



Membership Summary

MembershipSummary.dnax
Extension ID: 45ac1207-2364-4dc3-836c-aea599ddb55c

© 2018 Fiserv, Inc. or its affiliates. All rights reserved. This work is confidential and its use is strictly limited. Use is permitted only in accordance with the terms of the agreement under which it was furnished. Any other use, duplication, or dissemination without the prior written consent of Fiserv, Inc. or its affiliates is strictly prohibited. The information contained herein is subject to change without notice. Except as specified by the agreement under which the materials are furnished, Fiserv, Inc. and its affiliates do not accept any liabilities with respect to the information contained herein and is not responsible for any direct, indirect, special, consequential or exemplary damages resulting from the use of this information. No warranties, either express or implied, are granted or extended by this document.

<http://www.fiserv.com>

Fiserv is a registered trademark of Fiserv, Inc.

Other brands and their products are trademarks or registered trademarks of their respective holders and should be noted as such.

Overview:

Membership Summary Tool provides configurable, printed account information for members. This application allows users to select between accounts and related roles as needed, to assist members with setting up debit/credit activities.

Key Benefits:

This will save institute employees' time by creating less calls/visits for a simple account information, as well as save the members' time and effort when setting up their accounts.

Processing:

This application takes entity search result from *Relationship Profile* as the input. Where, an entity can be either *PERSON* or *ORGANIZATION*. All accounts on which the entity has a role will be queried based on specified filters and displayed. The application is available through the following navigation path:

Relationships (Module) > Quick Inquiries > Relationship Profile > More > Membership Summary Tool.

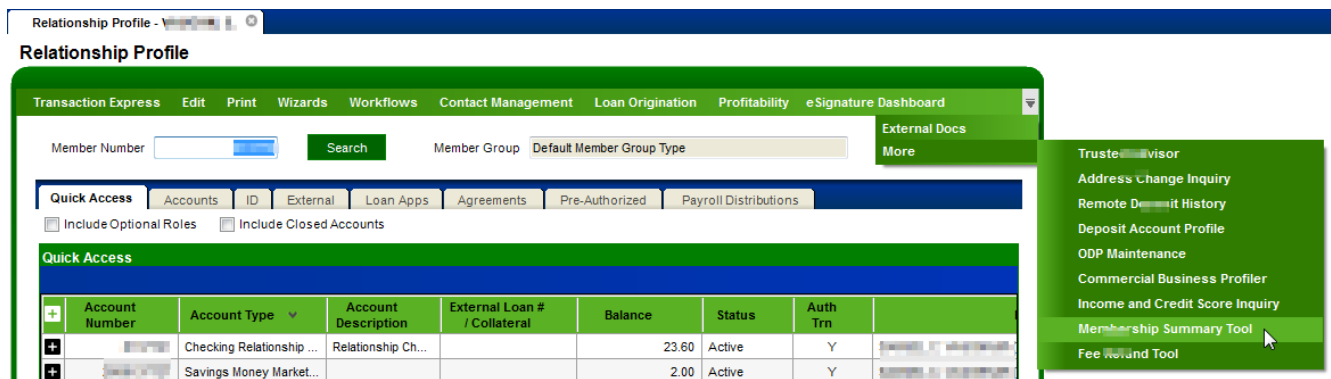


Figure 1. Application path.

The screen of Membership Summary Screen consists of two components:

