

# Oracle Banking APIs

Data Protection Guide

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# Table of Contents

<b>1. Objective and Scope .....</b>	<b>4</b>
1.1 Background .....	4
1.2 Objective .....	4
1.3 Scope .....	4
<b>2. Personally Identifiable Information (PII) .....</b>	<b>5</b>
<b>3. Flow of PII Data .....</b>	<b>8</b>
<b>4. Administration of PII Data .....</b>	<b>10</b>
4.1 Extracting PII data .....	10
4.1.1 Data stored in OBAPI .....	10
4.1.2 Data stored outside OBAPI .....	12
4.2 Deleting or Purging PII data .....	12
4.2.1 Using User Interface .....	13
4.2.2 Using purge procedures .....	13
4.2.3 Manual truncation of data from backend.....	14
4.3 Masking of PII data .....	18
<b>5. Access Control for Audit Information .....</b>	<b>20</b>
<b>6. User exporting the PII data .....</b>	<b>27</b>
<b>7. Third Party Consents .....</b>	<b>30</b>
<b>8. Device ID Consents .....</b>	<b>36</b>

# 1. Objective and Scope

## 1.1 Background

OBAPI is designed to help banks respond strategically to today's business challenges, while also transforming their business models and processes to reduce operating costs and improve productivity across both front and back offices. It is a one-stop solution for a bank that seeks to leverage Oracle Fusion experience across its core banking operations across its retail and corporate offerings.

OBDX provides a unified yet scalable IT solution for a bank to manage its data and end-to-end business operations with an enriched user experience. It comprises pre-integrated enterprise applications leveraging and relying on the underlying Oracle Technology Stack to help reduce in-house integration and testing efforts.

In order to provide these services OBAPI needs to acquire, use or store personally identifiable information (PII). In some cases, OBAPI may be owner of the PII data and in some other cases OBAPI might just acquire and use this data for providing required services to the customer.

## 1.2 Objective

By the very nature of PII data, it is necessary for the Bank to be aware of the information being acquired or used or stored by OBAPI. This knowledge will enable the Bank to take necessary measures and put apt policies and procedures in place to deal with PII data. In some of the geographies Bank might need to comply with local laws and regulations for dealing with PII data. This document attempts to provide necessary information so as to enable the Bank to do so.

## 1.3 Scope

This document is intended for technical staff of the Bank as well as administration users of the Bank and provides information about following aspects of the PII data.

- Identifies what PII data is acquired, used or stored in OBAPI
- Process to extract PII data from OBAPI
- Process to purge and delete the PII data from OBAPI

### **Out of scope**

This document does not intend to suggest that OBAPI is out of box compliant with any local laws and regulations related to data protection. The purpose of this document is to provide information about PII data dealt with in the system so that the Bank can put in place appropriate processes to comply with laws and regulations of the land.

## 2. Personally Identifiable Information (PII)

Personally identifiable information (PII) is any data that could potentially identify a specific individual. Any information that can be used to distinguish one person from another and can be used to de-anonymizing anonymous data can be considered PII.

OBDX needs to acquire, use or store some PII data of the customers of the Bank in order to perform its desired services. This section declares the PII data captured by OBDX so that the Bank is aware of the same and adopts necessary operational procedures and checks in order to protect PII data in the best interest of its customers.

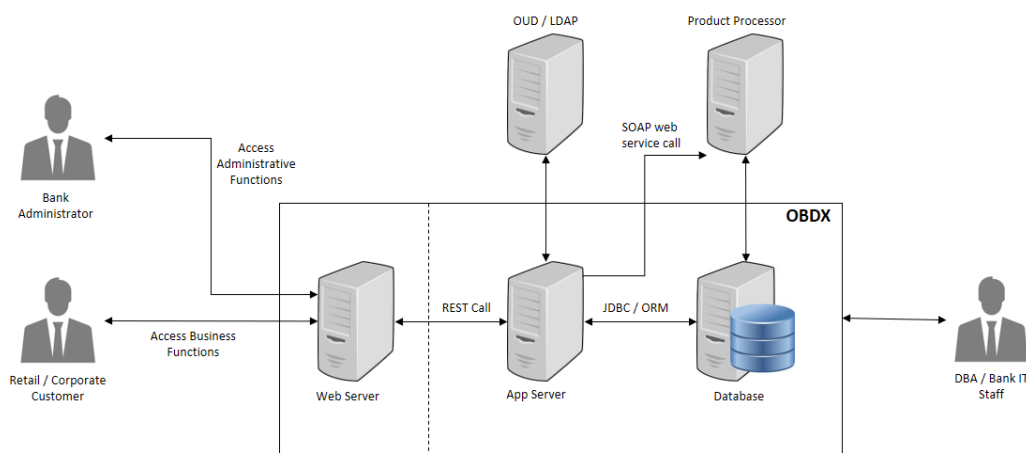
Fields	OBAPI 19.1
<b>Bank account information</b>	Yes
<b>Beneficiaries</b>	Yes
<b>Biometric records</b>	No
<b>Birthplace</b>	No
<b>Bonus</b>	No
<b>Country, state, or city of residence</b>	Yes
<b>Credit card numbers</b>	Yes
<b>Criminal record</b>	No
<b>Date of birth</b>	Yes
<b>Digital identity</b>	No
<b>Disability leave</b>	No
<b>Driver's license number</b>	Yes
<b>Education history</b>	No
<b>Email address</b>	Yes
<b>Emergency contacts</b>	No
<b>Employee ID</b>	Yes
<b>Ethnicity</b>	No
<b>Financial information and accounts</b>	Yes
<b>Fingerprints</b>	No
<b>Full name</b>	Yes
<b>Gender</b>	Yes

Fields	OBAPI 19.1
<b>Genetic information</b>	No
<b>Health information (including conditions, treatment, and payment)</b>	No
<b>Healthcare providers and plans</b>	No
<b>Personal/office telephone numbers</b>	Yes
<b>IP address</b>	No
<b>Job title</b>	Yes
<b>Login name</b>	Yes
<b>MAC address</b>	Yes
<b>Marital status</b>	Yes
<b>Military rank</b>	No
<b>Mother's maiden name</b>	No
<b>National identification number</b>	Yes
<b>Passport number</b>	Yes
<b>Performance evaluation</b>	No
<b>Personal phone number</b>	Yes
<b>Photographic images</b>	No
<b>PIN numbers</b>	Yes
<b>Political affiliations</b>	No
<b>Property title information</b>	No
<b>Religion</b>	No
<b>Salary</b>	Yes
<b>Screen name</b>	No
<b>Sexual life</b>	No
<b>Social security number</b>	Yes
<b>Taxpayer information</b>	Yes

Fields	OBAPI 19.1
<b>Union membership</b>	No
<b>Vehicle registration number</b>	Yes
<b>Work telephone</b>	Yes
<b>Citizenship Number</b>	No
<b>Geo-Location</b>	No
<b>Product has Customer defined fields</b>	No
<b>Mobile Subscriber Identifier (IMSI)</b>	No
<b>Surname</b>	Yes
<b>First name</b>	Yes

### 3. Flow of PII Data

This section depicts the flow 'personally identifiable information' (PII) within the OBAPI system in the form of a data flow diagram.



**The Bank Administrator** is Bank's employee who is performing administrative functions using OBAPI. As part of these, he will be dealing with PII data. An example is that the Administrator creates Retail and Corporate users in OBAPI and while creating users he/she enters user information such as first name, last name, email address, mobile number, correspondence address etc.

**Retail / Corporate Customer** is Bank's customer who is accessing the online banking features. As part of this he/she will be able to see his/her accounts, balances, beneficiaries, transactions, profile details etc. Note that OBAPI also supports onboarding of new users. The system captures some user information such as first name, last name, email address, mobile number, correspondence address and financial information such as income profile.

**DBA / Bank IT Staff** is Bank's employee who is not a user of OBAPI but has access to the database that stores OBAPI bank end data or the server environments on which OBAPI is deployed.

**Web server** typically contains static web content such as styling information (CSS), Javascript resources, images, static HTMLs etc. Web server passes the REST service calls to Application server.

**Application (App) Server** is the server on which OBAPI services are deployed. This server performs required processing on the service calls. It does use the database for retrieval or storage of data. It can also connect to external user credential store (such as OUD or Open LDAP). It can also connect to core product processor to enquiring CIF or Account related data or for posting any transactions initiated by the Retail or Corporate customer.



**Database** is the persistence store for OBAPI. It can contain master configuration data, user data and transactional data.

**ODU / LDAP** represents the external user credentials store. OBAPI does not maintain user credentials locally but depends on external specialized software to do that. An example can be Oracle Unified Directory (ODU) or Open LDAP.

**Product Processor** is the core banking solution which actually processes actual banking transactions. OBAPI connects to the product processor to fetch data such as CIFs or Accounts or transactions. It also connects to the product processor to post new transaction initiated by Retail or Corporate customer.

## 4. Administration of PII Data

This section provides information about doing administrative tasks on PII data. This includes retrieval, modification, deletion or purging of such data.

### 4.1 Extracting PII data

OBAPI stores some PII data in its database and it also accesses data stored or owned by external systems such as OUD / LDAP or product processor.

#### 4.1.1 Data stored in OBAPI

This section provides information about the tables that store PII data. This information is useful for the Bank to extract PII information.

