



# ARCHIVAL SOLUTION



**BEST OF BREED SOFTWARE SOLUTIONS (I)  
PVT. LTD.**

<http://www.bbssl.com>

## What is bARCH

- bARCH is a solution to archive historical data from production databases while maintaining access to the archived data for reporting
- bARCH provides browser based access to the archived/history data
- It is a Data Archival Solution for banks to archive old data when they purge their OLTP database or to retain legacy data when they migrate to a new banking solution or whenever the data base access is restricted for access for general users of the organisation.

## Need for bARCH

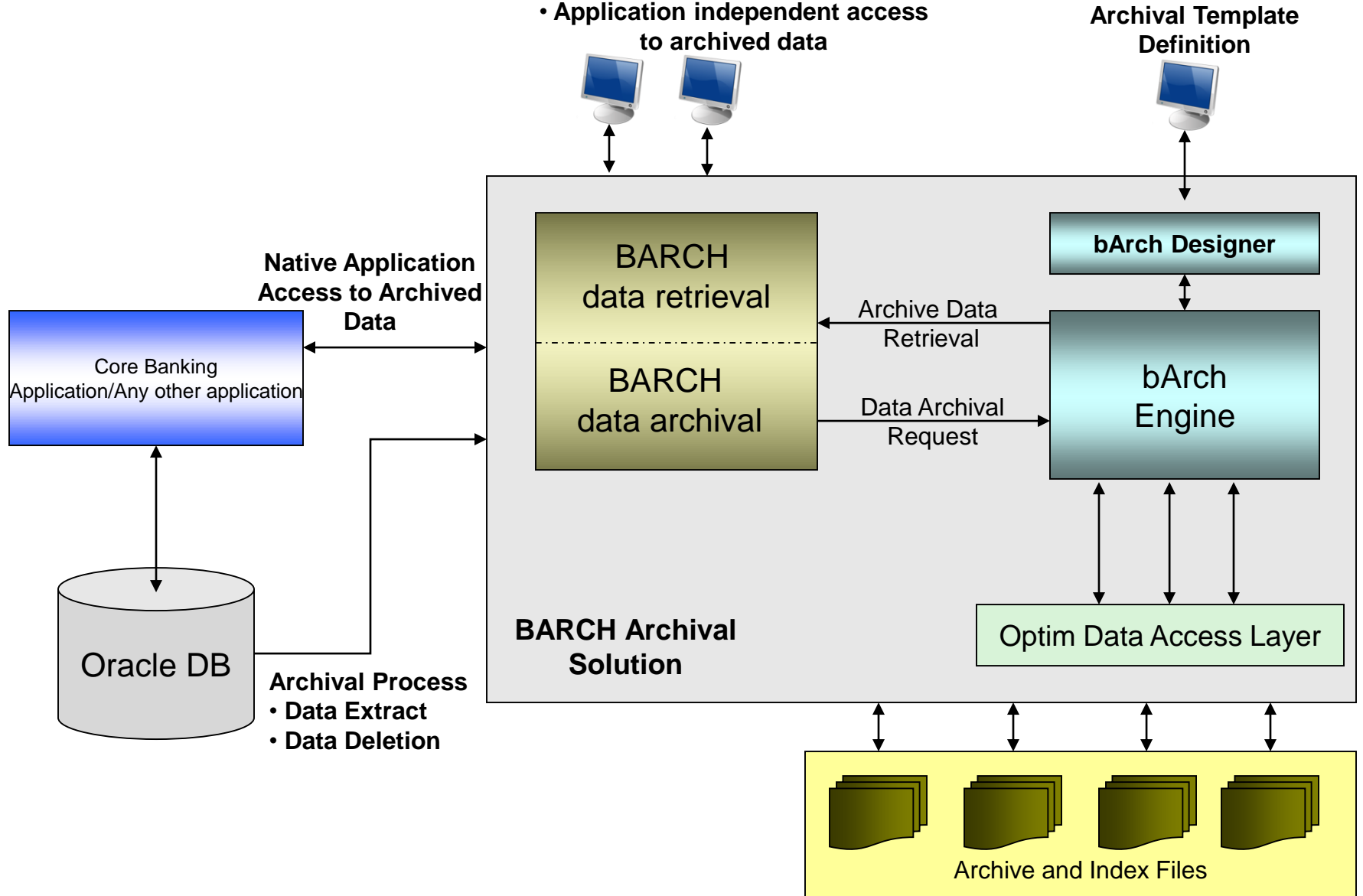
- Statutory requirements of the central bank and legal requirements of the country demand the banks to maintain the historical data
- When a bank replaces its existing software with new Software, in that cases the new software is not capable of carrying the historical data
- When a bank wants to purge their OLTP database, in that cases the existing database will not hold the purged data
- When the banks have a shared database or outsourced the activity but would like to have access to processed data without accessing the outsourced partner's database containing customers data