- Filters
- Account List

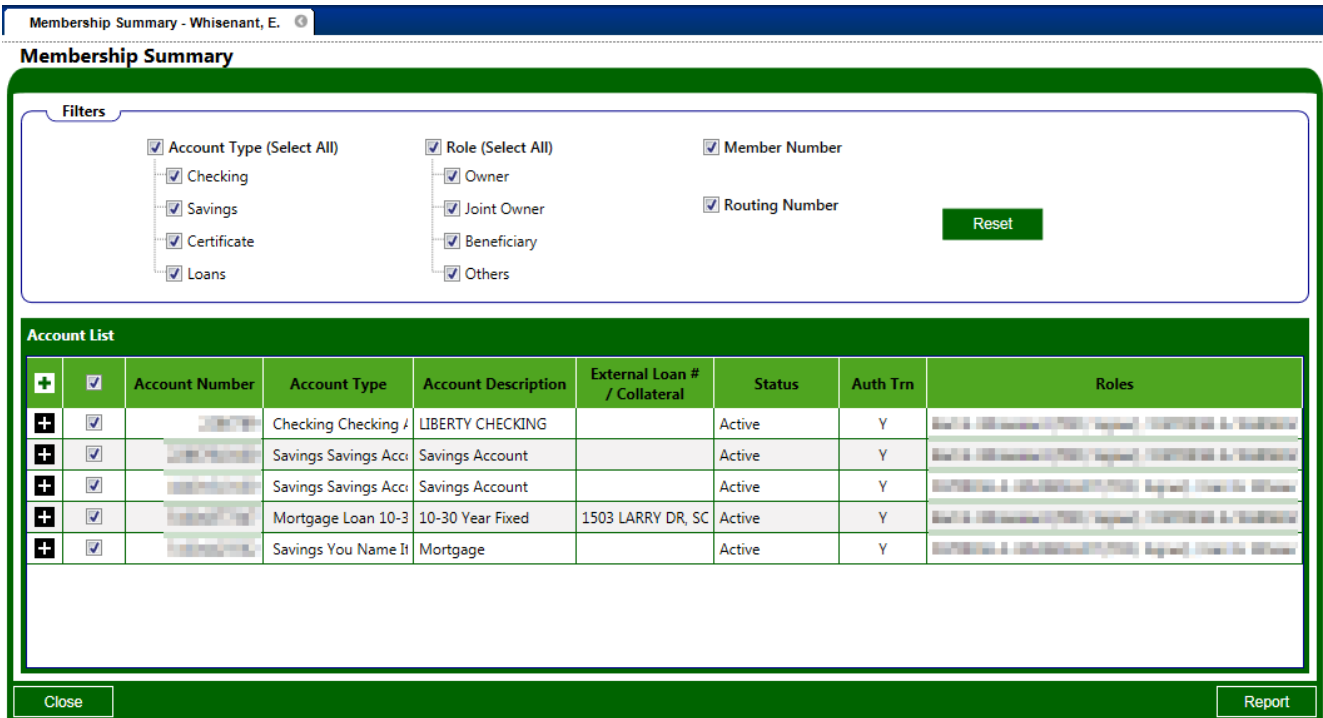


Figure 2. Main Screen of Membership Summary.

Filters:

This panel contains three groups of filters and a rest button to reset all filters.

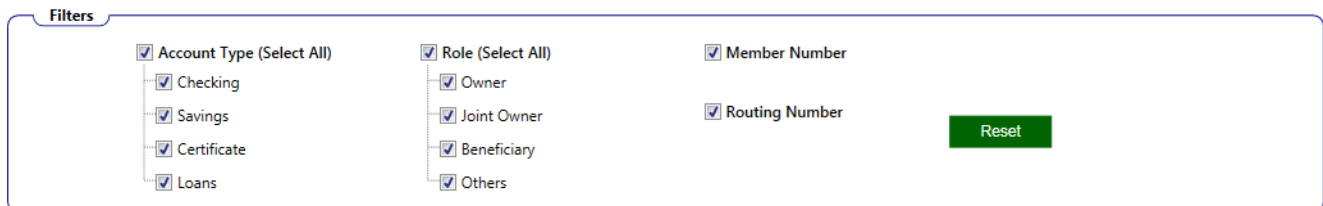


Figure 3. Account Filters.

- **Account Type**
 Each account type selection will determine the selection of accounts that have the same account type in the Account List. Only selected accounts will be presented in the report viewer. In this application there are four account major types specified. For these four major types, there can be an unlimited number of minor types associated with each. These can be configured with calculation variables. Each account type should be configured with the format: MjCd1:[x[MiCd1,MiCd2...]]n[MiCd1,MiCd2...], MjCd2[...], MjCd3...