PII Data	Table
<b>Bank account information</b>	DIGX_AC_ACCOUNT_NICKNAME DIGX_AM_ACCOUNT_ACCESS DIGX_AM_ACCOUNT_EXCEPTION
<b>Beneficiaries</b>	DIGX_PY_PAYEEGROUP DIGX_PY_PAYEE DIGX_PY_DOMESTIC_UK_PAYEE DIGX_PY_INTERNAL_PAYEE DIGX_PY_DEMANDDRAFT_PAYEE DIGX_PY_INTNATNL_PAYEE_BNKDTLS DIGX_PY_DOMESTIC_INDIA_PAYEE DIGX_PY_PEERTOPEER_PAYEE DIGX_PY_INTERNATIONAL_PAYEE DIGX_PY_DOMESTIC_SEPA_PAYEE DIGX_PY_GLOBAL_PAYEE
<b>Country, state, or city of residence</b>	DIGX_OR_APPLICANT, DIGX_OR_APPLICANT_ADDRESS  DIGX_UM_USERPROFILE
<b>Credit card numbers</b>	DIGX_CD_CREDITCARD_MASTER DIGX_CD_SUPP_CARD_RELATION
<b>Date of birth</b>	DIGX_OR_APPLICANT DIGX_UM_USERPROFILE
<b>Driver's license number</b>	DIGX_OR_APLT_IDNT

PII Data	Table
<b>Email address</b>	DIGX_OR_APPLICANT_CONTACT  DIGX_OR_EMAIL_VERIFICATION (used only for email verification, data is purged once email is verified)  DIGX_UM_USERPROFILE
<b>Employee ID</b>	DIGX_OR_APLT_EMPT
<b>Financial information and accounts</b>	Only financial information(Income, Asset, expense, Liability) DIGX_OR_APLT_FIN_INCM, DIGX_OR_APLT_FIN_AST, DIGX_OR_APLT_FIN_EXP, DIGX_OR_APLT_FIN_LIB
<b>Full name</b>	DIGX_OR_APPLICANT  DIGX_UM_USERPROFILE
<b>Gender</b>	DIGX_OR_APPLICANT
<b>Personal/office telephone numbers</b>	DIGX_OR_APPLICANT_CONTACT  DIGX_UM_USERPROFILE
<b>Job title</b>	DIGX_OR_APLT_EMPT  DIGX_UM_USERPROFILE
<b>Login name</b>	DIGX_UM_USERAPPDATA DIGX_UM_USERPARTY_RELATION USERS GROUPMEMBERS DIGX_UM_USERPROFILE  DIGX_AM_ACCOUNT_ACCESS

PII Data	Table
<b>MAC Address</b>	DIGX_AUDIT_LOGGING
<b>Marital status</b>	DIGX_OR_APPLICANT
<b>National identification number</b>	DIGX_OR_APLT_IDNT
<b>Passport number</b>	DIGX_OR_APLT_IDNT
<b>Personal phone number</b>	DIGX_OR_APPLICANT_CONTACT
<b>PIN numbers</b>	DIGX_OR_APPLICANT_ADDRESS
<b>Salary</b>	DIGX_OR_APLT_FIN_INCM, DIGX_OR_APLT_EMPT
<b>Social security number</b>	DIGX_OR_APLT_IDNT
<b>Taxpayer information</b>	DIGX_OR_APLT_IDNT
<b>Vehicle registration number</b>	DIGX_OR_APLT_IDNT
<b>Work telephone</b>	DIGX_OR_APPLICANT_CONTACT
<b>Surname</b>	DIGX_OR_APPLICANT DIGX_UM_USERPROFILE
<b>First name</b>	DIGX_OR_APPLICANT DIGX_UM_USERPROFILE

Please note that OBAPI provides user interface to access most of this data. The data will be accessible to you only if you have required roles and policies mapped to your OBDX login. For example, an Administrator user can see retail user's profile only if he is entitled by a policy to access this information.

#### 4.1.2 Data stored outside OBAPI

OBDX can store user information in external systems such as OUD or LDAP. OBDX provides screens for fetching this data. Please refer to the 'User Management' section of the Core user manual of OBDX. Web help is also available at <https://docs.oracle.com/cd/F18558-01/webhelp/OBDX.htm#obdx/core/coreintro.htm>

Also note that the data can be accessed directly from the external system i.e. OUD, Open LDAP or the Product Processor. These details are outside the scope of this document. Please refer to the manual of corresponding software for more details.

## 4.2 Deleting or Purging PII data

There are two ways in which PII data can be deleted or purged from the system.

## 4.2.1 Using User Interface

The information created in (or owned by) OBAPI can be deleted from its user interface. For example, a retail user can delete the beneficiaries he/she has maintained. Please refer to 'Manage Payee' section of following user manual for more details.

[https://docs.oracle.com/cd/F18558-01/webhelp/OBDX.htm#obdx/retail/payments/managepayees.htm%3FTocPath%3DOracle%2520Banking%2520Digital%2520Experience%7CRetail%2520Servicing%7CPayments%7C\\_\\_\\_\\_\\_1](https://docs.oracle.com/cd/F18558-01/webhelp/OBDX.htm#obdx/retail/payments/managepayees.htm%3FTocPath%3DOracle%2520Banking%2520Digital%2520Experience%7CRetail%2520Servicing%7CPayments%7C_____1)

Note that user's data such as CIF or account number is not owned by OBDX and hence it cannot be deleted from OBAPI. However information such as account access granted to a particular user can be modified or deleted by the bank administrator. Please refer to 'Party Account Access' and 'User Account Access' sections of the Core user manual for more details.

[https://docs.oracle.com/cd/F18558-01/webhelp/OBDX.htm#obdx/core/accountaccess/acctaccesintro.htm%3FTocPath%3DOracle%2520Banking%2520Digital%2520Experience%7CCore%7CAccount%2520Access%7C\\_\\_\\_\\_\\_0](https://docs.oracle.com/cd/F18558-01/webhelp/OBDX.htm#obdx/core/accountaccess/acctaccesintro.htm%3FTocPath%3DOracle%2520Banking%2520Digital%2520Experience%7CCore%7CAccount%2520Access%7C_____0)

## 4.2.2 Using purge procedures

OBAPI provides some out of the box purge procedure that can be used to purge the data. Otherwise the DBA / IT staff can prepare similar procedures to purge required data. However note that it is not recommended to purge or delete any data stored in OBAPI tables without doing detailed impact analysis. Please also note that the purge jobs are useful typically for purging old data. They may not be useful for purging data of a specific customer.

### Procedure name –

DIGX\_USER\_PII\_DATA\_PURGE.sql

Procedure input parameter –

User Id (unique identifier of user) which is to be purged.

### Description -

DIGX\_USER\_PII\_DATA\_PURGE will permanently purge the user and all the PII data associated with the user from all the database tables of OBAPI.

It must be noted that once user is purged then associated PII data and user cannot be retrieved under any circumstances.

### Associated table –

This table holds data of table names and field names of tables containing User Id. Procedure fetches data from table DIGX\_UM\_USERS\_ASSOCIATIONS and deletes all the PII data related to the provided User Id

### Steps to run -

Run the procedure with providing User Id as input parameter.

### 4.2.3 Manual truncation of data from backend

In scenarios where OBAPI does not have user interface to remove customer data and scheduled purge option is not useful, then data needs to be purged using SQL scripts. Below section provides some queries that can be used for such a purging. This option must be used with utmost care and proper impact analysis must be done before using these scripts.

PII Data	Table	Script
<b>For modules other than Origination: Personal information of user including Country, state, or city of residence, Date of birth, Email address, Employee ID, Full name, Gender, Personal/office telephone numbers, Login name, Work telephone, First Name, Surname</b>	USERS GROUPMEMBERS DIGX_UM_USERPROFILE DIGX_UM_USERAPPDATA DIGX_UM_USERPARTY_RELATION DIGX_UM_REGISTRATION	<pre> delete                                from digx_um_userparty_relation  where user_id = '&lt;USER IDENTIFIER&gt;';  delete from digx_um_userappdata where id = '&lt;USER IDENTIFIER&gt;';  delete                                from DIGX_UM_USERPROFILE        where U_NAME = '&lt;USER IDENTIFIER&gt;';  delete from GROUPMEMBERS where G_MEMBER = '&lt;USER IDENTIFIER&gt;';  delete from USERS where U_NAME = '&lt;USER IDENTIFIER&gt;'; </pre>
<b>Bank Account Information</b>	DIGX_AC_ACCOUNT_NICKNAME DIGX_AM_ACCOUNT_ACCESS DIGX_AM_ACCOUNT_EXCEPTION	<pre> delete                                from DIGX_AC_ACCOUNT_NICKNAME  where USER_ID = &lt;USER IDENTIFIER&gt;;  delete                                from DIGX_AM_ACCOUNT_EXCEPTION where ACCOUNT_ACCESS_ID in (select ACCOUNT_ACCESS_ID from DIGX_AM_ACCOUNT_ACCESS where ACCESS_LEVEL = 'USER' and USERID = &lt;USER IDENTIFIER&gt;);  delete                                from DIGX_AM_ACCOUNT_ACCESS </pre>

PII Data	Table	Script
		where ACCESS_LEVEL = 'USER' and USERID = <USER IDENTIFIER>;
<b>Beneficiaries</b>	DIGX_PY_PAYEEGROUP DIGX_PY_PAYEE DIGX_PY_DOMESTIC_UK_PAYEE DIGX_PY_INTERNAL_PAYEE DIGX_PY_DEMANDDRAFT_PAYEE DIGX_PY_INTNATNL_PAYEE_BNKD TLS DIGX_PY_DOMESTIC_INDIA_PAYEE DIGX_PY_PEERTOPEER_PAYEE DIGX_PY_INTERNATIONAL_PAYEE DIGX_PY_DOMESTIC_SEPA_PAYEE	delete from DIGX_PY_INTERNAL_PAYEE where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = <USER IDENTIFIER>);  delete from DIGX_PY_DOMESTIC_UK_PAYEE where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = <USER IDENTIFIER>);  delete from DIGX_PY_DEMANDDRAFT_PAYEE where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = <USER IDENTIFIER>);  delete from DIGX_PY_INTNATNL_PAYEE_BNKD TLS where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = <USER IDENTIFIER>);  delete from DIGX_PY_INTERNATIONAL_PAYEE where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = <USER IDENTIFIER>);  delete from DIGX_PY_DOMESTIC_INDIA_PAYEE where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = <USER IDENTIFIER>);  delete from

