***Tech Notes***

# ToDo

### - Pickup

*~~echeckin.html~~*

~~<a routerLink="/pickup" routerLinkActive="ac~~

*~~navmenu.html~~*

<ul class="navbar-nav ml-auto">

<li class="nav-item sliding-u-l-r hl-nav-item">

<a class="nav-link" routerLink="/e-checkin" routerLinkActive="active">Home</a>

</li>

~~<li class="nav-item sliding-u-l-r hl-nav-item">~~

~~<a class="nav-link" routerLink="/pickup" routerLinkActive="active">Pick-up</a>~~

~~</li>~~

<li class="nav-item sliding-u-l-r hl-nav-item">

<a class="nav-link" routerLink="/dropoff" routerLinkActive="active">Drop-off</a>

</li>

*~~app module.ts~~*

// components

…

import { EticketComponent } from './eticket/eticket.component';

~~import { PickupComponent } from './pickup/pickup.component';~~

…

@NgModule({

declarations: [

...

EticketComponent,

~~PickupComponent,~~

*~~app routing module.ts~~*

~~\*\* spaces in imports \*\*~~

~~import { PickupComponent } from './pickup/pickup.component';~~

…

const routes: Routes = [

{ path: '', component: HomeComponent, pathMatch: 'full' },

{ path: 'home', component: HomeComponent },

{ path: 'e-checkin', component: ECheckInComponent, canActivate: [MsalGuard] },

{ path: 'dropoff', component: DropOffComponent, canActivate: [MsalGuard] },

{ path: 'eticket', component: EticketComponent, canActivate: [MsalGuard] },

~~{ path: 'pickup', component: PickupComponent, canActivate: [MsalGuard] },~~

{ path: '\*\*', redirectTo: 'home' }

];

…

// convenience - instead of declaring individually in app module

export const routableComponents = [

ECheckInComponent,

DropOffComponent,

~~PickupComponent~~

];

Models & API are in place and also deployed on dev

Search PickUp VCTs call : https://ngcoreapis-dev-wa.azurewebsites.net/api/airwaybills/getpickupairwaybills/dev/172

Request PickUp VCTs : https://ngcoreapis-dev-wa.azurewebsites.net/api/vct/requestimportvct/dev

with Body like this:

{

"deliveryMethod": 4,

"appointmentInfo": {

"appointmentDateTime": 1554375716

},

"vehicleInfo": {

"vehicleType": 1,

"registrationNumber": "TS-ZM-238",

"driverInfo": {

"driverFirstName": "Burak",

"driverLastName": "Polak",

"driverId": 245

}

},

"vctManifestInfo": {

"looseCargoInfo": [{

"vctBookings": [{

"userProvidedAirwayBill": {

"awbNumber": "172-24051815",

"origin": "LHR",

"destination": "DEL",

"commodityInfo": {

"description": "HATS"

},

"shcs": [1, 2],

"airlineInfo": {

"airlineCode": "GK"

},

"consignmentInfo": {

"expectedNumberOfPieces": "13",

"expectedWeight": "1471",

"expectedVolume": "0.6",

"weightCode": 1

},

"deliveryInfo": "",

"agentInfo": {

"code": "23477876013",

"name": "BURAK Speedition",

"agentIATAAddress": "1330004"

},

"assignedTo": "",

"assignedByUser": ""

},

"pieces": "2",

"weight": "1471"

},

{

"userProvidedAirwayBill": {

"awbNumber": "172-24051816",

"origin": "LHR",

"destination": "DEL",

"commodityInfo": {

"description": "HATS"

},

"shcs": [1, 2],

"airlineInfo": {

"airlineCode": "GK"

},

"consignmentInfo": {

"expectedNumberOfPieces": "13",

"expectedWeight": "1471",

"expectedVolume": "0.6",

"weightCode": 1

},

"deliveryInfo": "",

"agentInfo": {

"code": "23477876013",

"name": "BURAK Speedition",

"agentIATAAddress": "1330004"

},

"assignedTo": "",

"assignedByUser": ""

},

"pieces": "2",

"weight": "1471"

}

]

}

]