Where,

MjCdx – account major type.

x[MiCd1,MiCd2..] – excluded minor types, optional.

n[MiCd1,MiCd2..] – included minor types, optional.
Note: either x[...] or n[..] should be defined if needed.

- Checking – default variable value: *CK*
 - Savings – default variable value: *SAV*
 - Certificates – see section *Configuration Variables* for details.
 - Loans – default variable value: *MTG,CNS,EXT*.
- Account Role
In the *Account List*, the column *Roles* displays all roles associated with the account(s) related to the entity in focus. If roles associated with an entity are not selected by *Account Role* option, the entity and its roles will not appear in the report viewer.
 - Owner – default variable value: *TAX,OTAX*
 - Joint Owner – default variable value: *OWN,SIGN*
 - Beneficiary – default variable value: *BENE*
 - Others - It can be used to define any other roles not included in above roles, or ignored if empty. See section *Configuration Variables* for details.
 - Member Number
When it is selected, the member/customer number will be presented in the report.
 - Routing Number
The routing number is configured with calculation variable that may contain multiple values, separated by commas. Only when it is selected, the routing number will be presented in the report.

Account List:

This panel contains all accounts that the input entity has a role and match all DEFAULT filters.

- Expander – Expand/Collapse account detail for all entities that have roles on the account.
- Selection – If selected, the account will appear in the report view.
- Account Number – Account number
- Account Type – Description of account major and minor types.
- Account Description – The description of the account.
- External Loan # / Collateral – External credit card # or collateral borrower's address.
- Status – Account status.

- Auth Trn – Indicates whether the entity has been authorized for transactions.
- Roles – Entity roles associated with the account.

Account List								
	<input checked="" type="checkbox"/>	Account Number	Account Type	Account Description	External Loan # / Collateral	Status	Auth Trn	Roles
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[REDACTED]	Checking Checking /	LIBERTY CHECKING		Active	Y	[REDACTED] (TRO, Signer) / PATRICIA A. WHISEN/
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> [REDACTED] (TRO, Signer) <input checked="" type="checkbox"/> [REDACTED] (NonTax Owner, NonTax Signator)						
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[REDACTED]	Savings Savings Acc.			Active	Y	[REDACTED] (TRO, Signer) / PATRICIA A. WHISEN/
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[REDACTED]	Savings Savings Acc.			Active	Y	[REDACTED] (TRO, Signer) / [REDACTED]
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[REDACTED]	Mortgage Loan 10-3		1503 LARRY DR, SC	Active	Y	[REDACTED] (TRO, Signer) / PATRICIA A. WHISEN/
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[REDACTED]	Savings You Name It	Mortgage		Active	Y	[REDACTED] (TRO, Signer) / [REDACTED]

Figure 4. Account List.

Report:

When the *Report* button at bottom right corner is pressed, the report viewer will pop up as shown in figure 5. Each report page can have up to seven accounts. On the bottom right corner of report viewer, a card-like account list is provided for member/customer to carry in a wallet.

- Report Menu – File
 This menu contains 3 items as shown in Figure 6.
 - Print – Allows a user to select a printer and print the contents on report viewer.
 - Export to PDF – Exports the report to PDF file.
 - Exit – Exits from report viewer.
- Report Menu – View
 This menu contains 5 items as shown in Figure 7.
 - Zoom In – Enlarge the view.
 - Zoom Out – Reduce the view.
 - Fit to Width – Fit the width of report content to window width.
 - Whole Page – Fit entire report page to the window.
 - Two Pages – Shows two report pages on each viewer page.