PII Data	Table	Script
		<pre> DIGX_PY_PEERTOPEER_PAYEE where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = &lt;USER IDENTIFIER&gt;);  delete                                from DIGX_PY_DOMESTIC_SEPA_PAYEE E  where PAYEE_ID in (select PAYEE_ID from DIGX_PY_PAYEE where CREATED_BY = &lt;USER IDENTIFIER&gt;);  delete from DIGX_PY_PAYEE where CREATED_BY = &lt;USER IDENTIFIER&gt;;  delete                                from DIGX_PY_PAYEEGROUP                where CREATED_BY = &lt;USER IDENTIFIER&gt;; </pre>
<b>Credit Card Information</b>	DIGX_CD_CREDITCARD_MASTER DIGX_CD_SUPP_CARD_RELATION	<pre> delete                                from DIGX_CD_SUPP_CARD_RELATION where PRIMARYCARDNUMBER in (select ID from DIGX_CD_CREDITCARD_MASTER where PARTY_ID = &lt;PARTY IDENTIFIER&gt;);  delete                                from DIGX_CD_CREDITCARD_MASTER where PARTY_ID = &lt;PARTY IDENTIFIER&gt;; </pre>
<b>Party/User Information in Originations</b>	DIGX_OR_APPLICANT DIGX_OR_APPLICANT_ADDRESS  DIGX_OR_APLT_IDNT DIGX_OR_APPLICANT_CONTACT DIGX_OR_EMAIL_VERIFICATION  DIGX_OR_APLT_EMPT	<pre> delete                                from DIGX_OR_APLT_FIN_INCM             where APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete                                from DIGX_OR_APLT_FIN_AST              where APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete                                from DIGX_OR_APLT_FIN_EXP              where </pre>



PII Data	Table	Script
	DIGX_OR_APLT_FIN_INCM DIGX_OR_APLT_FIN_AST DIGX_OR_APLT_FIN_EXP DIGX_OR_APLT_FIN_LIB	<pre> APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete                                from DIGX_OR_APLT_FIN_LIB                 where APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete from DIGX_OR_APLT_EMPT where    APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete from DIGX_OR_APLT_IDNT where    APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete                                from DIGX_OR_APPLICANT_CONTACT            where APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete                                from DIGX_OR_EMAIL_VERIFICATION           where SUBMISSION_ID = '&lt;SUBMISSION IDENTIFIER&gt;';  delete                                from DIGX_OR_APPLICANT_ADDRESS            where APPLICANT_ID = '&lt;APPLICANT IDENTIFIER&gt;';  delete from DIGX_OR_APPLICANT where    PARTY_ID = '&lt;PARTY IDENTIFIER&gt;'; </pre>

## 4.3 Masking of PII data

OBDX framework provides a facility to mask user sensitive information before showing on the screen. Masking is a process in which only some portion of the data is displayed to the user while remaining portion of the data is either skipped or is replaced with hash characters such as '\*'. Main purpose of masking is to avoid a possibility of 'over the shoulder' stealing of sensitive information. However it is also used so that the clear text sensitive information is not logged in system logs.

A typical example of masking is the account numbers. When OBDX API is invoked that contains Account number in the response, the API will always give masked value. So complete clear text account number is never displayed on the screen.

OBAPI provides masking for following fields out of the box.

Sr. No	Field Name
1	Party Identifier
2	Account Number (Includes current account, saving account, deposit, loan account)
3	Debit Card Number
4	Credit Card Number
5	Mobile/phone number
6	E-mail ID
7	Social Security Number
8	Submission Identifier
9	Application Identifier

OBAPI framework also provides a provision in which any field other than the ones mentioned in the above table can also be masked as per the requirement. This can be achieved by following steps:

1. Create a complex datatype in OBAPI. This datatype must extend `com.ofss.digx.datatype.complex.MaskedIndirectedObject`
2. Define a 'masking qualifier' and a 'masking attribute'
3. Configure this masking qualifier and masking attribute in `DIGX_FW_CONFIG_ALL_B`. An example of the configurations for account number mask is given below

```
INSERT INTO digx_fw_config_all_b (PROP_ID, CATEGORY_ID, PROP_VALUE,
FACTORY_SHIPPED_FLAG, PROP_COMMENTS, SUMMARY_TEXT, CREATED_BY,
CREATION_DATE, LAST_UPDATED_BY, LAST_UPDATED_DATE, OBJECT_STATUS,
OBJECT_VERSION_NUMBER)
```

```
VALUES (*.account_id, 'Masking', 'AccountNumberMasking<', 'Y', null, null, 'ofssuser', sysdate,
'ofssuser', sysdate, 'A', 1);
```

```
INSERT INTO digx_fw_config_all_b (PROP_ID, CATEGORY_ID, PROP_VALUE,
FACTORY_SHIPPED_FLAG, PROP_COMMENTS, SUMMARY_TEXT, CREATED_BY,
CREATION_DATE, LAST_UPDATED_BY, LAST_UPDATED_DATE, OBJECT_STATUS,
OBJECT_VERSION_NUMBER)
```

```
VALUES ('AccountNumberMasking', 'MaskingPattern', 'xxxxxxxxxxxxNNNN', 'Y', null, null,
'ofssuser', sysdate, 'ofssuser', sysdate, 'A', 1);
```

With above steps, the OBAPI framework will make sure to mask the data of this data type during serialization phase in the REST tier.

The masking pattern can contain following characters

1. N – Original character in the data will be retained
2. H – Original character in the data will be skipped
3. \* (Or any other placeholder character) – Original character in the data will be replaced with this character

## 5. Access Control for Audit Information

OBAPI provides mechanism for maintaining audit trail of transactions / activities done by its users in the system. This audit trail is expected to be used for customer support, dispute handling. It can also be used for generating some management reports related to feature usage statistics etc.

From a data protection perspective it is worth noting that the audit trail contains

PII data in the form of transactional data as well as usage trends or statistics. Hence it is necessary for the Bank to put in place appropriate access control mechanisms so that only authorized Bank employees get access to this data. OBAPI provides comprehensive access control mechanism that the Bank can leverage to achieve this.

This access control can be achieved using the role based transaction mapping. This section focuses specifically from data protection aspect. You are requested to go through the user manual for 'Role Transaction Mapping' before reading further in this section. As an example, we have considered a use case where the Bank wants to restrict access to 'Audit Log' feature so that only the permitted set of administration users will be able to access audit of the users. Please note that same process can be applied to other services that deal with PII data. For example, same process can be used for restricting access to user management functions.

### Check the 'out of box' access granted

There are two ways to check the Audit Information

- Maintenance
- Utilization

### Maintenance (Performed by system admin)

1. Log in using Authadmin credentials.
2. Go to tab Role Transaction Mapping.
3. Find application role named "AuditAdmin" or "AuthAdmin".

The screenshot shows the 'Role Transaction Mapping' page in a web browser. The page has a search bar for 'Application Role Name' with 'Search', 'Cancel', and 'Clear' buttons. Below the search bar, there is a table titled 'Application Role Details' with two columns: 'Internal' and 'External'. The 'Internal' column is selected. The table lists the following roles:

Internal	External
Administrator	
AdminMaker	AdminMakerDisplayName
AdminChecker	AdminCheckerDisplayName
AuthAdmin	AuthAdminDisplayName
payment	asa
AuditAdmin	AuditDisplayName

On the right side of the page, there is a 'Note' box with the following text:

**Note**

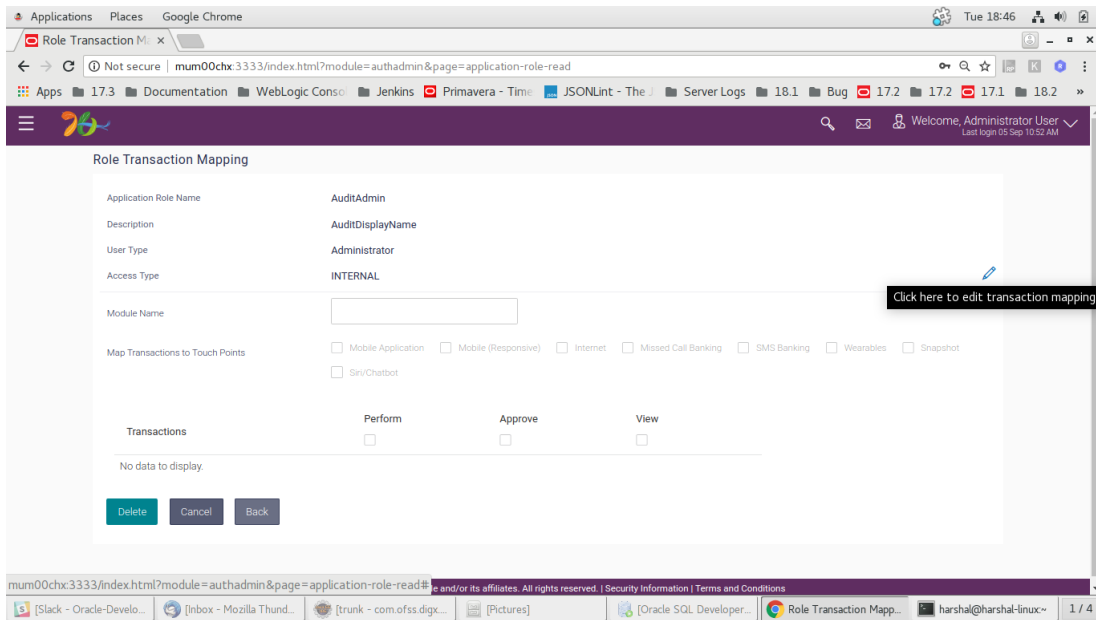
An Application may have several Application Roles for different type of users under different User Segments i.e. Retail, Corporate and Admin.

These roles can be defined for internal as well as for external Access points and various transactions needs to be mapped to it.

