBS / Menu options
- [ ] Details of different types of reports generated and their frequency.

CBS – General Concepts

SOL ID & Set ID (Init. Br. ID):

In CBS, each Branch, Back Office, Administrative / Controlling Office are assigned a code i.e. Service Outlet ID [SOL ID].

Set ID (Init. Br. ID): Set ID or Initiating Branch ID is a SOL ID of the Branch who initiated the transaction.

Any branch can initiate transaction for any of the account maintained with the bank and hence, a distinction is required

E.g.: Transaction of a Cash withdrawal by a customer of Mumbai Branch (SOL ID "0044") from Delhi Branch (SOL ID "0089"). In the instant case "0089" is Init. Br. ID and "0044" is Account SOL ID. In order to search transactions based on the branch who initiated transactions in Finacle, SET ID (Init. Br. ID) parameter is required to be used under Menu Code "FTI".

CBS- General Concepts

Tran ID, Journal No. & Date

Each transaction in Finacle will be assigned a unique Transaction ID.

The Transaction ID remains unique only for the day, since, on the next day the Transaction IDs are reset.

Combination of Transaction ID and transaction date make it unique across the system.

In Finacle, once the transaction is "Entered", a Tran ID is generated.

To locate any transaction from the database the user need to use Tran ID and Date at TI/TM Menu command.

CBS - General Concepts

Transaction Type & sub type

Transactions in Finacle are entered with the Transaction Type and Transaction Subtype.

It easier to trace set of transactions with Transaction Type & Sub Type.

Codes for Transaction Type and Sub Types are prescribed differently by each bank.

E.g.: Transaction Type codes for Cash and Transfer may be of following types.
- Tran Type: Cash: "C", Transfer: "T"
- Sub Tran Type: CR – Cash Receipt, CP: Cash Payment

CBS- General Concepts

Customer Master Level Configurations

❑ Accounts have a master Level Configuration & Account Level Configuration

❑ Customer is identified generally by a number called CUST ID/CIF no.

❑ Multiple accounts can be opened in a single CUST ID

❑ Separate series of Account Nos. for different Types/schemes of Accounts

 ❑ **E.g.** An Account No. **0099** **05** **014678** – is made up of Branch Code i.e. "0099", Account Type – "05" say Current Account and Account No. – "014678"

 ❑ Auditor should seek details of formation of Account number etc. during the initial discussion with Branch.

CBS- Important Points for Auditors

❑ Issues with multiple cust ids

❑ Difference in name of customer between cust id and account

❑ Account level configurations

❑ Pointing type accounts /Self reconciling accounts

❑ Interest table maintenance

❑ Interest Flags

❑ Tax slabs updated & withholding tax flags

❑ Freeze flags

❑ Scheme codes

❑ Maker – Checker Concept (Different Stages for a Transaction)

❑ Inventory locations

❑ Clearing zones

❑ Setting up of TOD limits

Audit Activity through CBS

Audit Activity	Auditors' Primary Checks	Suggested System option/Support
Cash	▪ Physical verification of Cash Balance ▪ Cash Balance as on the date of Audit Period ▪ Cash Balances reported in Friday Statement	Finacle: "ACLI" - Account Ledger Inquiry (Vault A/c and Teller Accounts)
Balances with RBI / SBI / Other Banks	▪ Balance as on Date ▪ Transactions in Mirror Accounts ▪ Reconciliation Statement (Generally outside of CBS)	Finacle: "ACLI" - Account Ledger Inquiry

Audit Activity through CBS

Audit Activity	Auditors' Primary Checks	Suggested System option/Support
Advances	Sanction Limit / Drawing Power setup	"ACLHM" – Account Limit History Maintenance "ACM / ACI" – Account Master (Go to Limit details) "LTL" – Limit Tree Lookup (Tree view of all Limits)
	▪ Account & Customer Master parameters setup viz. Interest Parameters (Regular & Penal Interest) ▪ Repayment Instructions ▪ Standing Instructions (SI) Parameters	"ACLHM" – Account Limit History Maintenance for DP & SL – Account Specific "ACM / ACI" – Account Master "CUMM / CUMI " – Customer Master
	Transactions in Borrower's Account	Finacle: "ACLI" - Account Ledger Inquiry
	Interest Rate History	"INTTM" – Interest Table Master Maintenance (Under Inquire Mode – Account Specific)

Audit Activity through CBS

Audit Activity / Process / Audit Area	Auditors' Primary Checks	Suggested System option/Support
Advances	Conduct of Account & Credit Turnover	"ATOR" – Account Turnover Report "ACTI" – Account Turnover Inquiry "CUTI" – Customer Level Turnover Inquiry
	Turnover of CC accounts based on Borrowers business profile	
	In case of loan accounts recovery of instalments and interest	
	Interest report	"AINTRPT" – Interest Report for Account
	Primary & Collateral security maintenance	"SRM" – Security Register Maintenance
	Lien Marking	"ALM" – Account Lien Maintenance
	Non Fund based Facility (LC, BG)	"GI" – Guarantee Inquiry "DCQRY" – Documentary Credit Query

Audit Activity through CBS

Audit Activity / Process / Audit Area	Auditors' Primary Checks	Suggested System option/Support
Office Accounts (Suspense, Sundry etc.)	▪ **Outstanding entries for reporting** ▪ **Entries outstanding – Whether any provisioning is required?** ▪ **Whether improper reversals are done**	"IOT" – Inquire on Transaction (As on date Inquiry) "MSGOIRP" – Outstanding Items Report
TDS Related	TDS Information & reports	"TDSIP" – TDS Inquiry & Reports Month-end report on account wise / transaction wise Tax deduction. Bank specific customized Menu / report

