PSCU QuickAssist
Server Installation

Overview:

PSCU cards are displayed in DNA as external accounts (credit cards) or Card Agreements (debit cards), however there is no ability to use PSCU to manage these accounts or display real time account information. Financial Institution employees today must open a separate browser window, navigating to PSCU QuickAssist, log in to QuickAssist and re-enter search information to locate an account.

This application integrates PSCU QuickAssist with DNA, allowing the employee to simply slide in a list of PSCU credit and debit cards and select one to launch QuickAssist. PSCU QuickAssist is launched within the default Windows browser, allowing the employee to view and manage the PSCU account without the need to log in to QuickAssist and search for the desired account.

PSCU does not currently have a QuickAssist test environment. Therefore, both DNA test and production environments may be configured to point to the same PSCU environment. Be sure to take the necessary security precautions to protect your live PSCU data while testing.

This document describes the installation of the server component which creates a SAML single sign on token per PSCU requirements. The SAML token is signed by the FI's private key and encrypted using PSCU's public certificate.

Prerequisites:

A prerequisite to using this application is to engage with PSCU for access to QuickAssist via Single Sign On. PSCU will assign a SAML EntityID to the institution and provide the PSCU public certificate to be used.

Additionally, a digital certificate meeting PSCU requirements will need to be purchased by the financial institution. This public certificate will need to be provided to PSCU and installed in their environment prior to using this application.

The certificate may be purchased for a subdomain such as "pscu.mycu.com". It may also be used by IIS for HTTPS encryption of the data to and from the server.

This server application requires the FI's certificate be in the form of a PFX file, containing both the FI's private key and public certificate, secured by a password. If the Certificate Authority it was purchased from did not provide it in this format, OpenSSL may be used to create a PFX file from PEM files:
https://www.ssl.com/how-to/create-a-pfx-p12-certificate-file-using-openssl/

Server Installation:

The PSCU QuickAssist DNAapp requires a server application to provide the Single Sign On integration with PSCU. This server application is strictly used to satisfy PSCU's Single Sign On requirements: creating a SAML token signed by the institution's private digital certificate and encrypted by PSCU's public digital certificate.

This server does not connect to DNA and in general should not be installed on a DNA or SAF server. It is better to find a separate Windows IIS server with capacity for this additional, small application.

Perform the following steps to install the PSCU QuickAssist server:

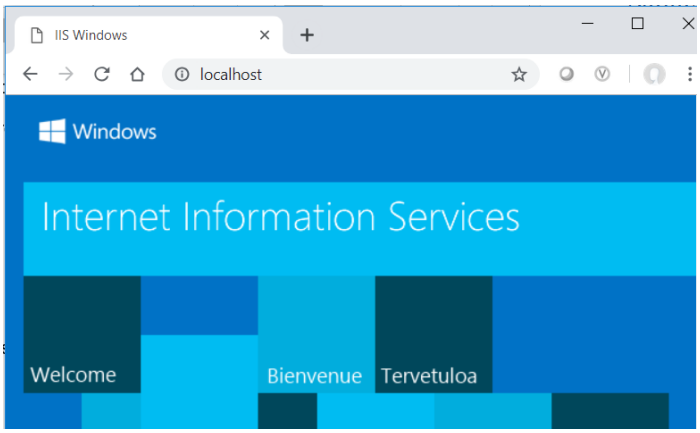
Prerequisites:

Insure the following prerequisites have been installed:

- Windows Server 2012 or above
- Windows IIS 8 or above

✓ Ensure you can open up **http://localhost** successfully.

