



Remote Deposit History

RemoteDepositHistory.dnax
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Overview:

This application will display a list of checks deposited by a person through Remote Deposit Capture within a specific period of time matching the cashbox number variable (that are used by your financial institution to post Remote Deposit Capture transactions). This application is not available for Organization, only Person and Pseudo Person. Users can also view check images (front and back) that are deposited via Remote Deposit Capture using an independent third party vendor for Remote Deposit Capture processing.

Note: This application is designed to work with Vertifi, an independent third-party Remote Deposit Capture processor. This DNAapp securely sends requests and receives check images from this processor. It requires a separate integration between DNA and Vertifi to exist prior to app installation.

Key Benefits:

This application allows the Financial Institution to verify that a check being deposited or cashed in person is not one that may have previously been deposited using Remote Deposit Capture.

Processing:

In the Relationship Profile, the user will select the Remote Deposit History submenu under the More menu. If the Remote Deposit History is accessed through Organization Relationship Profile, a message will be displayed as “Remote Deposit History is not available for Organizations. Please use the Pseudo Person associated with the Organization.”

The user can choose to change the Thru Date or leave as is (default is today's date). The user can also change the From Date (default is based on the calculation variable NbrDaysHist and Thru Date). For example, if the NbrDaysHist is 180, that means 180 days prior to Thru Date is From Date. The user can further filter the remote deposit transactions to display by entering a check amount. The Query button is disabled until both the From Date and Thru Date are populated. The **Query** button displays a list of remote deposit transactions made by the selected person in the Results section. The **Clear** button will Clear the Results, set Thru Date to today's date, and set From Date to number of days (based on the calculation variable NbrDaysHist) prior to Thru Date.

The Thru Date must be greater than or equal to the From Date or else a message will be displayed as “The Thru Date must be greater than or equal to the From Date.” If the RDCashbox calculation variable setting is non numeric or blank, a message will be displayed as “Remote deposit cashbox must be numeric. Please check the RDCashbox calculation variable.” If the DescFormat calculation variable setting is blank, a message will be displayed as “No transaction description format found. Please check the DescFormat calculation variable.” If the character “%” is not set on the DescFormat calculation variable setting, a message will be displayed as “Invalid transaction description format used. Please check the DescFormat calculation variable.” If there is no data to display, a message will be showed as “No Information Found.”

Once the remote deposit history appears on the Results section, the user can double click on a transaction and the check images (front and back) will be displayed in a pop-up box. This is accomplished by sending and receiving an external request to Vertifi (third party vendor for Remote Deposit Capture).

If any of the values in the CONFIG Table in the EXTN Schema are blank or incorrect, a message will be displayed as "Unable to retrieve the check image." If the 2 external DLLs are not in the Bin folder or the LocDLL calculation variable is blank, a message will be displayed as "PDFsharp and LibTiff.Net DLLs are missing in the BIN folder." If the PDF file is in incorrect format, a message will be displayed as "Unable to extract the TIFF images from the '\\.\RemoteDepositImage.pdf' PDF file. See below for details."

Authorization:

To grant a user access to this application, the authorization item Remote Deposit History Auth Item (R0EB) needs to be assigned to an authorization group, such as tellers (TELL), to which the user has at least View and Inquiry access privileges. The following AuthItem is used for that purpose.

Name	Code	Type	Description (how used)
Remote Deposit History Auth Item	R0EB	AuthItem	Authorization item for screen and GUI access.

Parameters:

N/A

Variables:

Only the value of the variables 9R60 to 9R67 can be customized by the financial institution.

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

Calculation Cat Code	Calculation Type Code	Description (how used)	MjMiYN
9RFC	9R0E	Remote Deposit History	N

Calculation Variables:

The following calculation variables are required for the application. They are populated within the '9R0E' calculation type.