## bARCH Solution Objectives

- Maintain the historical data based on the requirements defined by the bank
- Maintain archived data in a secure, read only format
- Archive and store historical data outside the relational database, there by optimizing on the cost of storing the archived data
- Retrieve/ print the archived data, as required in the predefined format
- Easy access to the data via bARCH solution and/or native application
- Ensure security and authorized access of archived data

# Solution Architecture

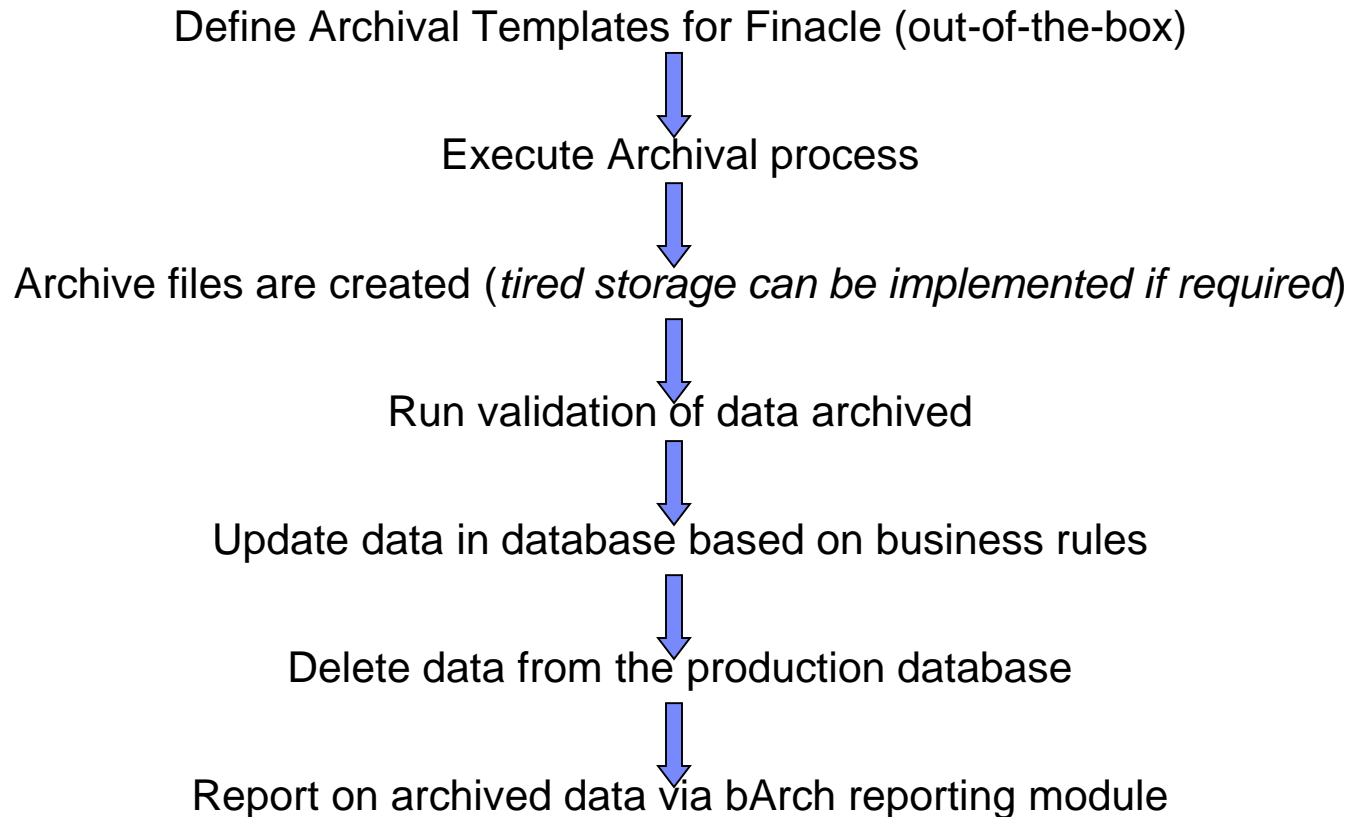
- Schedule/ Execute data archival request
- Application independent access to archived data