Report Document Viewer

File View

12/11/2017

Membership Summary

Member Number: [REDACTED] / Routing Number: [REDACTED]

Account Information:

Account #	Account Product	Account Roles
[REDACTED]	LIBERTY CHECKING	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	Savings Account	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	Savings Account	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	10-30 Year Fixed	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	Mortgage	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)

Membership Tips:

- **Member Number** should be used when personally accessing your account(s) through [CU mnemonic]*.
- **Account Number** should be used when submitting forms to non-[CU mnemonic] businesses regarding account(s).
- Every account at [CU mnemonic] has the same **Routing Number: [routing number]**.
- If you requested debit cards or checks when you opened your account, look for them to arrive within 7-10 business days.
- **Member Number & Social Security Number** are needed to sign up for Online Banking* at [domain name or site].

*Must be [CU mnemonic] member with member number or username and password to access online banking. Some restrictions may apply.

To help the government fight the funding of terrorism and money laundering activities, U.S. Federal law requires financial institutions to obtain, verify and record information that identifies each person who opens an account. What this means for you: When you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents. If we are unable to reasonably verify your identity, an account will not be opened nor will any formal banking relationship be established.

[CU name] is an Equal Credit Opportunity Lender. For more information, please call [phone number] or visit [web site] [Address]

Your savings federally insured to at least \$250,000 and backed by the full faith and credit of the United States Government

NCUA

National Credit Union Administration, a U.S. Government Agency

[CU Name] – Confidential

Account #	Account Name
[REDACTED]	LIBERTY CHECKING
[REDACTED]	Savings Account
[REDACTED]	Savings Account
[REDACTED]	10-30 Year Fixed
[REDACTED]	Mortgage

1 of 1

Figure 5. Report Viewer.

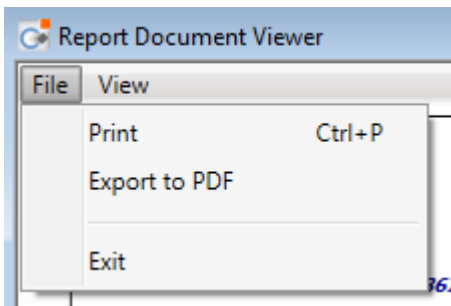


Figure 6. Report Menu - File.

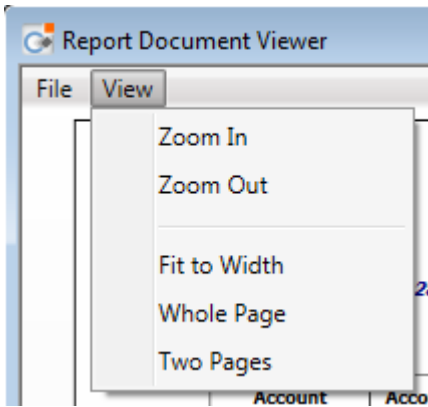


Figure 7. Report Menu - View

A component required to be presented in the report are illustrated in Figure 8. The template file will be deployed to *Resources* folder of the application when this application is installed. The administrator of the DNA can replace it accordingly or just replace the phrases that are bracketed with red color in RTF files.

1/9/2018

Membership Summary

Member Number: [REDACTED] / Routing Number: [REDACTED]

Account Information:

Account #	Account Product	Account Roles
[REDACTED]	LIBERTY CHECKING	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	Savings Account	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	Savings Account	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	10-30 Year Fixed	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)
[REDACTED]	Mortgage	[REDACTED] (TRO, Signer) / [REDACTED] (NonTax Owner, NonTax Signator)

Membership Tips:

- **Member Number** should be used when personally accessing your account(s) through [CU mnemonic]*.
- **Account Number** should be used when submitting forms to non-[CU mnemonic] businesses regarding account(s).
- Every account at [CU mnemonic] has the same **Routing Number: [routing number]**.
- If you requested debit cards or checks when you opened your account, look for them to arrive within 7-10 business days.
- **Member Number & Social Security Number** are needed to sign up for Online Banking* at [domain name or site].

*Must be [CU mnemonic] member with member number or username and password to access online banking. Some restrictions may apply.

To help the government fight the funding of terrorism and money laundering activities, U.S. Federal law requires financial institutions to obtain, verify and record information that identifies each person who opens an account. What this means for you: When you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents. If we are unable to reasonably verify your identity, an account will not be opened nor will any formal banking relationship be established.