Variable	Code	Description (how used)	Data Type	Default
RDcashbox	9R60	This is the cashbox number that is being used for Remote Deposit Capture. Can be multiple, separated by commas, no spaces. Example: 123,54894	STR	Blank
NbrDaysHist	9R61	This is used to calculate the From Date. The set number of days prior to the Thru Date will be the From Date.	STR	180
DescFormat	9R62	This is the transaction description format. This is used to extract the reference number from transaction description. % represents the reference number. For example, the description on the remote deposit transaction is saved as: Remote Deposit / Ref: 12345 Therefore on the DescFormat variable, it should be Remote Deposit / Ref: %	STR	Remote Deposit / Ref: %
LocDLL	9R63	This is the location where PdfSharp.dll and BitMiracle.LibTiff.NET.dll should be stored. Make sure "\ " is included at the end.	STR	G:\OS\CORE\BIN
InternetAccessAcctRole	9R64	This is the account role code for WWW Internet Access.	STR	WWW
RDrtxtypcd	9R65	This is the transaction type code used for Remote Deposit Capture.	STR	DEPD
NonTaxOwnerRole	9R66	This is the account role code for non tax owner.	STR	OWN
Qualification Method	9R67	This is the qualification method that the Financial Institution uses in Online Banking. MBR for member or person number and SSN for social security number.	STR	MBR

EXTN Schema:

The table CONFIG is needed to be created to store confidential values that will be used for getting the check images from Vertifi. When the application is installed, the CONFIG table is

created, along with 4 new config variables below. The table CONFIG will not be deleted when the application is uninstalled because it could be use by other applications in the future.

Name	Description (how used)	Data Type	Default
HMAC Key	This is provided by Vertifi. This is used in the HMAC algorithm.	STR	<BLANK>
URL	URL from Vertifi where the information about the check can be retrieved.	STR	<BLANK>
Requestor	This is the vendor ID assigned by Vertifi.	STR	<BLANK>
Routing Number	This is the routing number of the financial institution.	STR	<BLANK>

A script (EXTNupdateRows.sql) for updating the OSIEXTN.CONFIG table has been provided with this application. The financial institution can customize this script and use it after the application has been installed to setup values in the OSIEXTN.CONFIG table.

```

Declare
V_Count Number;
V_User Varchar(50);
Begin

Select count(*) into V_Count from all_tables where table_name='CONFIG' and owner='OSIEXTN';
Select sys_context('USERENV','OS_USER') into V_User from dual;

If (V_Count > 0) Then

Update OSIEXTN.CONFIG c
Set c.ConfigValue = ", c.RespPerson = V_User, c.Datelastraint = Sysdate
Where c.ConfigName = 'HMAC Key';

Update OSIEXTN.CONFIG c
Set c.ConfigValue = ", c.RespPerson = V_User, c.Datelastraint = Sysdate
Where c.ConfigName = 'URL';

Update OSIEXTN.CONFIG c
Set c.ConfigValue = ", c.RespPerson = V_User, c.Datelastraint = Sysdate
Where c.ConfigName = 'Requestor';

Update OSIEXTN.CONFIG c
Set c.ConfigValue = ", c.RespPerson = V_User, c.Datelastraint = Sysdate
Where c.ConfigName = 'Routing Number';

End If;

End;
/

```

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:

Remote Deposit History application is designed to work with Vertifi, an independent third-party Remote Deposit Capture processor. This application securely sends requests and receives check images from this processor to display on the screen.

This DNAapp requires the user to have a separate and independent integration between DNA and Vertifi to exist prior to app installation.

Screens:

Navigation:

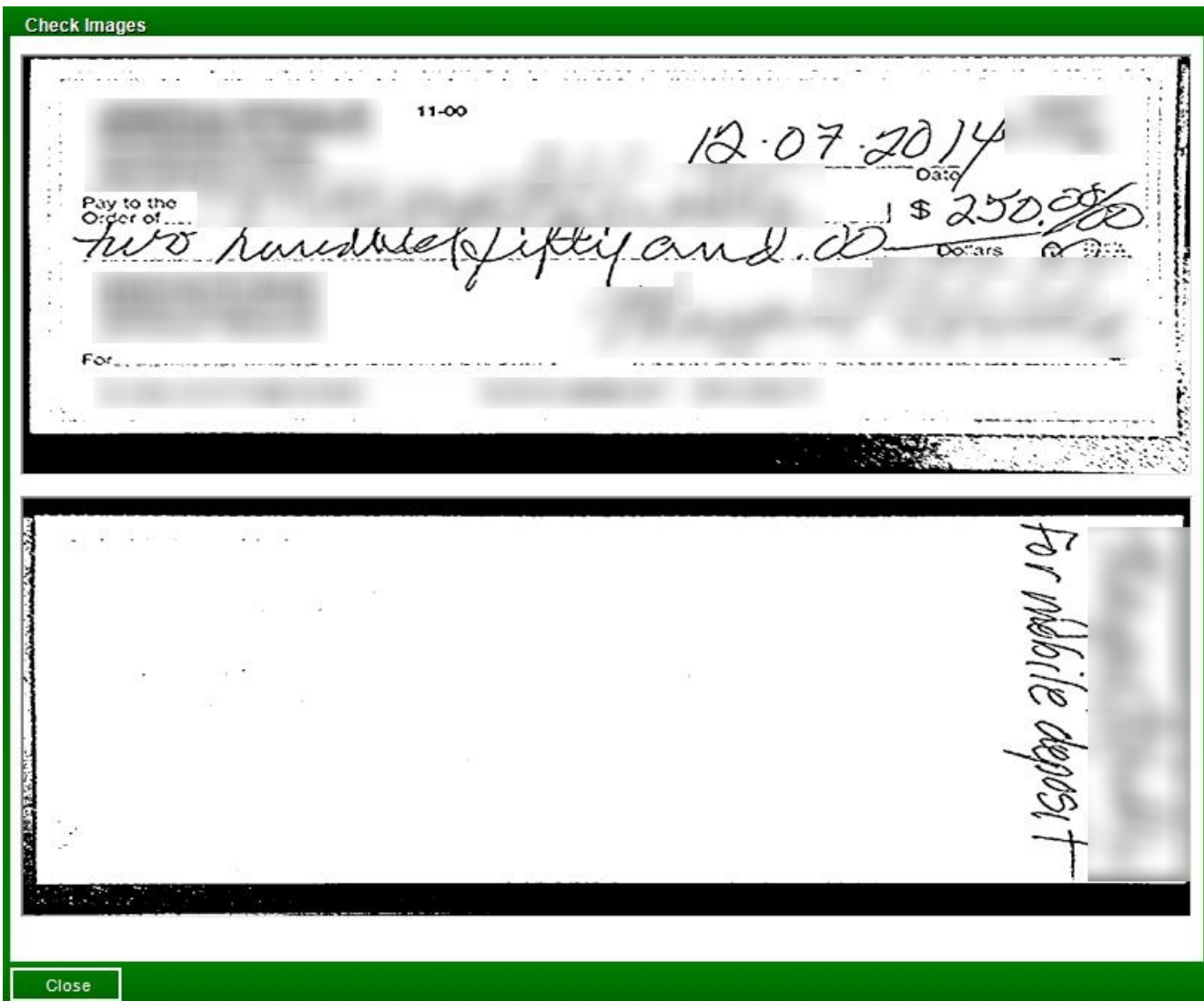
Relationships (module) > Quick Inquiries > Relationship Profile > More (menu) >
Remote Deposit History