## High Level Solution Design

- Archival process triggered / executed from the bARCH GUI
- bARCH solution invokes the Optim archival process
  - Optim archival templates incorporate business rules to select data for archival
  - Data extraction is done based on these templates & parameters passed from bARCH GUI
  - Archive files are created on storage
  - The deletion of archived data from database will be a deferred activity
- bARCH will run appropriate validation routines to
  - Check the archived data
  - Make necessary updates in CBS database based on business rules
    - E.g. update dummy customer IDs wherever customer IDs that have been archived are referenced
- bARCH solution will delete archived data from the database
- Access to archived data provided via the bARCH reporting module
  - Access can also be provided via the core banking application

## Process Flow



## Benefits bArch Data Growth Solution

- By default archives data to archive files, below are the key benefits
  - Lower TCO for maintaining historical/ archive data
    - Archive files are in a cost effective database
    - Database agnostic and can be stored in any database
  - Archive files preserve metadata and relationships of archived data outside the database
  - Archive files are immutable & read-only, hence totally secure
- Archive files should have a JDBC/ODBC interface, hence the data in the file can be accessed via independent tools and can be accessed thru any third party tools for viewing the archived data
- Reduces cost of data management in production systems
  - Software license fees
  - Hardware costs
  - Maintenance and Labor costs
  - Reduced processor upgrades
  - Improved performance
- Tiered Storage strategy can be implemented to optimize on the cost for archive data storage
- bARCH usage can be extended to application decommissioning & application upgrades
  - Helps reduce infrastructure complexity and cost
  - Streamlines application upgrades, reduces time for db conversion



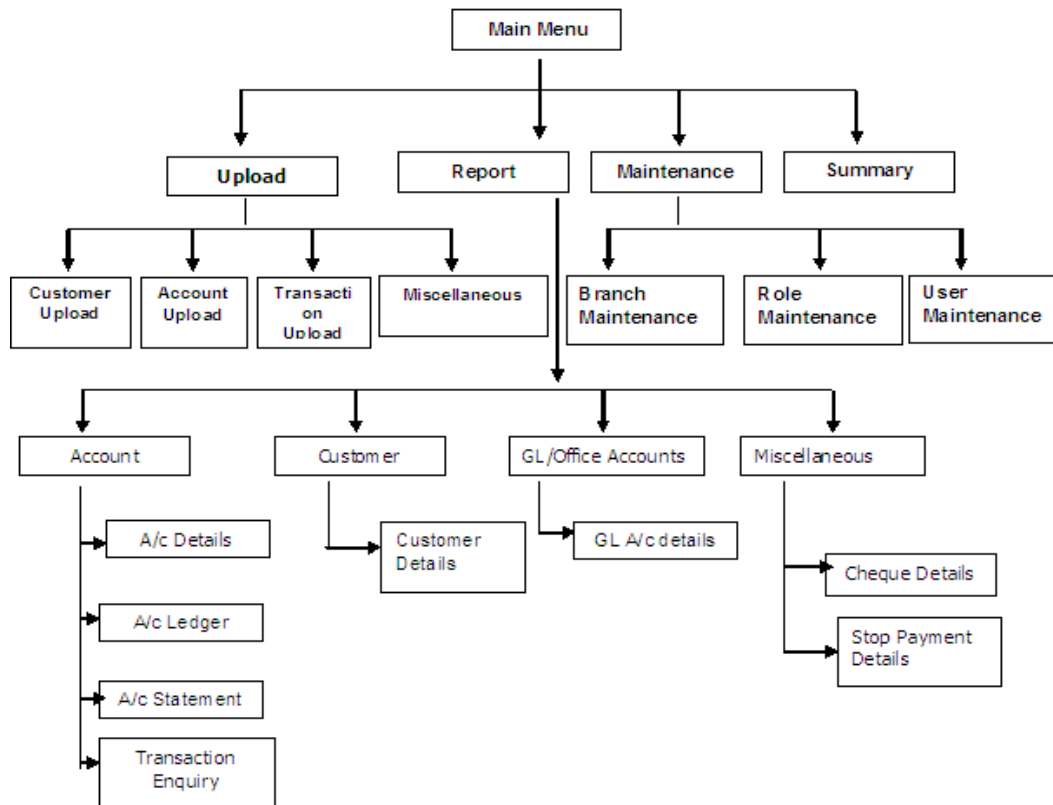
## bARCH Modules

- Login module
- Branch Master module
- Roles and user define module
- Summary module
- Archive module
- Report module

# Main Menu

## THE MAIN MENU

The structure of the main menu is as follows



## EXTRACTION/UPLOAD DETAILS

## CUSTOMER SUMMARY

[Total Summary](#)
[Customer Summary](#)
[Account Summary](#)
[Transaction Summary](#)
[Miscellaneous Summary](#)
[Trade Finance Summary](#)
[Branch Summary](#)