✓

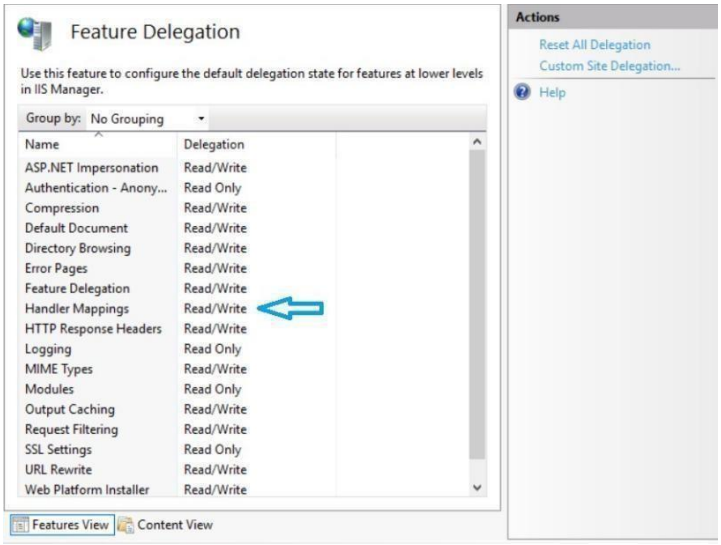


Install Support Components:

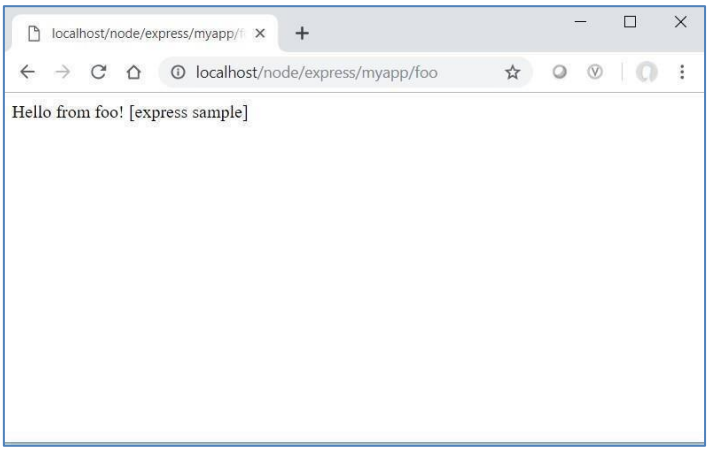
Follow the respective instructions for installing each of the following components:

- Microsoft IIS URL Rewrite extension - https://www.iis.net/downloads/microsoft/url-rewrite
- Node – https://nodejs.org (Choose the correct bit version matching your system)
  Microsoft Azure iisnode – https://github.com/Azure/iisnode (Choose correct bit version matching your system)
- Configure IIS "Handler Mapping" to prevent HTTP Error 500.19

1. Open IIS Manager
2. Select the root node (Server Name).
3. Open the “Feature Delegation” option.
4. Set the Handler Mappings to Read/Write.



✓ Ensure you can open up all the apps at **http://localhost/node** successfully, including **http://localhost/node/express/myapp/foo**



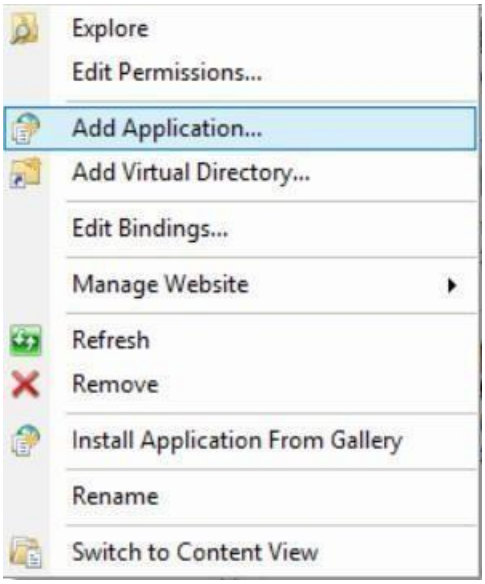
Install PSCU QuickAssist Server:

- Download PSCU QuickAssist application – (location TBD)
- Unzip to C:\pscu
- Install node_modules for server application:

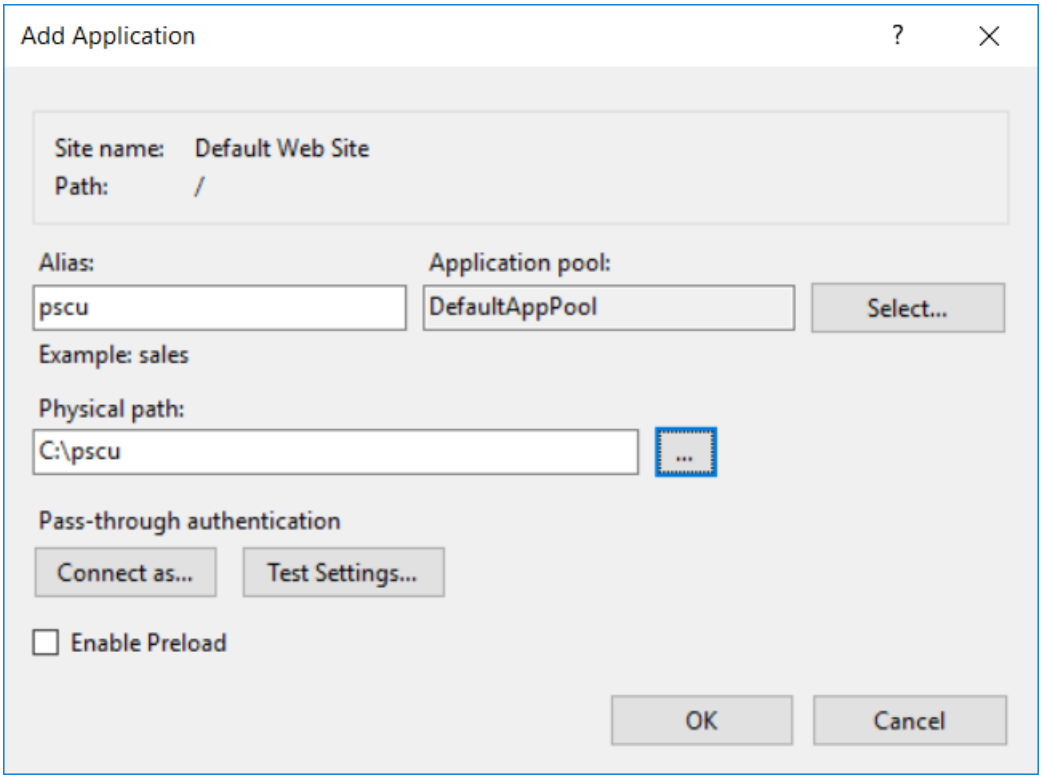
```
Open a “cmd” window
cd \pscu
```

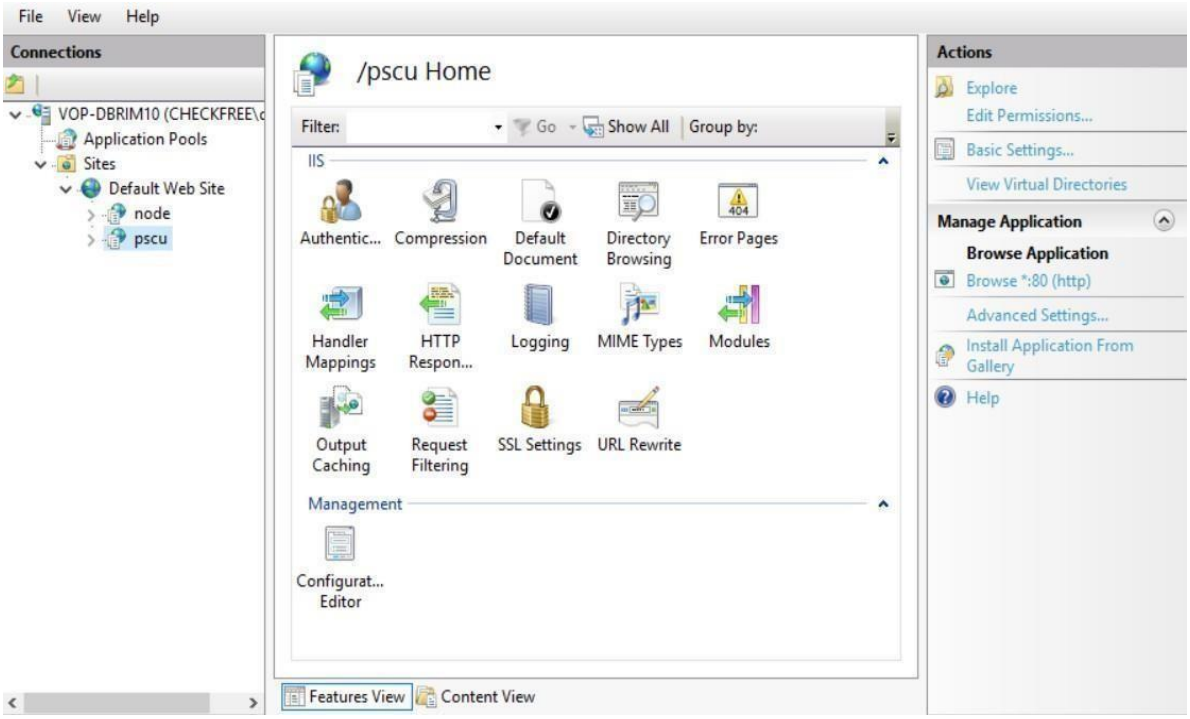
```
npm ci
```

- Add PSCU Application to IIS using IIS Manager. Click on “Sites”, right click on “Default Web Site”, click on “Add Application …”



- Specify Alias of “pscu” and set the Physical path to location of unzipped server application: C:\pscu





- Copy the signing certificate purchased per PSCU requirements into the c:\pscu\certificates directory

```
<add key="PSCU_CERTIFICATE_FILE"
          value="certificates/PSCU_saml_encryp_prod.txt" />
```

- Configure the institution specific parameters in C:\pscu\web.config file

  Your PSCU assigned Client ID and Entity ID:

```
<add key="FI_CLIENT_ID" value="12345" />
<add key="FI_ENTITY_ID" value="FI:8488:saml20:PROD" />
```

  The location and password of your PFX signing certificate:

```
<add key="FI_PFX_FILE" value="certificates/FI.pfx" />
<add key="FI_PASSPHRASE" value="Password123" />
```

- Add a certificate to IIS for https encryption of data.

  The AppMarket requires that only HTTPS URL's are used. Therefore, the DNA "PSCU" Calc Var URL which points to this server must begin with "HTTPS". If you do not have a digital certificate for encrypting your IIS servers, you may use the digital certificate purchased for PSCU requirements.

- Configure the PSCU specific parameters in C:\pscu\web.config file

  PSCU App ID and Entity ID:

```
<add key="PSCU_APP_ID" value="8488" />
<add key="PSCU_ENTITY_ID" value="PSCU:saml20:prod" />
```