[CU name] is an Equal Credit Opportunity Lender. For more information, please call [phone number] or visit [web site] [Address]

Your savings federally insured to at least \$250,000 and backed by the full faith and credit of the United States Government

NCUA

National Credit Union Administration, a U.S. Government Agency

[CU Name] - Confidential

Member # :	Routing # :
[REDACTED]	[REDACTED]

Account #	Account Name
[REDACTED]	LIBERTY CHECKING
[REDACTED]	Savings Account
[REDACTED]	Savings Account
[REDACTED]	10-30 Year Fixed
[REDACTED]	Mortgage

1 of 1

Membership Tips
Is loaded from a RTF file, located at *Resources* folder of this application. The file name is configured with calculation variable name *MembershipTips*.

Figure 8. File Templates in the report.

Parameters:
N/A

Variables:

Calculation Categories:

A calculation category is required to associate the variables to the application. The following calculation category is used for that purpose.

Calculation Cat Code	Description (how used)
9RFC	Custom Category

Calculation Types:

A calculation type is required to associate the variables to the application. The following calculation type is used for that purpose.

Calculation Cat Code	Calculation Type Code	Description (how used)	MjMiYN
9RFC	9R1N	Membership Summary	N

Calculation Variables:

The following calculation variables are required for the application. They are populated with the '9R1N' calculation type.

Variable	Code	Description (How used)	Data Type	Default
Account Type:Checking	9RJ0	Account type codes – Checking.	STR	CK
Account Type:Savings	9RJ1	Account type codes – Savings.	STR	SAV
Account Type:Certificates	9RJ2	Account type codes – Certificates.	STR	TD:x[IRAS,18MI,24MI,36MI,48MI,60MI,72MI,96MI,9YIR,10YI,12YI,NMIR,12MP,55WK,36MV,13MM,29MO,25CO,3MCC]
Account Type:Loans	9RJ3	Account type codes – Loans.	STR	MTG,CNS
Account Role:Owner	9RJ4	Account role codes – Primary owner.	STR	TAX,OTAX
Account Role:Joint Owner	9RJ5	Account role codes – Joint owner.	STR	OWN,SIGN
Account Role:Beneficiary	9RJ6	Account role codes – Beneficiary.	STR	BENE
Account Role:Others	9RJ7	Account role codes – Others, which means any other account roles to filter account list.	STR	ATM,BBAD,CHGO,CNSV,CONS,CUST,DBA,DPTY,EXEC,GUAD,GUAR,INQ,ITF,LNCO,MAIL,MINR,ND RP,POA,PPC,REPP,RPER,STMT,TRUS
Account Status	9RJ8	Account status codes to filter account list.	STR	ACT,DORM,IACT
Routing Number	9RJ9	Routing number, separated with comma for multiple routing numbers.	STR	Empty
MembershipTips	9RKA	File name of Membership Tips.	STR	MST_MembershipTips
ExcAcctRelationship	9RKB	If all roles of an account for the entity fall in this list, the account will not be displayed in the <i>Account List</i> .	STR	BENE

Scheduling and re-run information (for batch applications):

N/A

Notices:

N/A

Report (s):

N/A

File Layout(s):

N/A

Real-time Interaction with Other Applications:

N/A

Screens Navigation:

Menu Item of this application is available through following navigation path:

Relationships (Module) > Quick Inquiries > Relationship Profile > More > Membership Summary Tool