File Name	Extracion From Date	Extracion To Date	Extraction Date	Upload From Date	Upload To Date	Upload Date	Purge From Date	Purge To Date	Purge Date
CMG	01/01/2001	01/01/2002	12/05/2011	01/01/2001	01/01/2002	17/05/2011	-	-	-
CMT	01/01/2001	01/01/2002	12/05/2011	-	-	-	-	-	-
IDT	01/01/2001	01/01/2002	12/05/2011	-	-	-	-	-	-
NCT	01/01/2001	01/01/2002	13/05/2011	-	-	-	-	-	-
CMC	01/01/2001	01/01/2002	14/05/2011	-	-	-	-	-	-
DOFF	01/01/2001	01/01/2002	14/05/2011	-	-	-	-	-	-
SMT	01/01/2001	01/01/2002	14/05/2011	-	-	-	-	-	-
FPC	01/01/2001	01/01/2002	14/05/2011	-	-	-	-	-	-
GAC	01/01/2001	01/01/2002	14/05/2011	-	-	-	-	-	-

**All CUSTOMER Tables Are Extracted Please Check From Date And To Date All Table In Sink Or Not**

**Please UPLOAD all Extracted Table Before Next Extraction**

## Next Extraction / Upload

GAC	01/01/2002	01/01/2003	16/05/2011	-	-	-	-	-	-
CMG	02/01/2002	01/01/2003	17/05/2011	-	-	-	-	-	-
CMT	02/01/2002	01/01/2003	17/05/2011	-	-	-	-	-	-

**All CUSTOMER Tables Are Not Extracted Please Extract All Tables**

**Bank :** ICICI Bank Ltd      **Legacy :** null      **Start Date :** 12-07-1997  
**Branch :** GOBICHETTIPALAYAM      **Sol Id / Alpha :** 0025/null



User ID:ADMIN  
Logged on: 19-11-2008 22:59:49

Customer Details

Account Details

AccountLedger  
Details

Transaction Details

Cheque Book Details

Stop Payment Details

Customer Statement

GL Account Details

CUSTOMER DETAILS REPORT

Customer ID :  [Generate Reports](#) [Search](#)

Sol ID :


 User ID:ADMIN  
 Logged on: 19-11-2008 22:59:49

[Summary](#) | [Maintenance](#) | [Customer](#) | [Account](#) | [Transaction](#) | [Miscellaneous](#) | [Reports](#) | [Mig. Reports](#)
[Customer Details](#)
[Account Details](#)
[AccountLedger Details](#)
[Transaction Details](#)
[Cheque Book Details](#)
[Stop Payment Details](#)
[Customer Statement](#)
[GL Account Details](#)
**ACCOUNT LEDGER REPORT**

 Account Number :     
 From Date\* :   To Date\* :    
 Sol ID : 

(Date Format:\*dd/mm/yyyy)

Account Number :	30480100000135	Legacy A/C Number :	SB200104
Account Open Date :	20-07-2007	Account Closed Date :	
Customer Id :	021436410	Customer Name :	JETHALAL TRIBHOVANDAS PANCHAL
A/C Status as on Mig. Date (31-07-2008) :	ACTIVE	Account Type :	Savings Account
Joint Holders:	RAMILABEN JETHALAL PANCHAL		

Tran Date	Tran Particulars	Instr. Num	Debit	Credit	Balance
	<b>Opening Balance :</b>			0.00	0.00
20-07-2007	BY CASH	-		20,000.00	20,000.00
07-08-2007	-	-	4,000.00		16,000.00
31-12-2007	Interest Cred	00200104		233.00	16,233.00
	<b>Summation</b>		<b>4,000.00</b>	<b>20,233.00</b>	

Balance as on Mig. Date: 16233

**Bank :** Bank Of Baroda  
**Branch :** CPALAN

**Legacy :** BIBAS  
**Sol Id/Alpha :** 3048/CPALAN

**Start Date :** 01-01-2001  
**Migration Date :** 31-07-2008

## Success of bARCH

- State bank of Mysore (SBM)

Implemented successfully in 50 branches of State bank of Mysore as a decentralized application.

- Bank of Baroda (BOB)

Deployed at BOB datacenter as a centralized application holding nearly 1500+ branches data in its database.