- Temporarily configure for Debug Mode in C:\pscu\web.config file

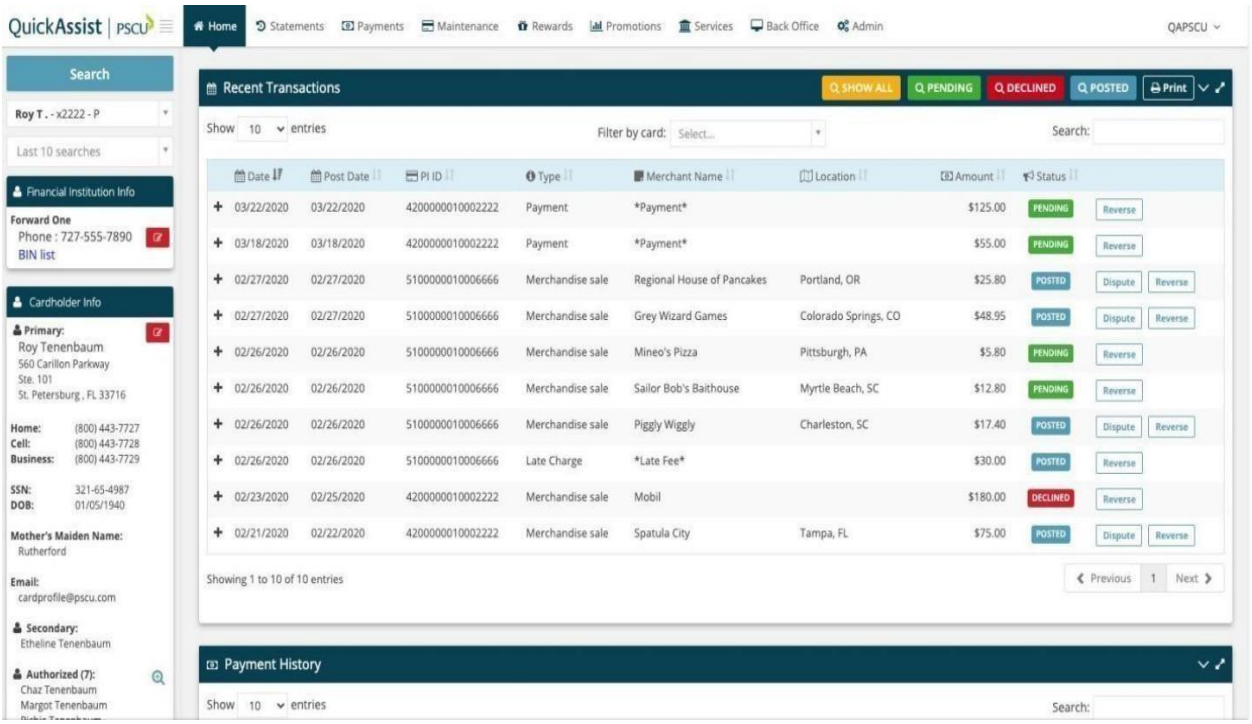
  Setting VALIDATE_SIGNATURE to “false” allows the proper connection between the DNA desktop and this server.

```
<add key="VALIDATE_SIGNATURE" value="false" />
```

  Setting DEMO_MODE to “true” causes this server to respond with a static screen shot of QuickAssist. A PSCU connection is not required. This helps you verify that everything is working correctly between the DNA desktop client and this server, without involving the connection to PSCU.

```
<add key="DEMO_MODE" value="true" />
```

✓ Ensure you can browse to **http://localhost/pscu/sso** successfully. You should see the screen below



- Turn Debug Mode off in C:\pscu\web.config file

  Setting VALIDATE_SIGNATURE to “true” performs a verification process to validate the signature sent by the DNA client before allowing them to connect with this server.

```
<add key="VALIDATE_SIGNATURE" value="true" />
```

  Now that you’ve verified proper operation between the DNA desktop and this server, it’s time to add the connection to PSCU to see real QuickAssist screens. Specify the PSCU’s endpoint to post the SAML response

```
<add key="PSCU_SERVICE_URL"
          value="https://pfs.pscu.com/sp/ACS.saml2" />
```

  This will launch PSCU QuickAssist in the default Windows browser with Single Sign On.

```
<add key="DEMO_MODE" value="false" />
```

Server Configuration:

DNA External Accounts and Card Agreements often include items that are unrelated to PSCU card accounts. To filter out these non-PSCU items, two configuration parameters are provided in the C:\pscu\web.config file. Leaving these values blank will display all External Accounts and all Card Agreements to the user:

Credit Cards

CREDIT_CARD_CODES is a comma separated list of DNA Account Minor Type Codes that represent PSCU credit cards:

```
<add key="CREDIT_CARD_CODES" value=""
```

For example, if PSCU credit cards use PSC1, PSC2, PSC3 for their DNA Account Minor Type Codes, use the following configuration:

```
<add key="CREDIT_CARD_CODES" value="PSC1,PSC2,PSC3"
```