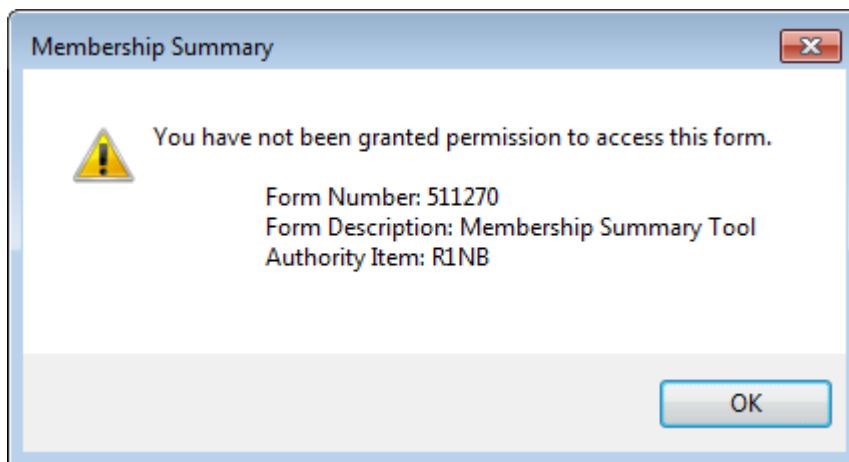
Screen Appearance:

Figure 9. Login user does not have permission to run the application.

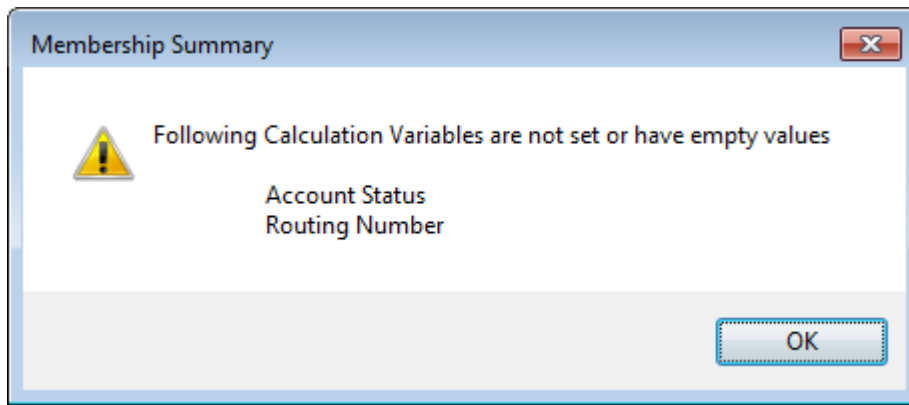


Figure 10. Message indicates calculation variables are missing.

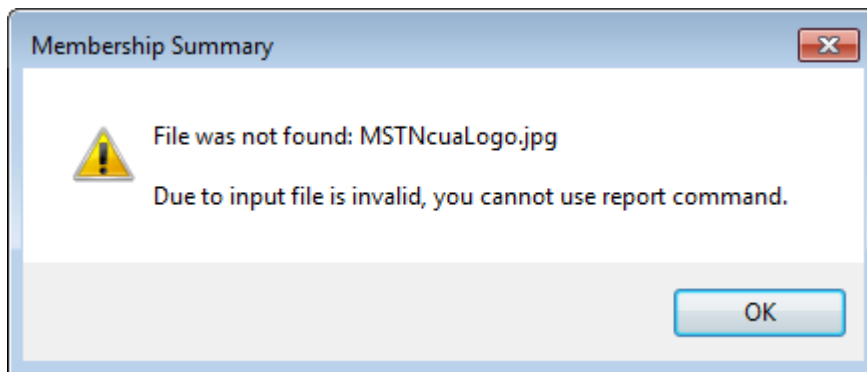


Figure 11. Message indicates a required input file was not found, and the report cannot be generated. When any one of input files specified in Calculation Variables is invalid, this message box will pop up.

Field Listing:

Filters:

Field	Description
Account Type Options	
Account Type (Select All)	Select or unselect all account types underneath.
Checking	Account type for checking account.
Savings	Account type for savings.
Certificates	Account types for certificates.
Loans	Account types for loans.
Account Role Options	
Role (Select All)	Select or unselect all account roles underneath.
Owner	Primary owner.
Joint Owner	Joint account owner.
Beneficiary	Beneficiary.