- The Malleswaram Co-operative Bank (MCB)

Implemented successfully in all the branches of MCB as a decentralized application for the purged data

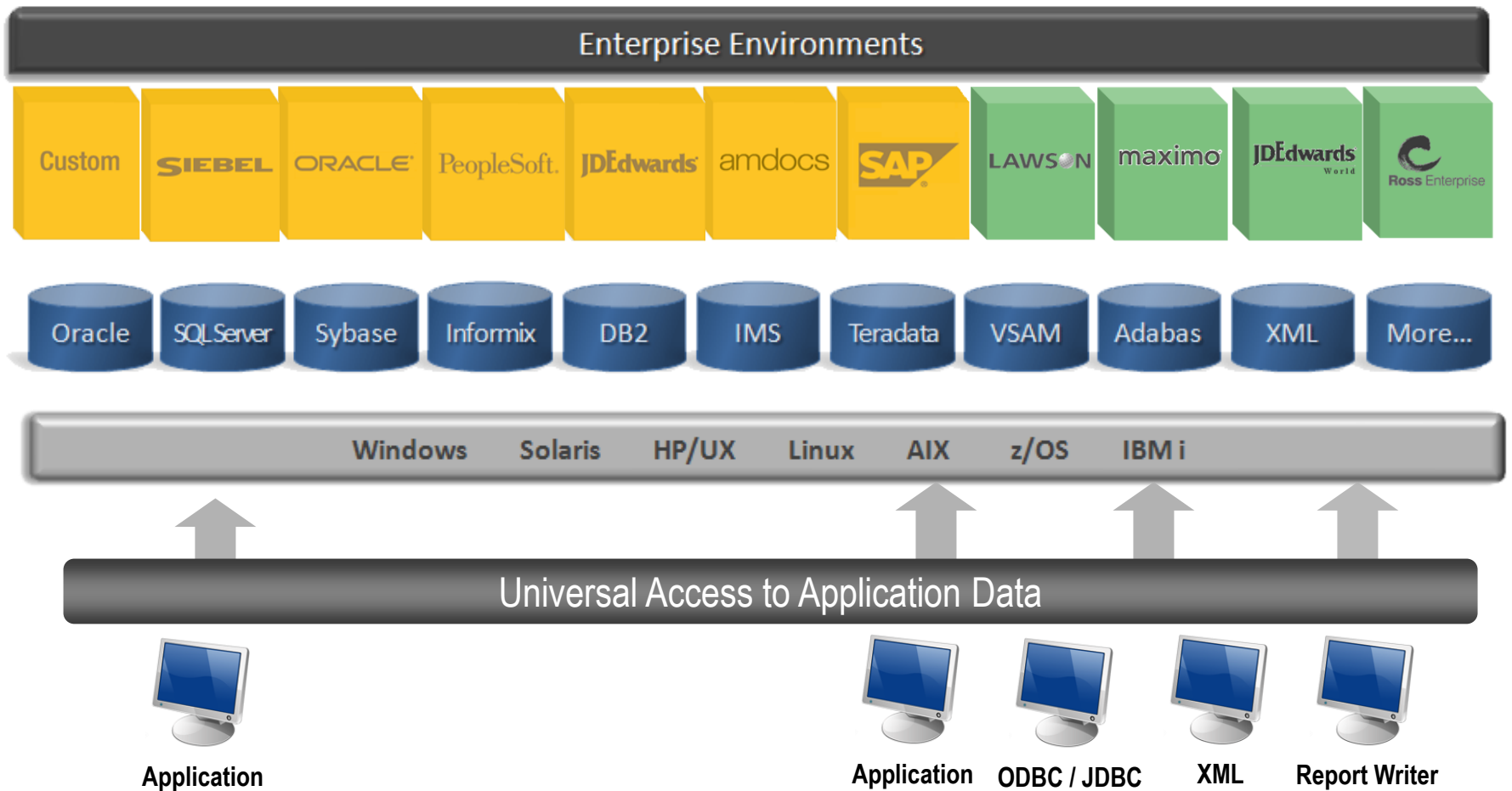
- ICICI Bank

Installation phase for Finacle Purged data and other legacy applications

## Other data life cycle management Solutions

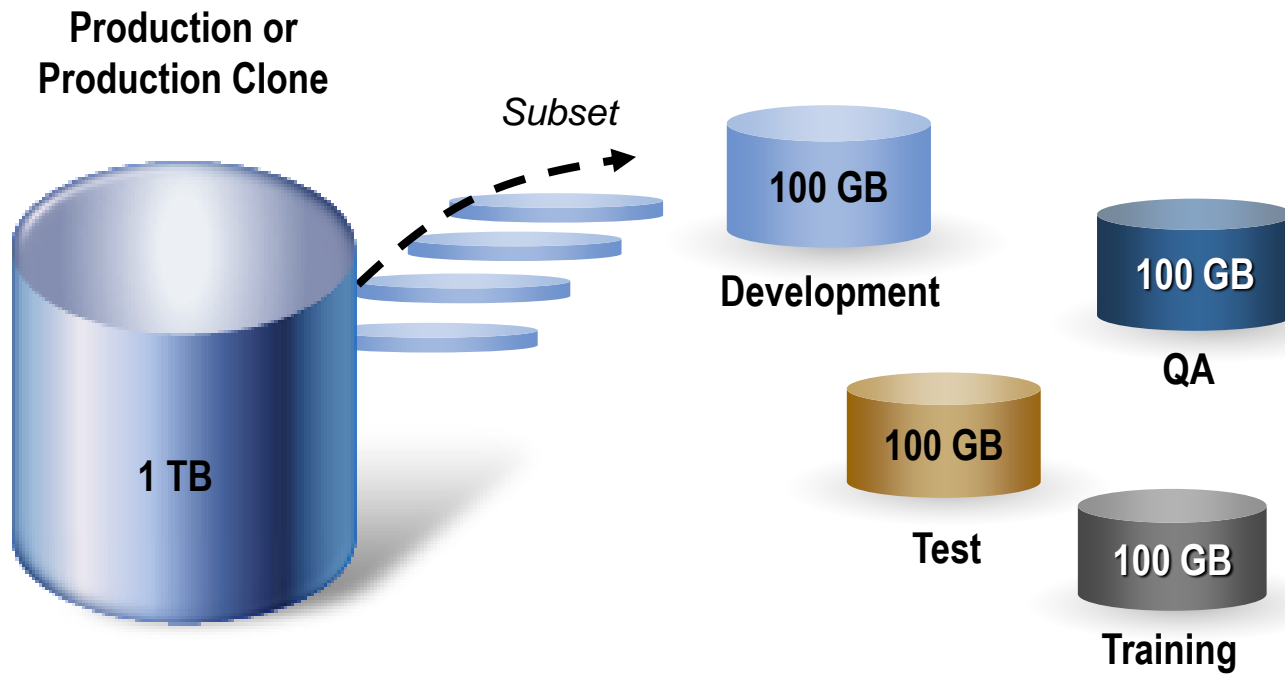
- bARCH Application Retirement Solution
  - Archive data from applications being sunset
  - Provide SQL interface to query the archive data
- BBSSL's Test Data Management Solution
  - Helps define right sized test environments, there by lowering cost of test environments
  - Easily refresh and maintain test environments
  - Develop new functionality more quickly, shorten testing cycles
- BBSSL's Data Privacy Solution
  - Mask sensitive data in test or other non-production environments
  - Replace confidential data with fictionalized but contextually accurate data