Debit Cards

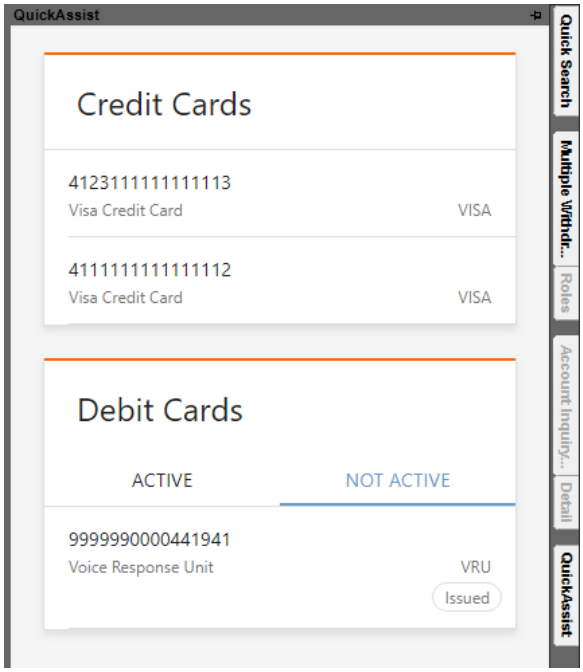
DEBIT_CARD_CODES is a comma separated list of DNA Card Agreement Type Codes Account Minor Type Codes that represent PSCU debit cards:

```
<add key="DEBIT_CARD_CODES" value=""
```

For example, if PSCU debit cards use PS11, PXYZ for their DNA Card Agreement Type Codes, use the following configuration:

```
<add key="DEBIT_CARD_CODES" value="PS11,PXYZ" />
```

To make it easier to find these codes, they are displayed on the far right for both credit and debit cards. In the example below, all External Accounts and Card Agreements are displayed. If "VISA" credit cards are not serviced by PSCU, do not add them to the list of CREDIT_CARD_CODES. And as VRU is not a debit card, do not add that Card Agreement Type to the list of DEBIT_CARD_CODES.



User ID translation:

The PSCU QuickAssist DNAapp provides Single Sign On to PSCU QuickAssist, passing the DNA user ID to PSCU. But sometimes a user's DNA User ID and their PSCU User ID are not the same. For those users a translation file is provided to translate User ID's between systems.

```
<add key="PSCU_USER_TRANSLATION_FILE"
        value="assets/userIdTranslationFile.csv" />
```

It is located in C:\pscu\assets\userIdTranslationFile.csv and is prepopulated with a few example values. It is a simple comma separated variable (CSV) file where each line represents a user id to be translated between systems. The first value is the DNA user id (shown in blue below), the second value is the PSCU user ID (shown in green below). It is important not to remove or modify the first line When this server is loaded, the translation file will be read into memory and used to translate user id's between systems. Any user ID not found in this file will not be translated, the DNA user ID will be passed to PSCU.

DNA userID,PSCU UserId
MARYDOUGLAS,mdouglas
MACKDHONI,mack.dhoni
VMIRENA,MirenaV
JBANKER,Jbanker1

Graceful Application Reloading:

By default, this application will start one process for each CPU available:

```
nodeProcessCountPerApplication="0"
```

To gracefully, restart this server, edit the C:\pscu\web.config file. This file is monitored, and any change will terminate all processes, first allowing outstanding requests to complete, then start new processes for each CPU.

But more importantly, the User Id translation file will be re-read into memory and any changes to the web.config file will take effect. There is no need to restart IIS after a configuration change.

Logging:

Limit the information written to the log file by setting a specific log level. The default level for the logger is “info”

```
<add key="LOG_LEVEL" value="info" />
```

A log file is generated by this application: C:\pscu\pscu.log. It logs information at each SAML token generation step. Step 02 logs the DNA bank ID assigned to the institution, the user ID (after user id translation) and the card number selected (card numbers are masked in the log).

Other information logged may be useful to the server application developers to assist in problem resolution. This log is cleared each time the server is started.

Revision History

Date	Version	Change
04/2024	1.1	Fixed the issue in filtering the credit cards
07/2023	1.1	Updated PSCU certificate for DNA 2023
03/2022	1.1	Migrate DNA version to 4.7.3 Support to decrypt debit card numbers to display to user Fixed the issue of showing the wrong current value for the debit card numbers
12/2020	1.1	Add Support for PSCU Debit Cards Support Active Directory User ID’s from DNA Translate DNA User ID’s to PSCU User ID’s via Translation Table Support DNA Slide Out for fewer clicks
9/2019	1.0	Initial Version