Field	Description
Others	Other roles.
Member Number and Routing Number Options	
Member Number	If selected, the member number will be presented in the report.
Routing Number	If selected, the routing number will be presented in the report.
Reset Command	
Reset	Reset button to reset all filters.

Account List:

Field	Description
[Expander]	Expand/Collapse account detail for all entities that have roles on the account. Only selected entities will appear in the report viewer.
[Checkbox]	Select account for reporting.
Account Number	Account number.
Account Type	The description of account major and minor types.
Account Description	The description of the account.
External Load # / Collateral	External credit card # or collateral borrower's address.
Status	Account status.
Auth Trn	Indicates whether the entity has been authorized for transactions.
Roles	Entity roles associated with the account.

Application Buttons:

Field	Description
Close	Close the application.
Report	Open report viewer window.

Additional Requirements:

- Fiserv DNA 4.2.2 or higher
- .NET Framework 4.5.2
- CoreApiService 2.0.0.10 or above, delivered by the Fiserv.
- Authorization needs to be granted to employees to access this application.
 1. If the app is going to be used by a small number of employees, the authorization of this application can be assigned to specified users:

- Go into Security module
 - Search for employee
 - Select Assign Authorizations tab
 - Authorizations available are on left, and assigned ones are on right. The *Membership Summary App Auth* would show up on left initially. It should be selected (moved to right) and processed.
2. If the app is going to be used by one or more already established classes of employees (e.g., all Tellers) then there is already an existing Auth that represents the class of employees. Using this Auth, and the AuthItem code for *Membership Summary*, assign the newly created AuthItem into this Auth.
- Go into Security module, then Authorizations menu
 - Search for the Auth that represents the class of employees
 - Select the Authorization Item Maintenance tab
 - Available Authorization Items are on left, and assigned ones are on right. *Membership Summary App AuthItem* would show up on left. It should be selected (moved to right) and processed
 - Select the *Membership Summary App AuthItem* from the selected list and click on the Authorization Permission Maintenance. Move all the available permissions to the Selected list and processed
3. The installation process will assign following auth items to *Membership Summary App Auth*.
- CAPR 7701
 - CAPR 7702
 - CAPR 7704
 - CAPR 7789
 - CAPR 7802
 - *Membership Summary App AuthItem*
- MigraDoc Foundation for WPF – needed to generate report viewer document. This is an Open Source .NET library for modeling and rendering documents. The following DLLs, which can be downloaded from <http://www.pdfsharp.net> need to be copied to the folder where the application client DLL is installed, e.g. Y:\OSI\DNA_Client\DNAApps\4320\bin.
 - MigraDoc.DocumentObjectModel-WPF.dll
 - MigraDoc.Rendering-WPF.dll
 - MigraDoc.RtfRendering-WPF.dll

MigraDoc Foundation is published under the [MIT License](#).

Copyright (c) 2005-2014 empira Software GmbH, Troisdorf (Germany)

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- MigraDoc Foundation is Open Source.
 - You can copy, modify and integrate the source code of MigraDoc Foundation in your application without restrictions at all.
 - This also applies to commercial products (both open source and closed source).
- PDFsharp for WPF – needed to convert the report into a PDF file. It is an Open Source library that can be used to easily create PDF documents from any .NET language. The PdfSharp-WPF.dll, which can be downloaded from <http://www.pdfsharp.net> needs to be copied to the folder where the application client DLL is installed such as Y:\OS\DNA_Client\DNAApps\4320\bin.

PDFsharp is published under the [MIT License](#).

Copyright (c) 2005-2014 empira Software GmbH, Troisdorf (Germany)

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- PDFsharp is Open Source.
- You can copy, modify and integrate the source code of PDFsharp in your application without restrictions at all.
- This also applies to commercial products (both open source and closed source).

Configuration Checklist:

Item	Test Environment	Production Environment
Variables		
Authorizations		

Revisions:

Date	App Version #	Change
05/2018	2.1.0.0	Three template files are merged into a single one, so that all items can be easily aligned together.
01/2018	2.0.0.0	Application Created