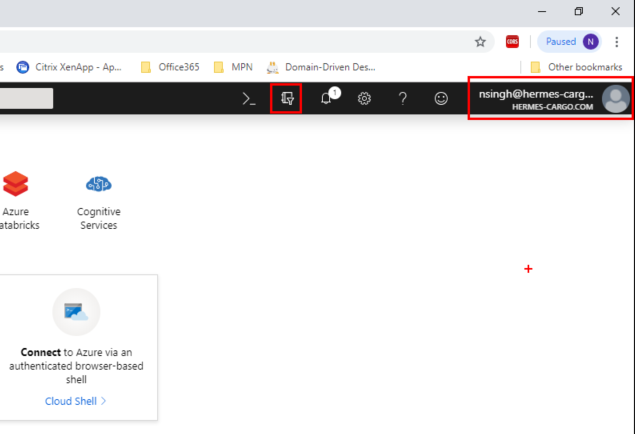
}

}

### - GH redesign

**New changes** WI:**253** -Task:**325**

**1)** use filter like icon instead of cog to select GHs. Cog might need for more settings (or new settings comp with GH within it)

**2)** show user's current GH next to avatar (like Azure portal)

### - Publish, switch between Dev & Prod

switch publish profile so doesn’t build **--prod** mode

try new *environment.dev.ts*  file with ng build -- --dev -test when next publish