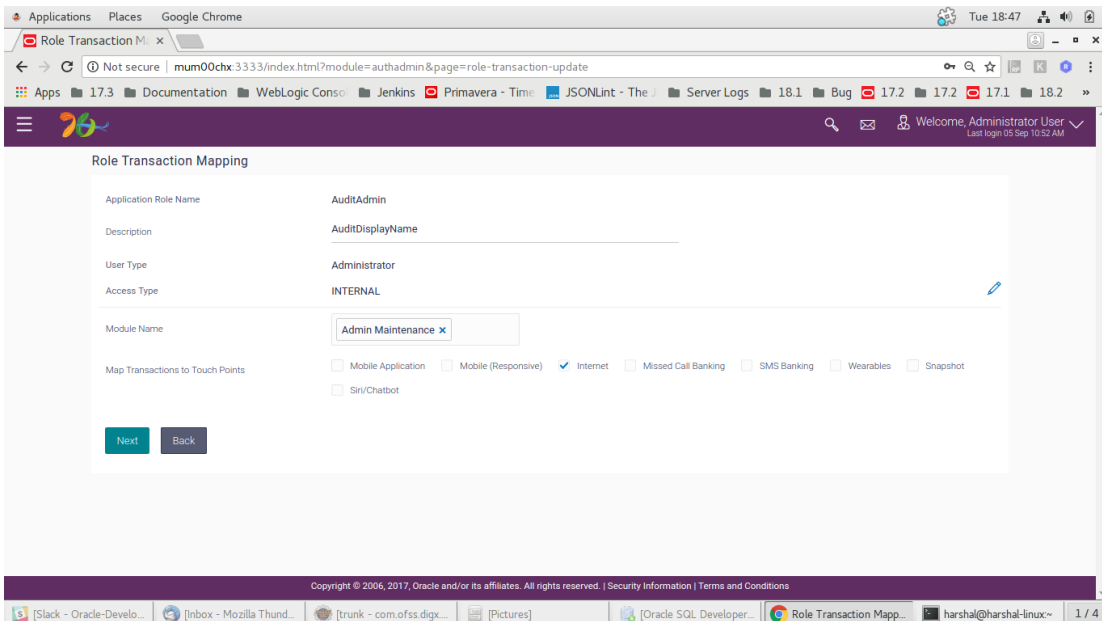
Click below to create an Application Role and map it to various transactions for selected access points.

[Create](#)

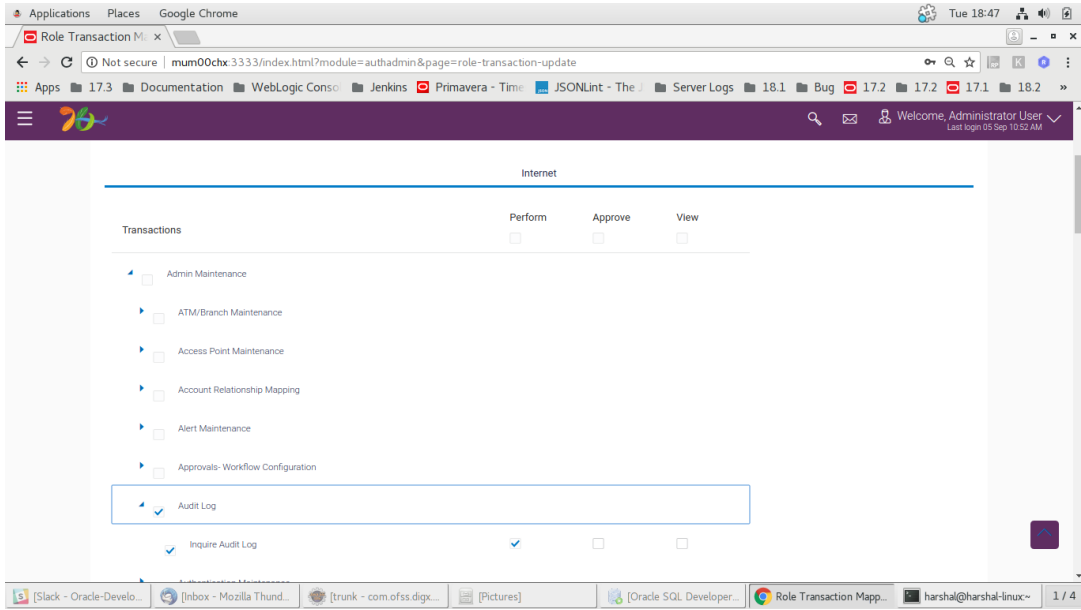
4. Click on AuditAdmin and click on edit symbol as shown.



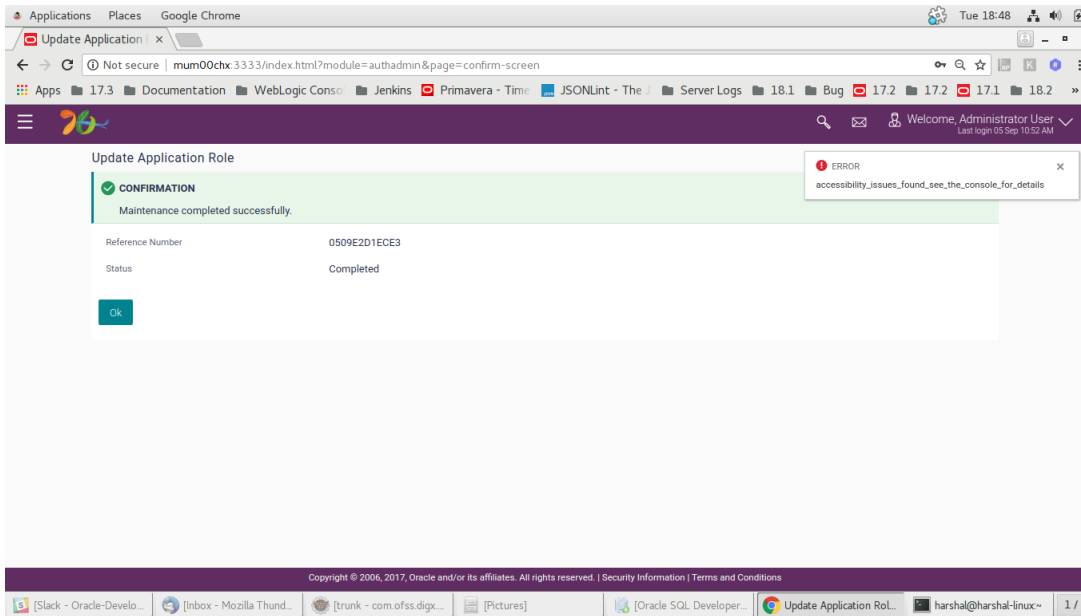
5. Assign module name "Admin Maintenance" and check "Internet".



6. Under Admin maintenance give access of Module name Audit log to it and click save.

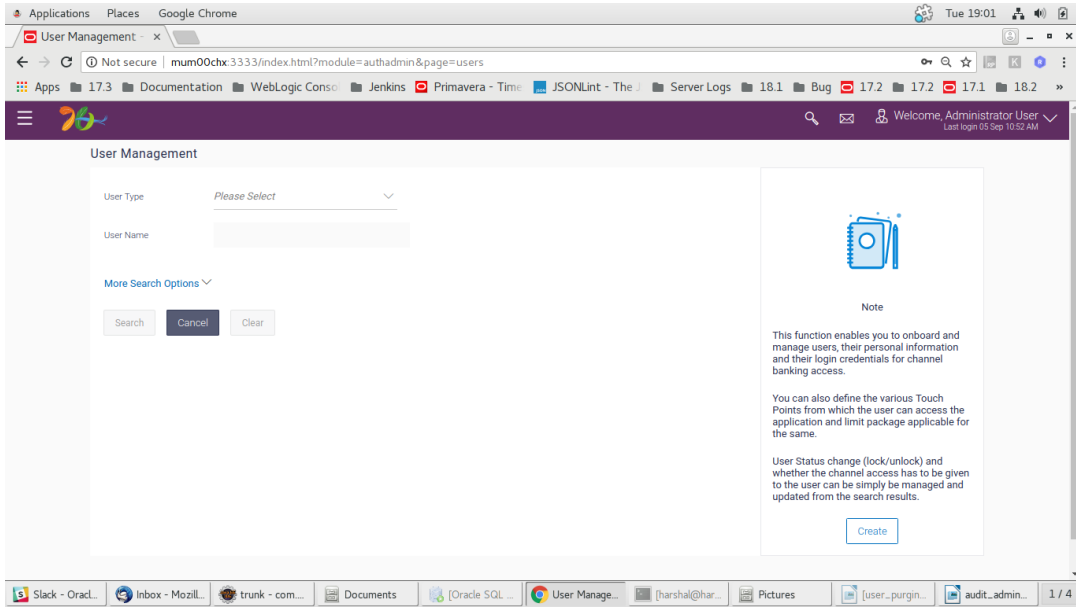


7. Submit.

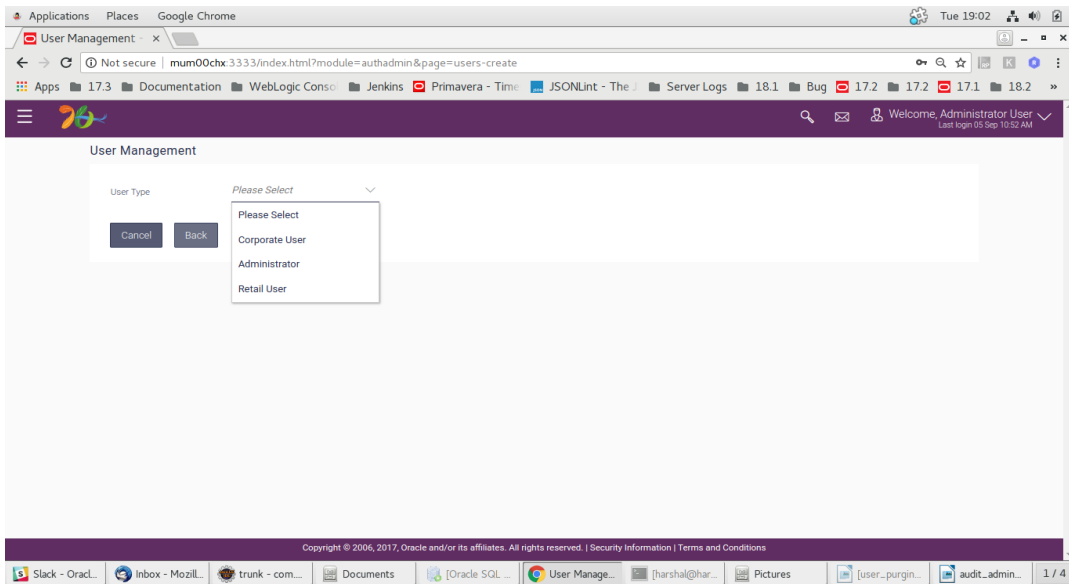


## Utilization

1. Go to user management.
2. Click “Create” user.



3. Select Administrator.



#### 4. Fill necessary details.

The screenshot shows a web browser window with the URL `mum00chx3333/index.html?module=authadmin&page=users--create`. The page title is 'User Management'. The form contains the following fields and values:

- User Type: Administrator
- Organization: Oracle
- Manager: ABC
- Employee Number: 121212
- User Name: AuditAdminUser (Available)
- Title: Mr
- First Name: AuditAdminUser
- Middle Name: (empty)
- Last Name: AuditAdminUser
- Date of Birth: 04 Sep 2018

#### 5. Select AuditAdmin or Authadmin as an application role.

The screenshot shows the 'Roles' section of the form. The 'AuditAdmin' role is selected with a checked checkbox. Other roles are unchecked:

- AdminMaker
- AdminChecker
- AuthAdmin
- payment
- AuditAdmin

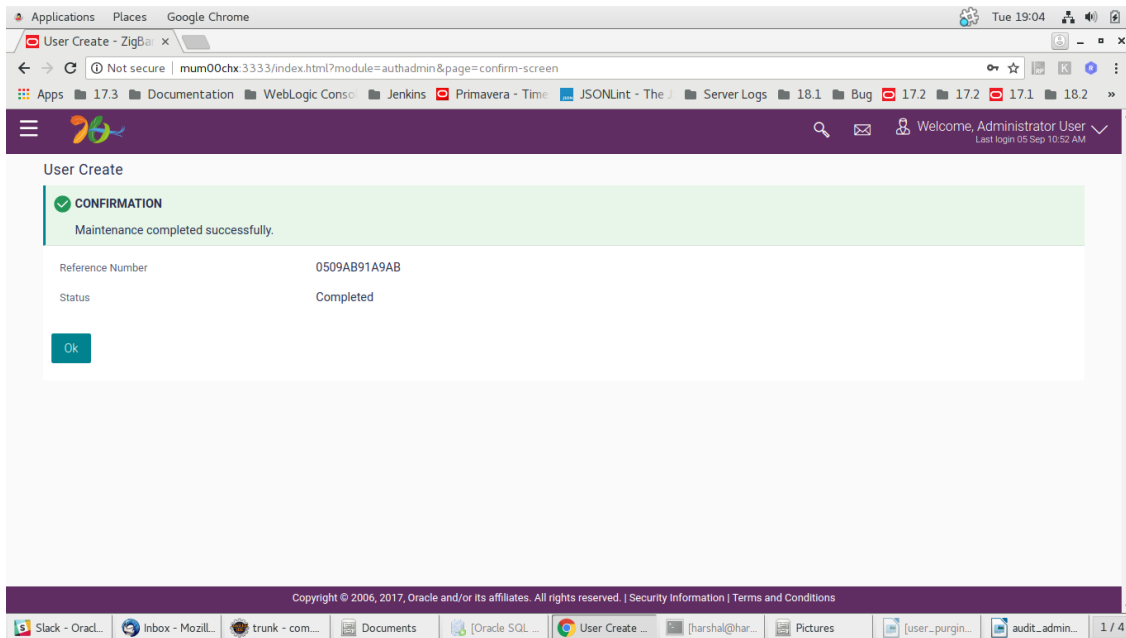
The 'Select Touch Points' section includes the following options:

- Mobile Application
- Mobile (Responsive)
- Internet
- Missed Call Banking
- SMS Banking
- Wearables
- Snapshot
- Siri/Chatbot

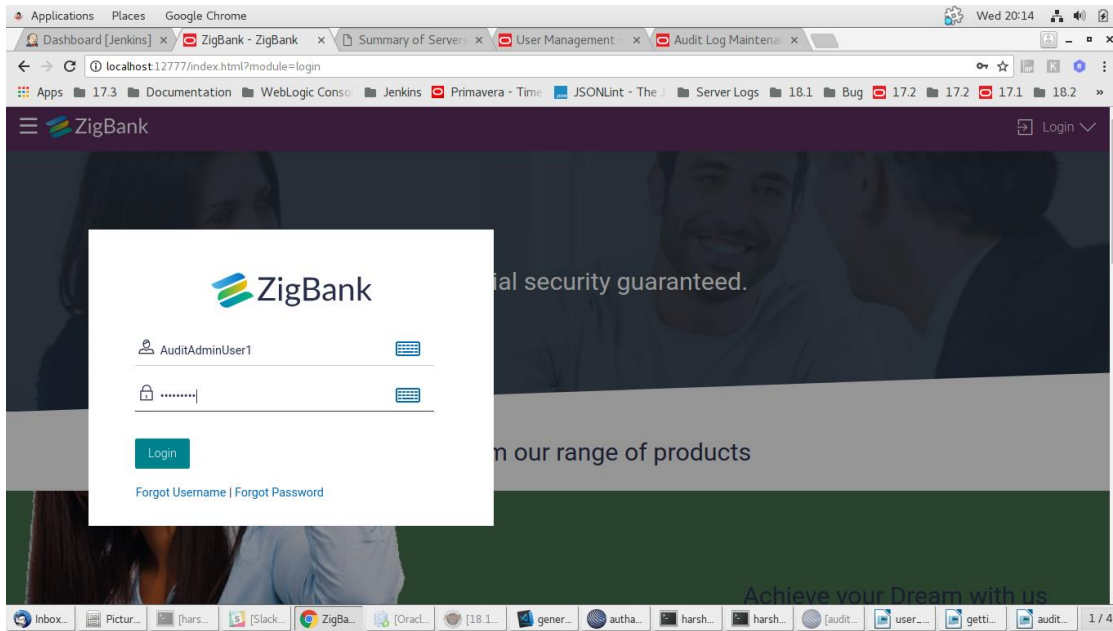
At the bottom of the form, there are buttons for 'Add Accessible Entity', 'Save', 'Cancel', and 'Back'.

#### 6. Submit

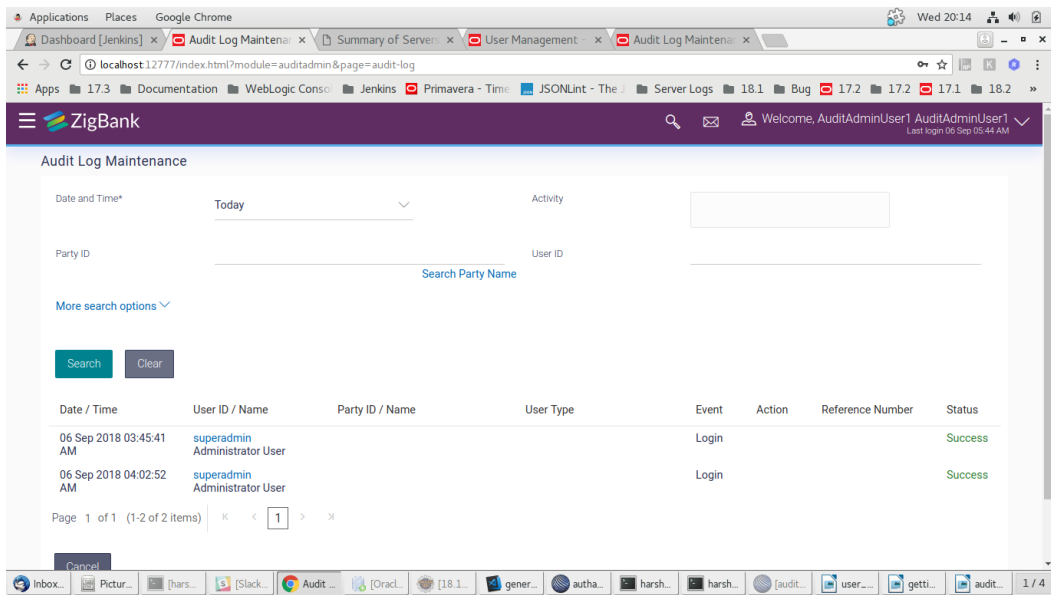
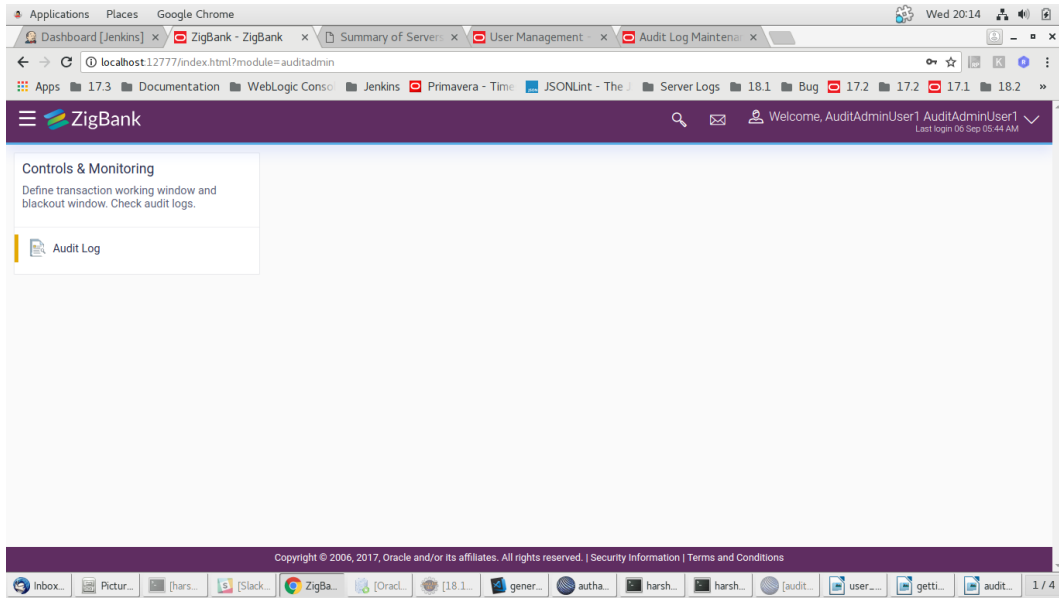