# Supporting Enterprise Environments

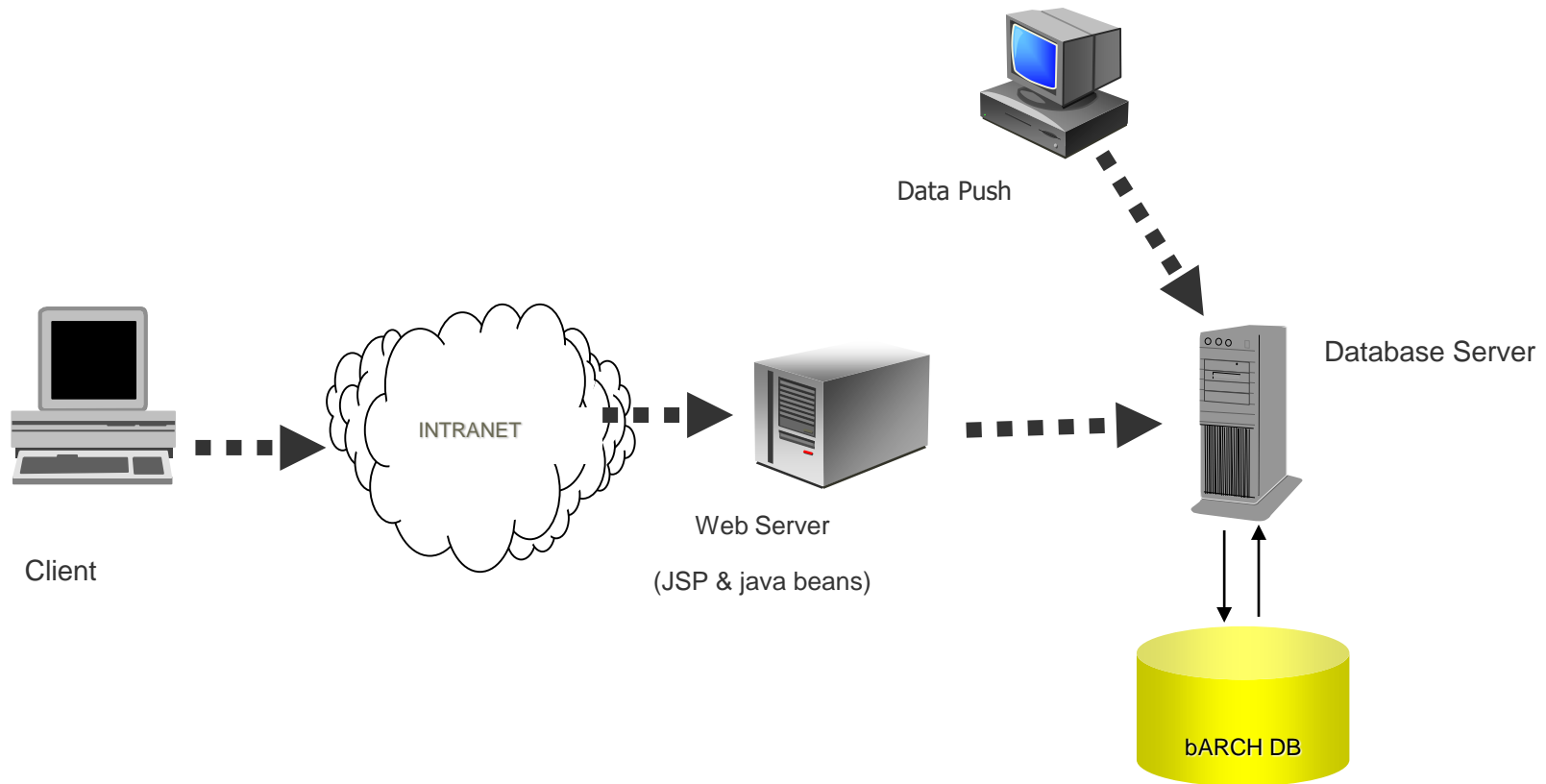




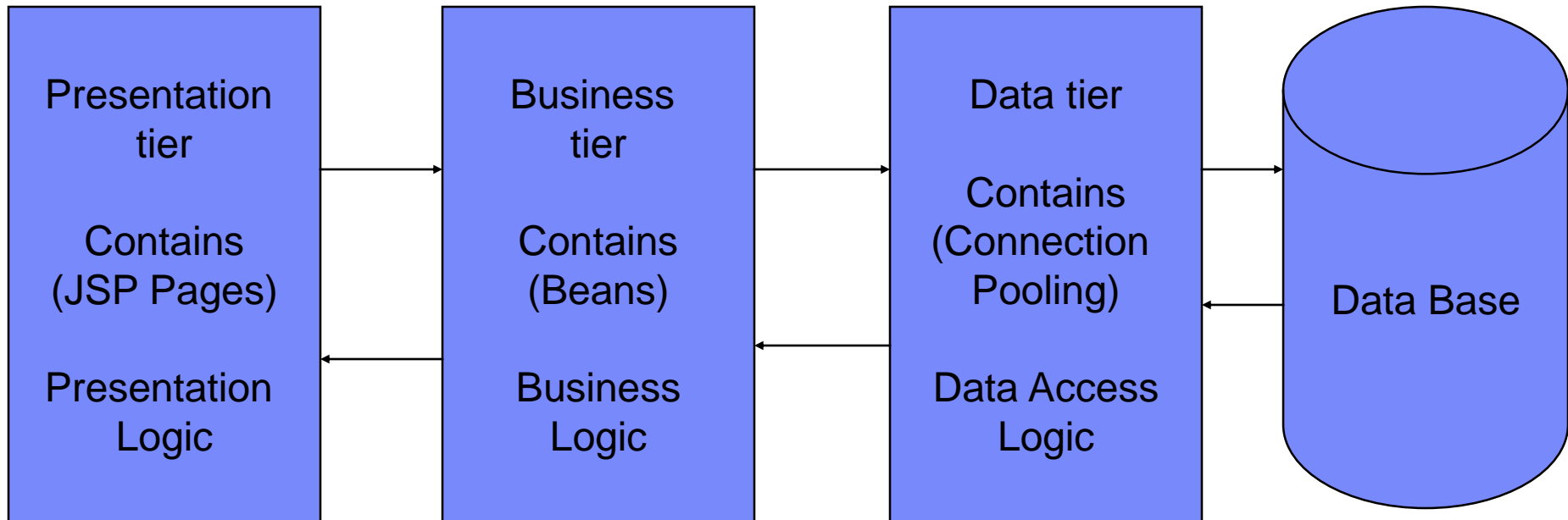
# Test Data Management



The system is developed under 3 tier architecture as a Client-Server application. The system development will follow the *waterfall model*.