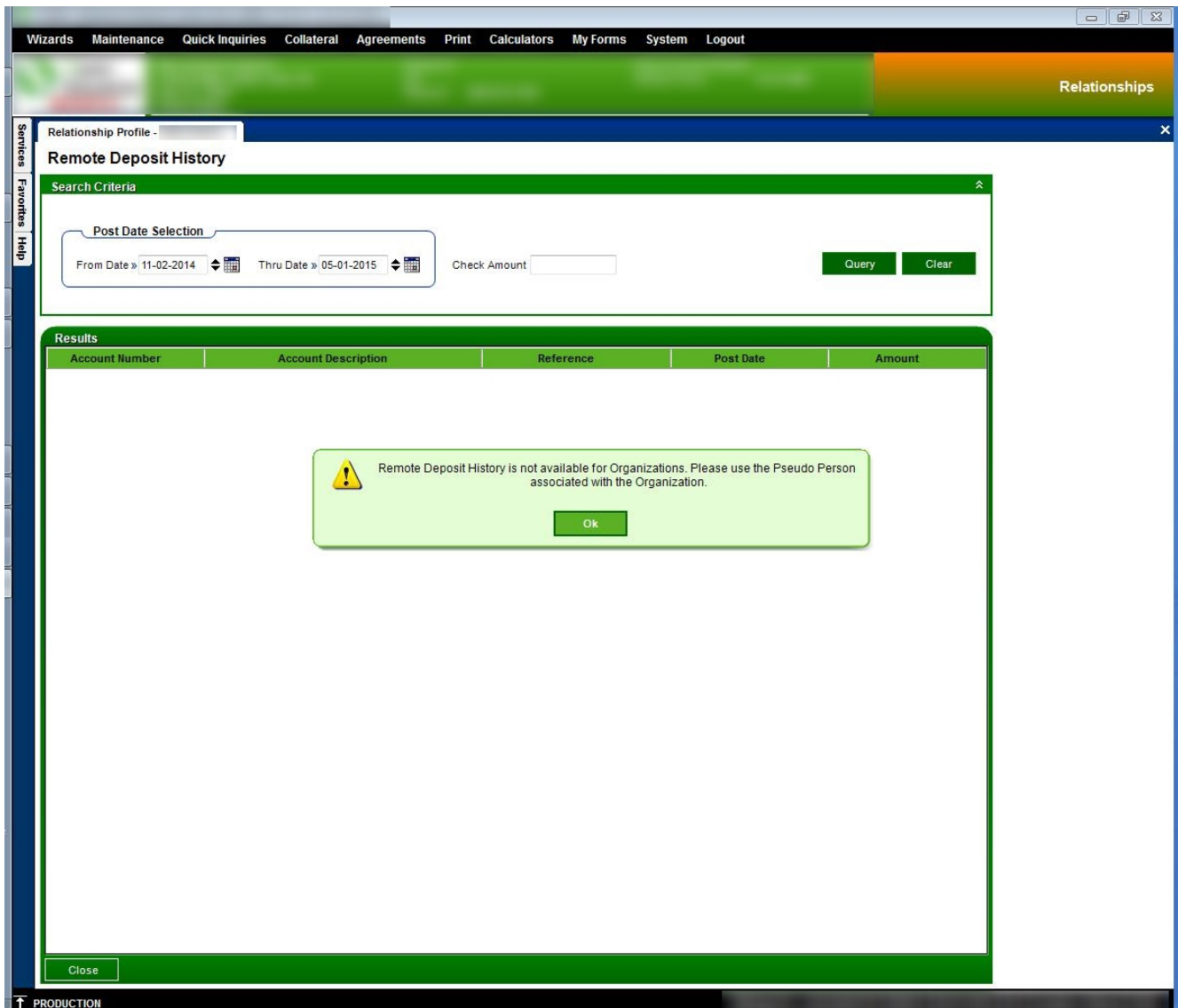
Screen Appearance:

The screenshot displays a web application interface for "Remote Deposit History". At the top, a navigation menu includes "Wizards", "Maintenance", "Quick Inquiries", "Collateral", "Agreements", "Print", "Calculators", "My Forms", "System", and "Logout". A "Relationships" button is visible in the top right. The main content area is titled "Remote Deposit History" and features a "Search Criteria" section with a "Post Date Selection" tab. This section includes "From Date" (11-02-2014), "Thru Date" (05-01-2015), and a "Check Amount" field, with "Query" and "Clear" buttons. Below the search criteria is a "Results" table with the following data:

Account Number	Account Description	Reference	Post Date	Amount
			01-05-2015	500.00
	LIBERTY CHECKING		01-03-2015	250.00
	LIBERTY CHECKING		01-03-2015	255.00
	LIBERTY CHECKING		12-29-2014	250.00
	LIBERTY CHECKING		12-26-2014	250.00
	LIBERTY CHECKING		12-19-2014	250.00
	LIBERTY CHECKING		12-09-2014	250.00
	LIBERTY CHECKING		12-03-2014	250.00
	LIBERTY CHECKING		11-26-2014	250.00
	LIBERTY CHECKING		11-21-2014	250.00
	LIBERTY CHECKING		11-17-2014	250.00
	LIBERTY CHECKING		11-17-2014	255.00
	LIBERTY CHECKING		11-06-2014	250.00

A "Close" button is located at the bottom left of the results area. The status bar at the bottom left shows "PRODUCTION".