### 7. Log in using created user.



### 8. User can access audit log.

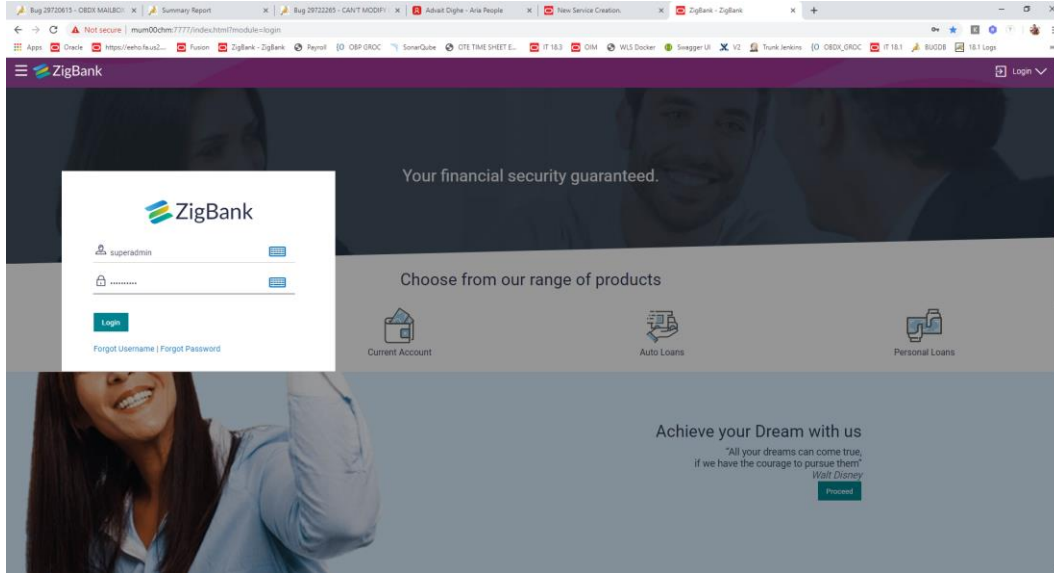


## 6. User exporting the PII data

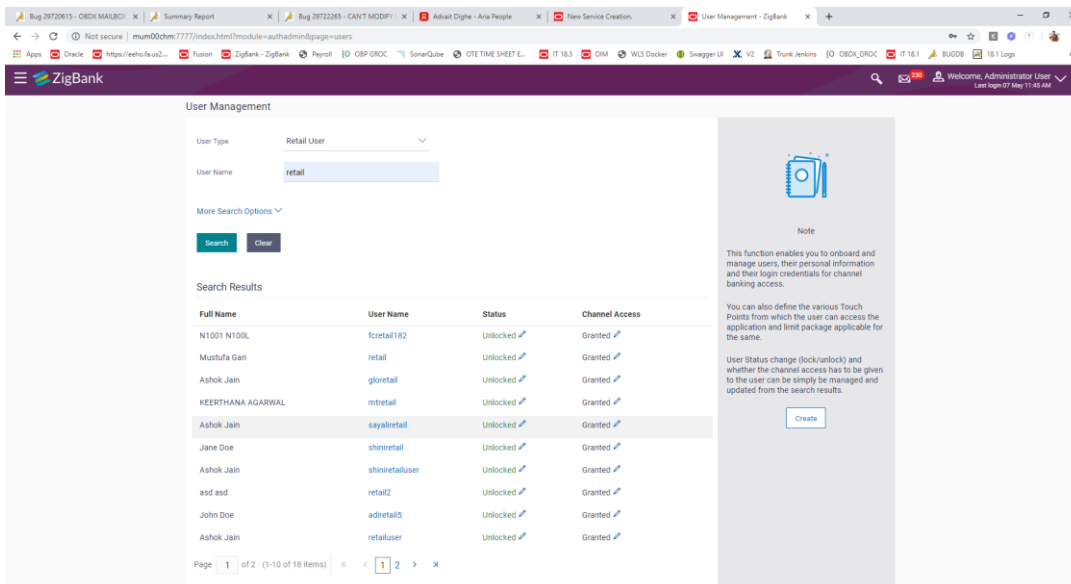
This functionality will allow to download of user wise PII in CSV formats.

### 6.1 Administrator

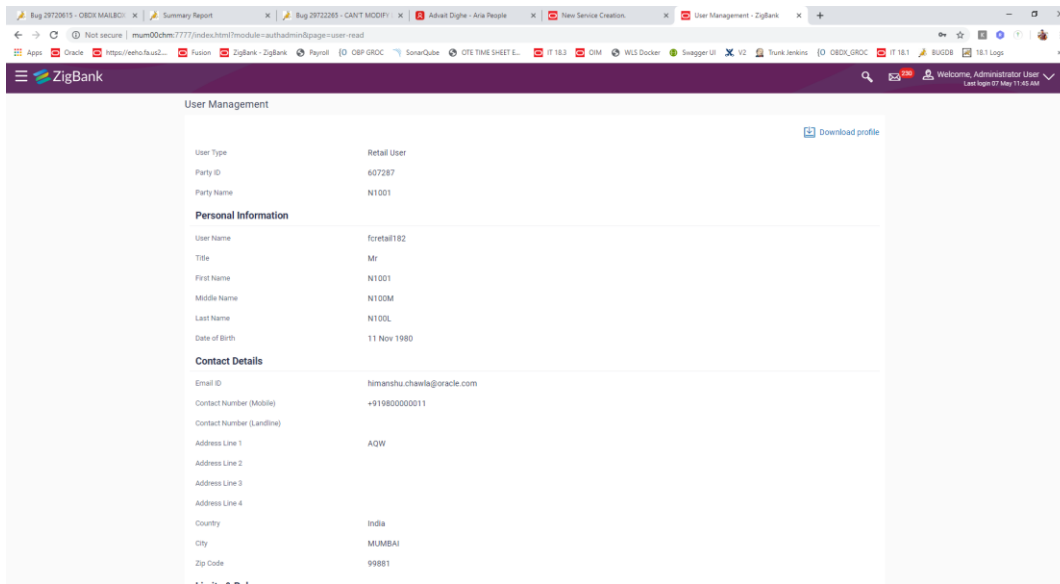
#### 1. Login as administrator



2. Click on “User Management” and search for any user (Corporate User/ Administrator / Retail User) then clicked on the any “User Name” from the list of search users.



### 3. Clicked on the “Download profile” link.



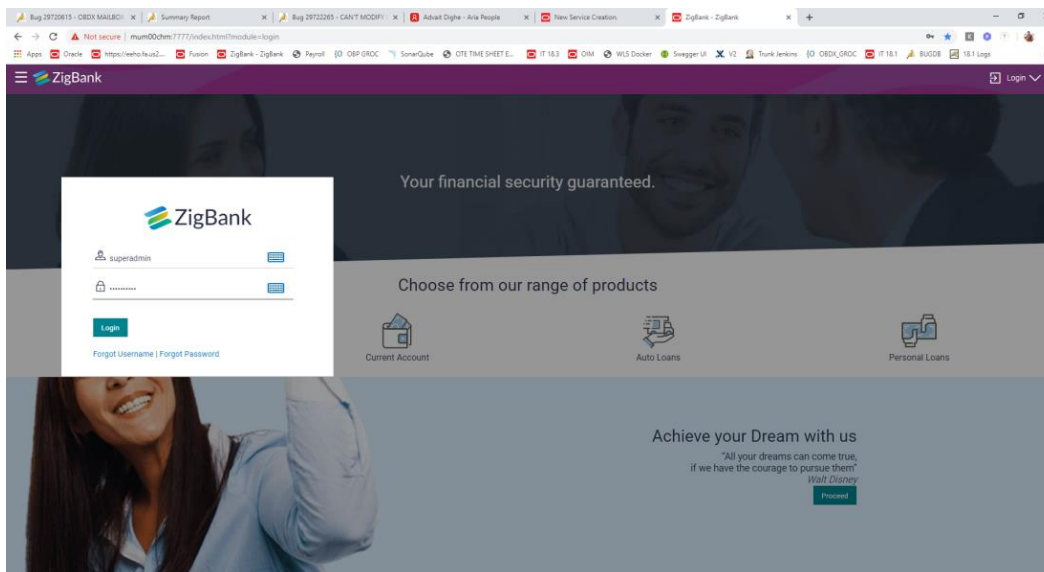
The screenshot shows the ZigBank User Management interface. The user details are as follows:

Field	Value
User Type	Retail User
Party ID	607287
Party Name	N1001
<b>Personal Information</b>	
User Name	fcreta1182
Title	Mr
First Name	N1001
Middle Name	N100M
Last Name	N100L
Date of Birth	11 Nov 1980
<b>Contact Details</b>	
Email ID	himanshu.chawla@oracle.com
Contact Number (Mobile)	+91980000011
Contact Number (Landline)	
Address Line 1	AQW
Address Line 2	
Address Line 3	
Address Line 4	
Country	India
City	MUMBAI
Zip Code	99881

A "Download profile" link is visible in the top right corner of the user details section.