(Alt + Enter) Debug >Environment variables

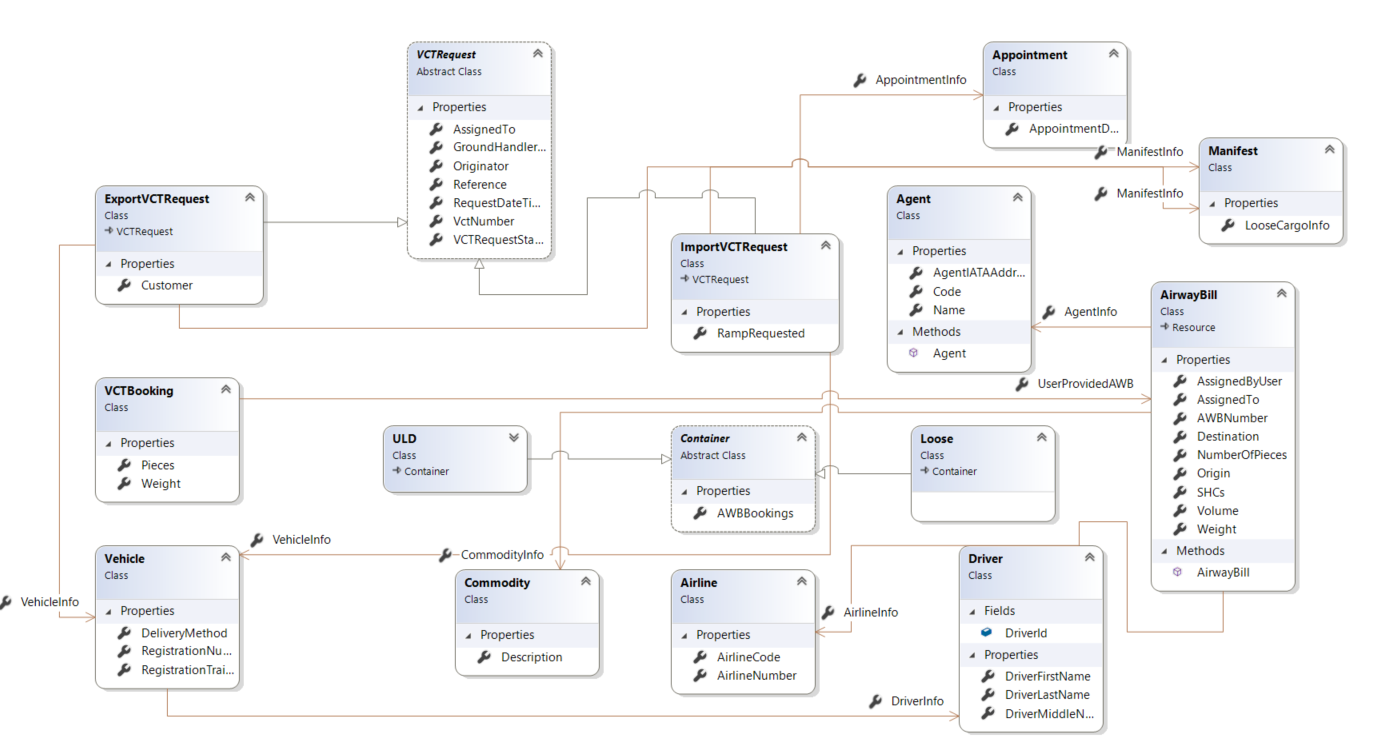
ASPNETCORE\_ENVIRONMENT Development

ASPNETCORE\_ENVIRONMENT Production

**alternative user**

"ngb2cuser1@gmail.com" , pwd: "Password-123"

***- Model Changes***



endpoint for fetching new AWB

endpoint for Posting new VCT request

omit the fields from Presentation layer that are not relevant there (like Originator, RequestDateTime etc).

***new AWB structure***

{

"awbNumber": "172-24051815",

"origin": "LHR",

"destination": "DEL",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "5",

"expectedWeight": "1471",

"expectedVolume": "0.6"

},

"deliveryInfo": null,

"agentInfo": {

"code": "",

"name": "",

"agentIATAAddress": "1330004",

"isSecure": false

},

"assignedTo": "",

"assignedByUser": "",

"remarks": null

}

***new VCT Request structure***

{

"vehicleInfo": {

"registrationNumber": "TS-ZM-238",

"registrationTrailorNumber": null,

"driverInfo": {

"driverFirstName": "NISH SINGH",

"driverMiddleName": null,

"driverLastName": null,

"driverId": null

}

},

"manifestInfo": { /\* looseCargoInfo: array<loose> *objs* \*/

"looseCargoInfo": [{ /\* container *obj* has vctBookings:Array<vctbooking> *objs* \*/

"vctBookings": [{ /\* **vctbooking** *objs* \*/

"userProvidedAWB": {

"awbNumber": "172-24051816",

"origin": "LHR",

"destination": "DEL",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "5",

"expectedWeight": "1471",

"expectedVolume": "0.6"

},

"deliveryInfo": null,

"agentInfo": {

"code": "",

"name": "",

"agentIATAAddress": "1330005",

"isSecure": false

},

"assignedTo": "",

"assignedByUser": "",

"remarks": null

},

"pieces": "2",

"weight": "3.4"

}, {

"userProvidedAWB": {

"awbNumber": "172-24051815",

"origin": "LHR",

"destination": "DEL",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "5",

"expectedweight": "1471",

"expectedVolume": "0.6"

},

"deliveryInfo": null,

"agentInfo": {

"code": "",

"name": "",

"agentIATAAddress": "1330005",

"isSecure": false

},

"assignedTo": "",

"assignedByUser": "",

"remarks": null

},

"pieces": "4",

"weight": "6.4"

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "4b72c74e-15df-4341-9da6-dd8ae7e2c828",

"vctRequestStatus": 1,

"customer": "NKS-2",

"deliveryMethod": 1,

"queueName": "q\_vctrequests\_nish",

"scheduledEnqueueTimeUtc": null,

"originator": "19751be5-2e35-4d6a-a49f-8bb59eeabd2d",

"groundHandlerId": "nish",

"requestDateTime": 1552908171

}

# General

## DevOpps

Note: don’t create features (business task)

backlog items: **prefix:** app level: (**Check-In**, **Track&Trace**, **General**) or comp (**checkinUI**, Functions, API)

## Annual leave

**4** days 28-31 Jan (**4** carried over - Nov/Dec)

**1** day 7 Feb

**3** days 25-27 Mar

Total 2019: **4** /25

Machine: Serial Number: PF11MVTH Machine Type Model: **20L7001VUK**

***Application***

*App User:* **[spalmer@hermes-cargo.com](mailto:spalmer@hermes-cargo.com)** / **Pwd001**  shortcuts: **hl / pwd**

*Data:* 177, 187

***Azure***

[SPalmer@hermes-cargo.com](mailto:SPalmer@hermes-cargo.com) / **Fri111**$0- laptop registered as device for **microsoft workplace** AzureAO / SPalmer