Field Listing:

Field	Description
Search Criteria	
From Date	Start date for the transaction post date to limit the remote deposit transactions being displayed. This is being calculated based on the calculation variable NbrDaysHist and Thru Date. For example, if the NbrDaysHist is 180, that means 180 days prior to the Thru Date is From Date.
Thru Date	Thru date for the transaction post date to limit the remote deposit transactions being displayed. Default is today's date.
Check Amount	The amount of the check to use to filter the remote deposit transactions being displayed. If blank, all the remote deposit transactions on the given dates will be displayed.

Field	Description
Query Button	To display a list of remote deposit transactions based on the parameters entered.
Clear Button	Clear the Results, set Thru Date to today's date, and set From Date to a set number of days (based on the calculation variable NbrDaysHist) prior to Thru Date
Results	
Account Number	Account number where the check was deposited via Remote Deposit Capture
Account Description	The description that the account owner gave to the account
Reference	Reference number of the transaction
Post Date	Post date when the check was deposited via Remote Deposit Capture
Amount	The amount of the check that was deposited via Remote Deposit Capture
Close Button	Close the form

Additional Requirements:

- Fiserv DNA 4.2.2 or higher
- .NET Framework 4.5.2
- You must download and install the RelationshipProfileMoreMenu.dnax from the DNAappstore Community Forum before you install the Remote Deposit History DNAapp.
- Requires purchase or subscription to a third-party solution. Third-party solution is not included in the price of this app.
 - This DNAapp was originally designed to work with the Vertifi DeposZip solution.
 - This DNAapp requires the user to install a separate integration between Vertifi and DNA prior to installing this DNAapp.
 - Vendors/Solutions not listed may also work with this application; please check with your vendor of choice if they are not listed here.
- The check images downloaded from Vertifi are in PDF format. In order to display them properly in DNA screen, the files will need to be converted to TIFF format. The PDFsharp and bitmiracle LibTiff.Net are needed for the conversion.
 - PDFsharp is the Open Source library that easily creates PDF documents from any .NET language and can be downloaded from the following website:

http://sourceforge.net/projects/pdfsharp/files/pdfsharp/PDFsharp%201.31/PDFsharp-MigraDocFoundation-Assemblies-1_31.zip/download

Unzip the PDFsharp-MigraDocFoundation-Assemblies-1_31.zip file and copy the PdfSharp.dll from GDI+ folder to G:\OS\CORE\Bin\

License Information:

PDFsharp is published under the MIT License.
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- o LibTiff.Net provides support for the Tag Image File Format (TIFF) and can be downloaded from the following website:

<http://bitmiracle.com/libtiff/>

Copy the BitMiracle.LibTiff.NET.dll to G:\OS\CORE\Bin\

License Information:

LibTiff.Net
Copyright (c) 2008-2011, Bit Miracle

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DLLs are only required to be copied to the G:\ drive once and not to individual client PCs.

Configuration Checklist:

Item	Test Environment	Production Environment
Variables		
EXTN Schema CONFIG table		

Revisions:

Date	App Version #	Change
08/2016	1.5.0.0	Upgraded to DNA 4.2.2.
05/2015	1.4.0.0	Added calculation variable QualificationMethod to allow Financial Institutions that use SSN for Online Banking to use this application.
04/2013	1.3.0.0	Added calculation variable NonTaxOwnerRole. Improve query response time.
04/2013	1.2.0.0	Improve query response time.
02/2013	1.1.0.0	Show informational message when the application is accessed through Organization Relationship Profile. Remote Deposit History can now be viewed on pseudo persons.
01/2012	1.0.0.0	Application Created.