## 6.2 Business User

### 1. Login as Business User (Retail/Corporate/Admin)

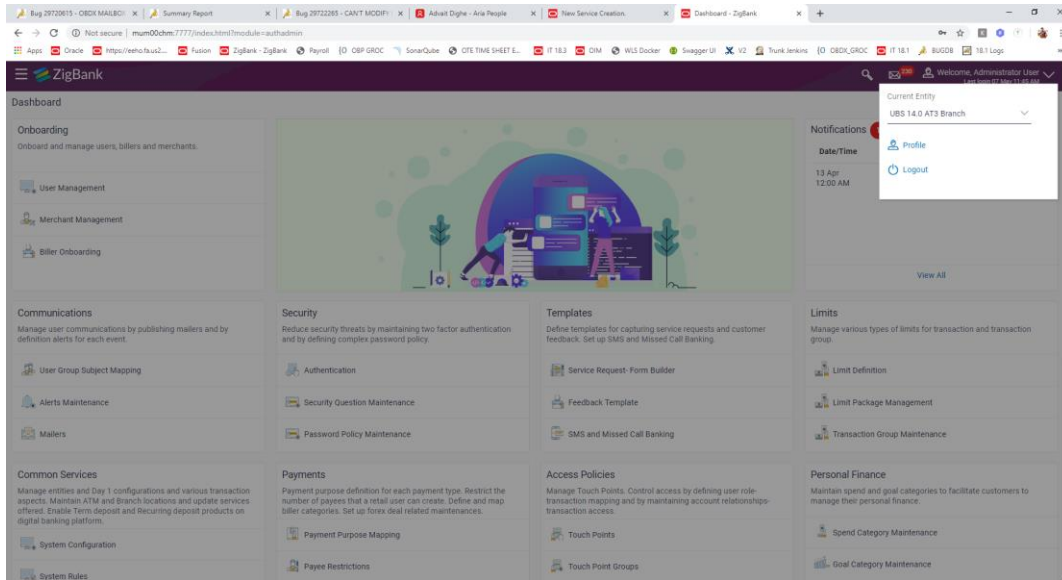


The screenshot shows the ZigBank login page. A login form is overlaid on the page, containing the following fields and elements:

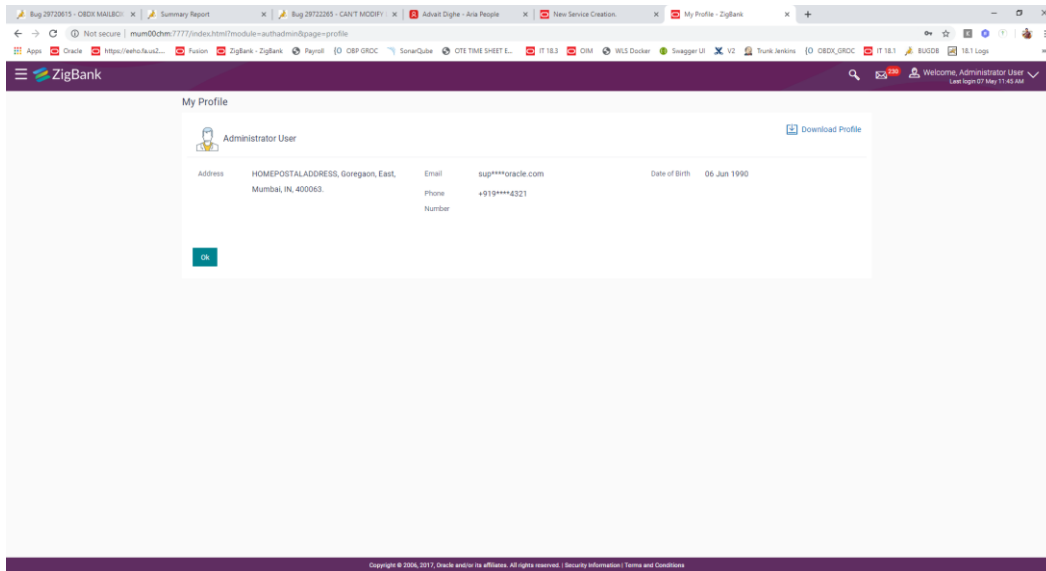
- ZigBank logo
- Username field: superadmin
- Password field: [masked]
- Login button
- Forgot Username | Forgot Password link

The background of the page features a banner with the text "Your financial security guaranteed." and "Choose from our range of products" with icons for Current Account, Auto Loans, and Personal Loans. At the bottom, there is a section titled "Achieve your Dream with us" with a quote and a "Proceed" button.

### 2. Clicked on “Profile”



### 3. Clicked on “Download Profile”



## 7. Third Party Consents

This option enables the user to manage the access provided to third party application(s). The user can define the fine-grained entitlements i.e. account level access along with a set of transactions for the third party. The user can disable the access for a specific third party application whenever required.

---

Note: Only those third party applications for which the user has registered and given rights to access his/her accounts for inquiries and transactions, will appear on this page.

---

### **How to reach here:**

Dashboard > Toggle Menu > Account Settings > My Preferences > Third Party Application OR

Dashboard > My Profile > Profile > Third Party Application

## Third Party Apps

**ZigBank** | Welcome, Ashok Jain | Last login 29 Jun 06:47 PM

### Third Party Consents

**MODEL Solutions** **epay**

Application Access:  Granted

Current & Savings | Term Deposits | Loans

xxxxxxxxxxxx0035 - Savings Account Class 1

- Map All Transactions
- CASA Inquiries
  - CASA Interest Certificate
  - Party CASA Interest Certificate
  - Inquire Sweep-In Instruction
- Sweep-In Instruction
  - Create Sweep-in Instruction
  - Delete Sweep-in Instruction
- Loans
  - Loan Settlement
- CASA
  - Replace Debit card
  - Request DC Limit Change
  - Reset Debit Card Pin
  - Stop/Unblock Cheque
  - Allow International Transaction on DC
  - Request Debit Card Pin
  - Validate Card Details
  - Block Debit Card
  - Cheque Book Request
  - E-Statement Subscription
  - Demand Deposit Electronic Statement Download
  - List Demand Deposit Electronic Statement
  - Apply Debit Card
  - Request Demand Deposit Statement
- Term Deposits - Financial
  - New Deposit
  - TD Top UP
- All Inquiry Transactions
  - CASA Inquiries

xxxxxxxxxxxx0037 - Savings Account Class 1

xxxxxxxxxxxx0046 - Savings Account Class 1

[Edit](#) [Cancel](#)

[Back To Dashboard](#)

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## Field Description

Field Name	Description
<b>Third Party Application Name</b>	The names of the third party applications are displayed. Select a third party application to define access to the application.

Field Name	Description
<b>Application Access</b>	The option to define whether access for the application is to be provided or not. If access is granted, then the user can revoke access and if it was revoked, then the user can grant access whenever required.
<b>Current and Savings/ Term Deposits/ Loans and Finances</b>	Select a product to define account and transaction level access to the third party.

1. Select the third party application for which you wish to define fine grained access.
2. The system will display the list of accounts under each of the account types along with the transactions
3. Click **Edit** to modify account and transaction access. The **Third Party Consents – Edit**
4. Screen with values in editable form appears.  
OR  
Click **Cancel** to cancel the operation and to navigate back to the Dashboard.  
OR  
Click **Back** to Dashboard to go to the Dashboard.



## Third Party Apps – Edit

The screenshot shows the 'Third Party Consents' page in the ZigBank interface. The header includes the ZigBank logo, a search icon, an envelope icon, and a user profile for 'Mary Doe' with the last login time '12 Jun 04:41 PM'. The left sidebar contains navigation options: Profile, Primary Account Num..., Alerts/Notifications, Third Party Apps (selected), Security and Login, and Settings. The main content area is titled 'Third Party Consents' and features the logos for 'MODEL Solutions' and 'epay'. An 'Application Access' toggle is currently turned on, labeled 'Granted'. Below this, there are three tabs: 'Current and Savings', 'Term Deposits', and 'Loans and Finances'. The 'Current and Savings' tab is active, showing a list of accounts. The first account, 'xxxxxxxxxxxx020 - Savings Account - Regular', is selected with a checkmark. A large box contains a grid of permissions, all of which are checked with blue checkmarks. These permissions include: 'Map All Transactions', 'CASA Inquiries' (with sub-items 'CASA Interest Certificate' and 'Party CASA Interest Certificate'), 'CASA' (with sub-items 'E-Statement Subscription', 'Demand Deposit Electronic Statement Download', 'List Demand Deposit Electronic Statement', and 'Request Demand Deposit Statement'), 'Payments' (with sub-items 'Domestic Payment', 'International Draft', 'Bill Payment', 'Domestic Draft', 'International Payout', 'External Transfer', 'Internal Transfer', and 'PeerToPeer Transfer', and 'Instruction Cancellation', 'Self Transfer'), and 'All Inquiry Transactions' (with sub-items 'Payments Inquiries' and 'CASA Inquiries'). A second account, 'xxxxxxxxxxxx018 - Savings Account - Regular', is listed below but is not selected. At the bottom of the main content area are three buttons: 'Save', 'Back', and 'Cancel'. A 'Back To Dashboard' link is located at the bottom left of the page. The footer contains the copyright notice: 'Copyright © 2006, 2017, Oracle and/or its affiliates. All rights reserved. | Security Information | Terms and Conditions'.

## Field Description

Field Name	Description
<b>Third Party Application Name</b>	The names of the third party applications are displayed. Select a third party application to define access to accounts and transactions.
<b>Application Access</b>	The option to define whether access for the application is to be provided or not.

Field Name	Description
<b>Current and Savings/ Term Deposits/ Loans and Finances</b>	Select a product to define account level access to the third party.
<b>Accounts</b>	All the accounts of the user are displayed under the respective account type.
<b>Transactions</b>	Once you select an account, all the transactions through which the account can be accessed are displayed. Select any or all transactions to provide account access for the transactions to the third party application.

