**Document Version**

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| **Date** | **Author** | **Description** | **Version** |
| 6 June 2018 | Hafiz Hamdi | Initial version | 1.0 |
| 29 June 2018 | Hafiz Hamdi | Update info on Installation step | 1.1 |
| 15 Nov 2018 | Hafiz Hamdi | Support document scanner and label printer | 1.2 |

**HIS HTP Service (Mykad service) V2.4**

HISHTP Service is developed initially to support reading mykad from web browser. The problem came after the latest web browser does not support Java Applet and ActiveX features anymore due to security issue.

To overcome this issue, HISHTP service was developed using self-hosted WCF feature preinstalled in C# Development. Whereby, the HIS system now can interact with the devices located at client side such as card reader, printer and scanner to pass the data back to HIS system. The calling method should be embedded in HIS code where the integration is start.

Call service

HIS

Pass data

Invoke process

Self-hosted service

Scanner

Printer

Card Reader

Figure General Workflow of HISHTP Service

PC Client

**Installation Steps**

1. Install card reader driver, Extract ACS-Unified-MSI-4250.zip. Run installer.

**Note:** Unplug the card reader before start installing driver.

1. Download the latest HISHTP Service installer (as of now v2.3)
2. Unzip the folder, let say HISHTPServiceV2.3.rar
3. Right-click and run in administrator mode on HISHTPServiceV2.3.exe.
4. Wait, Installation will start until finish.
5. Open Windows Services at the start bar.
6. Look for HISHTP Service, Right-click and go to Properties.
7. Set Logon as this account, preferably account that registered in the network.
8. Click Apply and Start service.

**Additional Note:**

HISHTP Service is dependent with the latest version of Microsoft .NET Framework version 4.7.1. Get the installer inside the installation folder for update. Internet connectivity is required to install this software.

**Issue with IE browser**

Some IE ask for download instead of display the result on the browser. Solution, run *json-ie.reg* inside installation folder

**Verify Installation**

1. Open web browser let say Chrome.

**Note:** For Internet Explorer user, there is registry file required to install to prevent file from downloading. The file is included in the package.

1. Type in url bar as follow to test the service whether is working fine.

http://localhost:8000/Hello

Browser should display “Hello Im In!”. This means the service working as expected.

Otherwise, error will display out on the screen.

**API**

There are several APIs available to use within this HISHTP Service.

1. http://localhost:8000/Hello - to test service is working.
2. http://localhost:8000/readmykad – to read mykad.
3. http://localhost:8000/readmykid – to read mykid.
4. http://localhost:8000/getHostName – to get PC host name.
5. http://localhost:8000/PostPdf/{id} – to post PDF and store as buffer

Parameter:

id – Any

1. http://localhost:8000/PostPdfCopies?numOfCopies={copies}&prtName={prtName}– to post PDF and store as buffer with No of copies for printing

Parameter:

copies – No of Copies (ex: 2, 3 and etc)

prtName – set printer name

1. http://localhost:8000/ExecPrint/{drive}/{path}/{progName} – to generate PDF file and start print.

Parameter:

drive – Source drive (ex: C, D, and etc.)

path – Installation path

progName – Batch file to handle printing process.

Example:

http://localhost:8000/ExecPrint/C/HISHTPService/runme.bat

1. http://localhost:8000/GetEnvironment?envName={envName} - to retrieve system variable name.

Parameter:

envName – system environment name

1. http://localhost:8000/SetEnvironment?envName={envName}&envValue={envVal} – to create or reset system variable in environment.

Parameter:

envName – system environment name

envVal – system environment value

1. http://localhost:8000/ScanDocument?fileid={fileid} – Start scanning document

Parameter:

fileid – file indicator

1. http://localhost:8000/RetrieveScannedDoc?fileid={fileid}– To retrieve scanned document in base64.

Parameter:

fileid – file indicator

1. http://localhost:8000/ListPrinter– To list all installed printers
2. Script runme.bat

runme.bat {currentPath} {noOfCopies} {printerType} {printerName}

Parameter:

currentPath – Full Path where script located

noOfCopies– Set of copies for printing (default is 1)

printerType – set to LBL or NORMAL

printerName – set printer name

Example:

1. Printing label on label printer:

runme.bat C:\HISHTPService 1 LBL ZebraGT800

1. Print normal PDF file

runme.bat C:\HISHTPService 1 NORMAL HP-Printer

**Note**: Default printer has disabled. You need to specify printer name as mandatory.

**Integration Point**

HIS have several integration points which has been identified where to start the integration action. This should be done in the code. Seem, HIS is web-based, JavaScript and HTML are useful to integrate this action.

There is index.html page included in the package as reference.

**Source Code**

Go to link <https://github.com/hafizhamdi/mykadservice>

**Printer Setting for Label Printer**

1. Install label printer driver (Seagull software)
2. Set Label size 3 x 1.5 inch on printer properties
3. Adjust the offset 3 x 2 mm

**Document Scanner**

1. Turn off Auto TWAIN/ISIS on back of the scanner
2. Install driver downloaded TWAIN/ISIS
3. Add new scanner on windows system.

**Note**: Put paper on scanner before scanning to avoid error