***Documentation***

**OneNote: Components**

vision **-** to make each component **self-sufficient** in terms of developing, mocking, debuging, testing, deploying & managing/monitoring.

create **-** **development guide** for each component

**OneNote: Azure Scaffolding**

templates for spinning up new envs

**DEV** (comp integration) - deployed instance of (healthy) master branch - can use for dev purposes, but keep data consistent (happy path)

Test & Prod for Icelandair

***HermesNextGen - Local Dev setup***

>download repo

>VS - Tools->Options->Nuget Package Manager->Package Sources - add local feed as second source (in addition to public Nuget feed) <https://hermes-cargo2.pkgs.visualstudio.com/_packaging/NGNugetFeed/nuget/v3/index.json>

>Build project - should get all dependencies (if not, close VS and reopen, Build again)

>local dev/debug - Functions need local configuration stored in 'local.settings.json' (ensure Settings are for your local development)

# Unit Test

ng test

or

cd HermesNGCore\HermesNGUI\ClientApp

npm test

or

cd node\_modules\.bin

.\karma start ..\..\karma.conf.js

single run

ng test --single-run

**Issues**

https://stackoverflow.com/questions/31966434/karma-chrome-failed-2-times-cannot-start-giving-up

ng test -sm false

# UI Layer

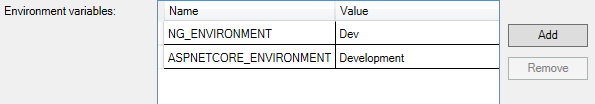
‘**Dev**’ **env:** service plan: **ng-dev-asp** app serice: **ngcheckin-dev-wa**

## vs Setup

add additional environment variable..  (launchSettings.json)

"NG\_ENVIRONMENT": "Dev | Test | Prod",

when Microsoft SPA build logic drops into "ASPNETCORE\_ENVIRONMENT": "Development", then this new  environment variable is detected to set the Angular specific build environment - covers all the scenarios like:   ng serve --dev --env=[*xxx*]



or via Project >Properties view

**Environment files** contain all configurable application settings

- each environment (**dev**, **test**, **prod**) will have a separate file in folder **/ClientApp/src/environments/**

- each file named with env postfix (environment.ts | environment.**test**.ts | environment.**prod**.ts )

*example:* *environment.ts*

export const environment = {

production: false,

env: 'dev',

baseUrl: "https://localhost:44392/",

B2CAuthority: "https://login.microsoftonline.com/tfp/hermesdevb2c.onmicrosoft.com/B2C\_1\_signup\_in",

B2CPwdResetPolicyURL: "https://login.microsoftonline.com/tfp/hermesdevb2c.onmicrosoft.com/b2c\_1\_pwd\_reset",

B2CPwdResetPolicyName: "b2c\_1\_pwd\_reset",

B2CForgotPwdErrorCode: "AADB2C90118",

B2CClientID: "bde5bded-25ba-4689-ac11-cb51d677fbd0",

B2CPostLogoutRedirectUri: "https://localhost:44355/",

protectedResourceMap: [

['https://localhost:44392/api/orgsgraph', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://localhost:44392/api/airwaybills', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://localhost:44392/api/vct', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']]

]

};

can change the configuration of the development environment.ts as required.

Note: only check in changes to environment files if appropriate for rest of the teams needs

## Switch Local Debug

### new Config File Technique

**switch API** to Azure ‘**Dev**’ env (currently environment.prod.ts points to ‘Dev’)

baseUrl: "https://ngcoreapis-dev-wa.azurewebsites.net/",

...

protectedResourceMap: [

['https://ngcoreapis-dev-wa.azurewebsites.net/api/orgsgraph', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://ngcoreapis-dev-wa.azurewebsites.net/api/airwaybills', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://ngcoreapis-dev-wa.azurewebsites.net/api/vct', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']]

]

**switch API** back to local env (& start up **HermesNgCore** prj)

baseUrl: "https://localhost:44392/",

...

protectedResourceMap: [

['https://localhost:44392/api/orgsgraph', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://localhost:44392/api/airwaybills', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://localhost:44392/api/vct', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']]

]