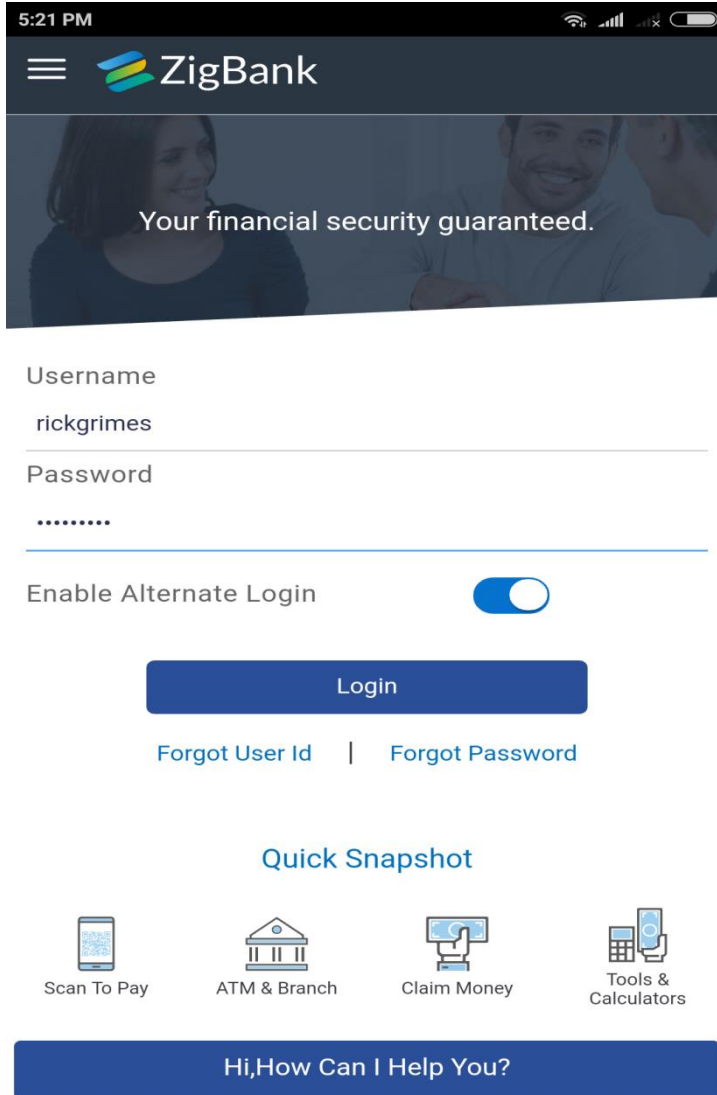
1. Click the **Application Access** button to enable / disable access for the third party application.
  - a. If you select **Enable**,
    - i. Click an account type.  
The account check boxes are enabled and you can select/deselect any check box to edit access of these accounts to the third party application
    - ii. Select an account check box. The transactions for which the selected account can be accessed appear.
    - iii. Select/Deselect all or any of the transaction checkboxes to define the transactions through which the selected account can be accessed.
2. Click **Save** to save the changes.  
OR  
Click **Back** to go back to previous screen.  
OR  
Click **Cancel** to cancel the operation and navigate back to 'Dashboard.
3. The Third Party Consents – Review screen appears. Verify the details, and click Confirm.  
OR  
Click Back to go back to the previous screen.  
OR  
Click **Cancel** to cancel the operation and navigate back to Dashboard.
4. The success message of third party consent setup appears along with the transaction reference number.

5. Click **OK** to complete the transaction and to navigate back to the Dashboard.

## 8. Device ID Consents

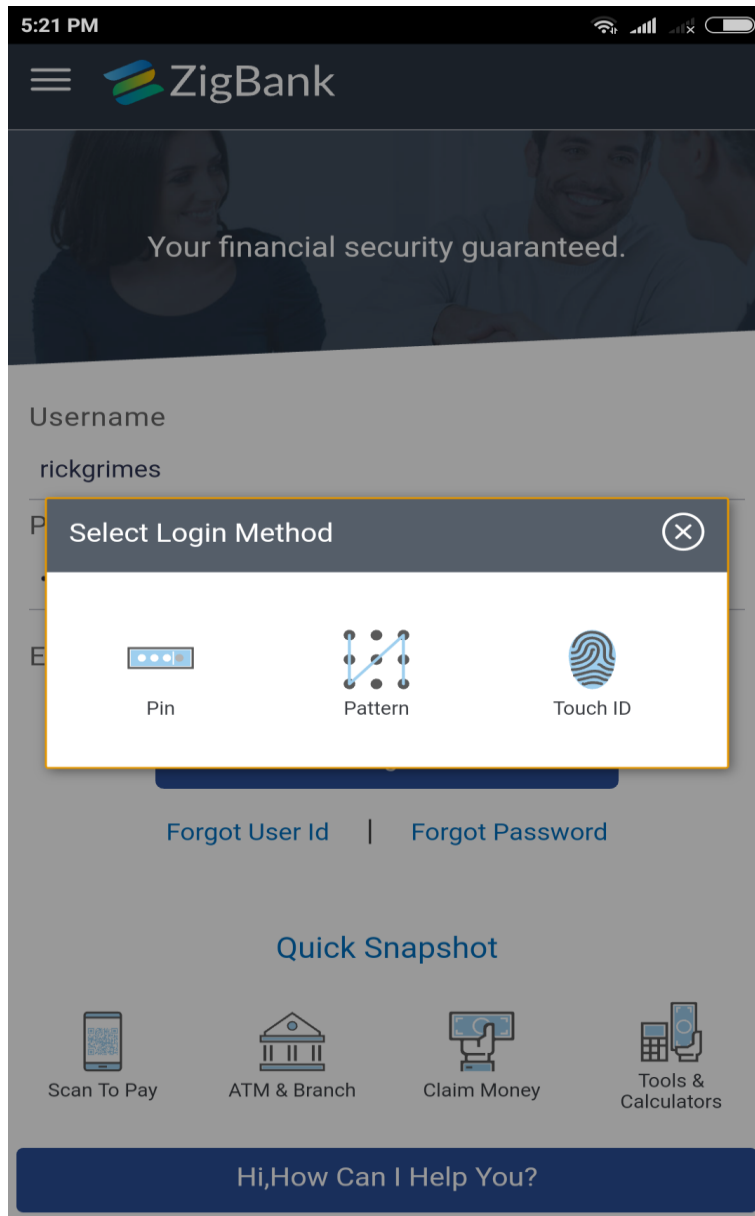
OBAPI framework provides a facility to enables the alternate login via Pin, pattern or touch ID.

1. On the login page, user will get the “Enable Alternate login” functionality. User needs to enable this for alternate login as pin, pattern or touch ID.

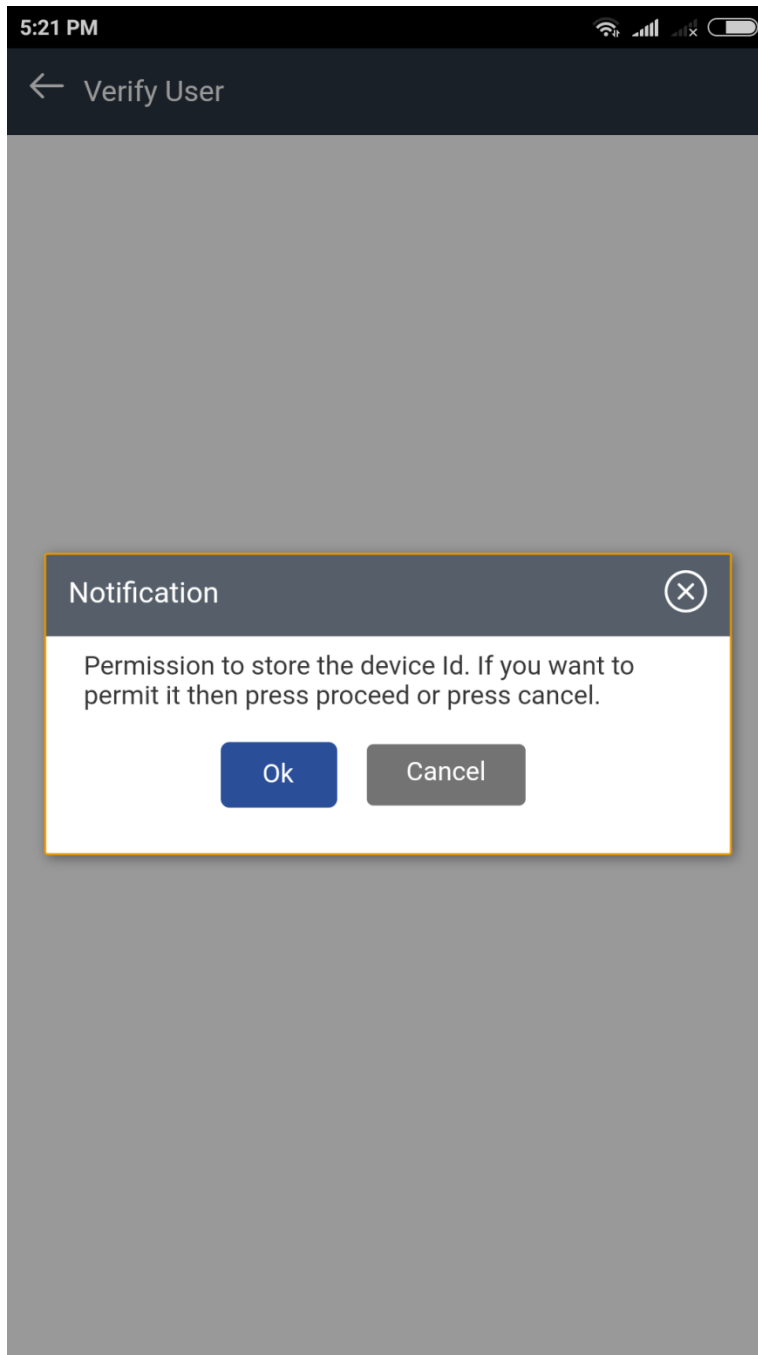


The screenshot shows the ZigBank mobile app interface. At the top, the status bar displays 5:21 PM, signal strength, Wi-Fi, and battery icons. The app header features the ZigBank logo and a navigation menu icon. Below the header is a banner image with the text "Your financial security guaranteed." The login form includes a "Username" field with the value "rickgrimes" and a "Password" field with masked characters ".....". A toggle switch for "Enable Alternate Login" is currently turned on. Below the form is a blue "Login" button, followed by links for "Forgot User Id" and "Forgot Password". A "Quick Snapshot" section contains four icons: "Scan To Pay", "ATM & Branch", "Claim Money", and "Tools & Calculators". At the bottom is a blue button that says "Hi,How Can I Help You?".

2. Once user enables the functionality then, "Select Login Method" pop up will come from which user can select the alternate login method.



3. Once user will select the appropriate option, Notification of permission to store the device id message will display before setting up the alternate login method.



### **Unregister the Device ID**

In the Settings page, user can disable the alternate login from all mobile devices.