Audit Activity through CBS – NPA verification

Audit Activity / Process / Audit Area	Auditors' Primary Checks	Suggested System option/Support
Discrepancies in setting up the EMI / Instalments	- Whether EMI / instalment is correctly setup. - Whether EMI / instalment amount is matching with the Sanctioned Terms. - Whether periodicity of Instalment is correctly classified as per Sanctioned Terms?	ACI -> Option "E" Repayment details
Multiple sets of EMI / Instalments	For case of Multiple sets of EMI e.g. For 1-5 years EMI of Rs. 7,000 and after 5 years Rs. 7,500 Whether sets of EMI are properly entered? Is there any substantial difference between 1st set of EMI and 2nd or other sets (e.g. 1st set Rs. 5,000 and 2ndRs. 1,00,000) which cast doubt on debt serviceability?	ACI -> Option "E" Repayment details

Audit Activity through CBS – NPA verification

Audit Activity / Process / Audit Area	Auditors' Primary Checks	Suggested System option/Support
System determined Asset Classification vis a vis User defined Asset Classification	- CBS contain two sets of parameters. At first instance CBS identify the account based on set parameters under Asset Classification types. - In few CBS it has been observed that user is generally given the option to differ and select / amend the classification. In such cases detailed scrutiny of NPA system is required to be carried out. - Due to errors in certain Master Data, there can be erroneous identification of account as NPA. However, such accounts require detailed scrutiny	- ACM / ACI Option – 'Y' – Asset Classification Inquiry - A report containing accounts wherein there is difference between Asset Classification by System and by user should be requested for. Accounts listed in the said report should be thoroughly verified.

Audit Activity through CBS – NPA verification

Audit Activity / Process / Audit Area	Auditors' Primary Checks	Suggested System option/Support
Manipulation in SL / DP	Changes in SL / DP should be cross checked with Sanctioned Letter. Whether any change in Limit is supported by necessary documentation?	ACLHM – Account Limit History Maintenance
Incorrect moratorium period	Based on moratorium period CBS will identify the Loan Instalment and will track repayment. In case the moratorium period / instalment start date is erroneously updated system will not show correct result.	ACI -> Option "E" Repayment details
Installment Start Date is future date	Check whether Instalment Start Date entered as per sanctioned term? In case of future date system will not identify instalment and any repayment received will be shown as "Overflow".	ACI -> Option "E" Repayment details
Interest Demand date (Future Date)	Check whether Interest Start Date entered is as per Sanctioned Term? In case of future date as Interest Demand Date system will not accrue interest and any repayment received will be shown as "Overflow"	ACI -> Option "E" Repayment details

Audit Activity through CBS

❏ <u>Logical Access Controls:</u>

  ❏ Creation / Deletion / Amendment in User Profile, Powers done centrally. If not, verify the compliances as follows.

    ❏ Records for User – ID Creation properly maintained?

    ❏ Records for Deletion of user-ID with proper authorisation available?

    ❏ Other issues like security of password, compulsory change of password, Transaction Limit for employees etc.

Audit Activity through CBS

❑ <u>Output Controls:</u>

    ❑ Whether Hard copies of Accounts available?

    ❑ Whether such reports are signed?

❑ <u>Security of Data:</u>

    ❑ Whether the encryption software is available in Server / Backup Server (If data is stored)

    ❑ Whether the computers are having Antivirus Software?

    ❑ Whether the AV Software is updated on regular basis?

Audit Activity through CBS

❑ <u>Backups</u>

   ❑ Important Activity for Non CBS Branches

   ❑ Backup should be stored on Off-site Location

   ❑ Backup should have been tested at periodical intervals

   ❑ Backup Register should be maintained

❑ <u>Verification of specific auto generated Reports</u>

   ❑ **Exception Report:**

      ❑ Reports for the month end and two days prior and after month end should be verified.

      ❑ Exceptions of following natures should be closely verified.

         ❑ Balance exceeded Account Limit

         ❑ Manual debits to Income Account

         ❑ Value Dated Transactions

         ❑ Manual entry for SI Failure cases

         ❑ Instrument passed against Clearing

Audit Activity through CBS

❑ **Irregularity Report:**

    ❑ Reports for the month end and two days prior and after month end should be verified.

    ❑ Report contains details of Accounts where Balance in Accounts are greater than the Limits Sanctioned. Check whether the same is due to,

        ❑ Application of Interest

        ❑ Granting of Intra Day TOD

        ❑ Passing of Instruments against Clearing Effects

❑ **Accounts where Interest Code is '0':**

  ❑ Interest will not be charged from Accounts where Interest Code is selected as '0'. Hence, a detailed checking is required. Possible reasons can be,

    ❑ Whether NPA Account
    ❑ Accounts with Moratorium?

❑ **Interest Collection Flag as "No":**

  ❑ If Interest Collection Flag is selected as "No", Software will not consider the account for calculation and entry for Debit Interest.

❑ **Debit Interest / Loan Installment SI Failed Report:**

   ❑ Failure of Standing Instruction for Debit Interest/instalment should be closely verified. If the SI is failed the Account will not be debited for Interest/instalment. SI Failure can be for any reason like

     ❑ Non availability of Balance in Account (In case of TOD in Operative Account)

     ❑ Non availability of Limit in Account

     ❑ Technical Snag in execution

   ❑ Whether Branch has manually passed the entry for all such cases should be verified.

Audit Activity through CBS

❑ **Report containing all Advance Accounts with Limits:**

❑ Generally, CBS Software generate a Report wherein details of all Advance Accounts are listed.

❑ Excel can be used to verify cases of DP > SL, Margin Requirement etc.

Thank You