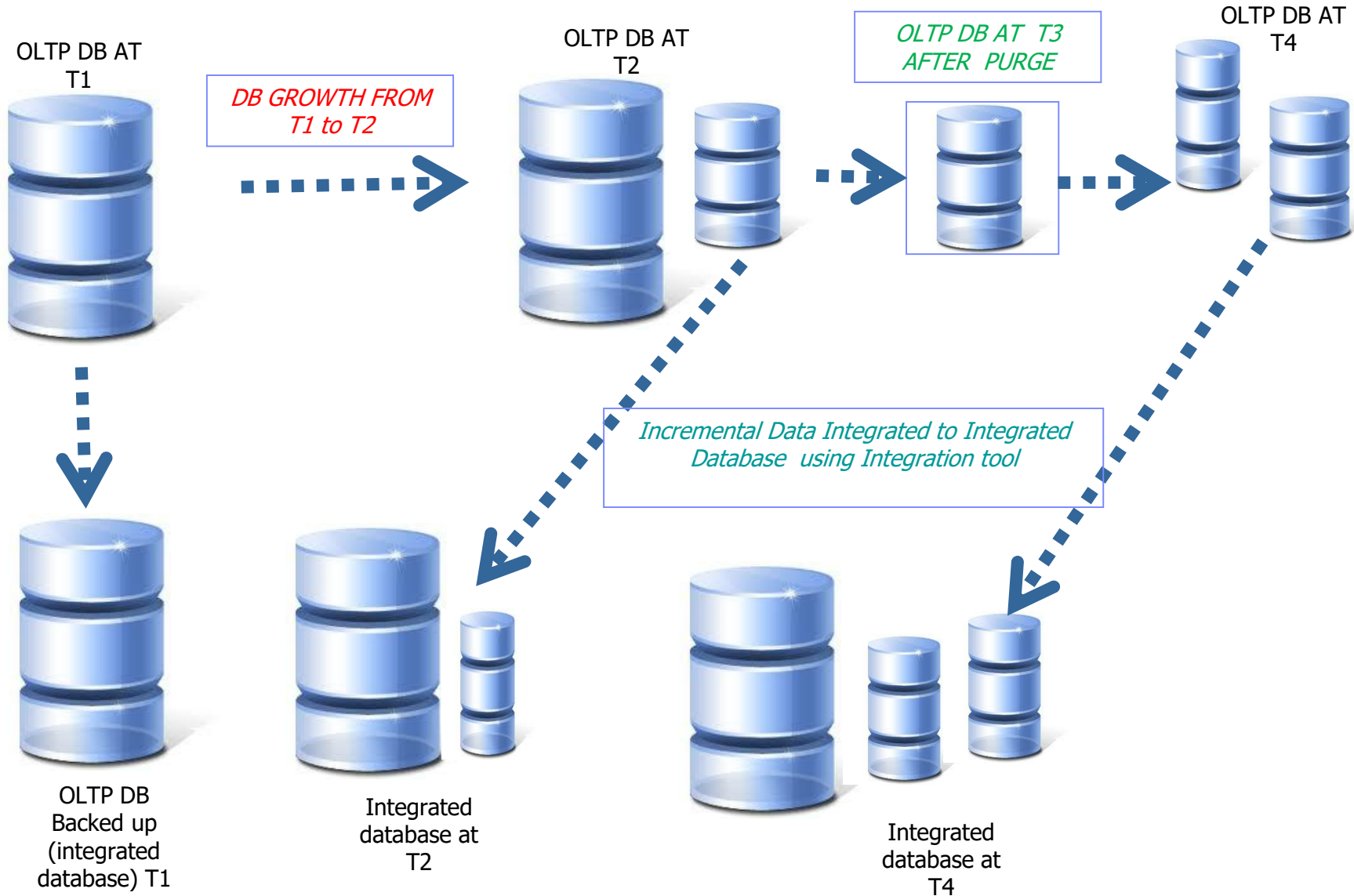
# 3 Tier Architecture



# What else bARCH can Do ?

- Limitations have created a road block for purge projects and customers trade off cost and performance rather than loose data
- A new approach is proposed to get over the mind set and provide feasible and acceptable solution
- The solution will provide a option for the customer to view the purged data using the application or through an application that is developed for the purpose.
- The solution expects the user to periodically append the incremental data to an integrated database
- A utility to be provide for appending the data
- Mark the appended data as eligible for purge in the OLTP database

# CONTEXT DIAGRAM – Purge OLTP after integration



Questions – Q and A Session?