### old Manual Technique

aim to step into local API controllers

\*\* switch **ON** plugin Allow-Control-Allow-Origin

switch to localhost

**main**.ts > export function getBaseUrl() { return - switch to local version [line 8]

**app.module**.ts > export const protectedResourceMap - switch to local version [line 34]

typical *main.ts*

...

export function getBaseUrl() {

~~//return "https://hngcoreapis-dev-wa.azurewebsites.net/"; //old~~

//return "https://ngcoreapis-dev-wa.azurewebsites.net/"; //DEV env

return "https://localhost:44392/"; //LOCAL

}

typical *app.module.ts*

//DEV env

//export const protectedResourceMap: [string, string[]][] = [

// ['https://ngcoreapis-dev-wa.azurewebsites.net/api/orgsgraph', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

// ['https://ngcoreapis-dev-wa.azurewebsites.net/api/airwaybills', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

// ['https://ngcoreapis-dev-wa.azurewebsites.net/api/vct', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']]

//];

//LOCAL env

export const protectedResourceMap: [string, string[]][] = [

['https://localhost:44392/api/orgsgraph', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://localhost:44392/api/airwaybills', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']],

['https://localhost:44392/api/vct', ['https://hermesdevb2c.onmicrosoft.com/ngdevapi/ngapi']]

];

***Key Files for dev end***

\HermesNextGen\eCheckInUI\Properties\launchSettings.json - profiles specify env Variables - "ASPNETCORE\_ENVIRONMENT": "Development"

\HermesNextGen\appsettings.dev.json

***Local env***

\HermesNextGen\eCheckInUI\ClientApp\src\**environments**\environment.ts

export const environment = {

production: false,

B2CAuthority: "https://login.microsoftonline.com/tfp/hermesdevb2c.onmicrosoft.com/B2C\_1\_signup\_in\_b2c",

B2CClientID: "bde5bded-25ba-4689-ac11-cb51d677fbd0",

B2CPostLogoutRedirectUri: "https://localhost:44355/"

};

***DEV integration env***

currently -prod switches to \HermesNextGen\eCheckInUI\ClientApp\src\**environments**\environment.prod.ts

export const environment = {

production: true,

B2CAuthority: "https://login.microsoftonline.com/tfp/hermesdevb2c.onmicrosoft.com/B2C\_1\_signup\_in",

B2CClientID: "e07fec6c-fa7d-4c62-aef3-14be91dcf8e2",

B2CPostLogoutRedirectUri: "https://nguiapp-dev-wa.azurewebsites.net/"

};

## Switch to Mock XHR interceptors

uncomment the MockXHRInterceptor provider

*\app.module.ts*

@NgModule({

...

providers: [

...

//{

// provide: HTTP\_INTERCEPTORS,

// useClass: MockXHRInterceptor,

// multi: true

//}

],

# API Layer

## Switch Local Debug

aim to step throught the api controllers

profile: IIS Express vs HermesNGAPI vs Dev - cf Key Files section

select profile: **dev**

optionally HermesNgApi Controllers

//[Authorize] - comment out [line 25] Note: can revert back to vs2015… debug >options >general >Enable js debugging for .net

***Key Files for dev end***

\HermesNGAPIs\Properties\launchSettings.json - profiles specify the environent Variables - "ASPNETCORE\_ENVIRONMENT": "dev"

\HermesNGAPIs\appsettings.dev.json - DEV env - switches based on env var

~~\HermesNGAPIs\appsettings.json - old env~~

***DEV integration env***

typical **launchsettings**.json (picks up the **appsettings.dev.**json )

{

"profiles": {

...

"dev": {

"commandName": "Project",

"launchBrowser": true,

"launchUrl": "api/airwaybills/2/172",

"environmentVariables": {

"ASPNETCORE\_ENVIRONMENT": "dev"

},

"applicationUrl": "https://localhost:44392/"

}

}

}

typical **appsettings.dev**.json

{

"Logging": {

"IncludeScopes": false,

"Debug": {

"LogLevel": {

"Default": "Warning"

}

},

"Console": {

"LogLevel": {

"Default": "Warning"

}

}

},

"ServiceBusConfiguration": {

"ConnectionString": "Endpoint=sb://ng-dev.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=++j7RqUaQ2Bf0uIOTLRRm3QaAJybH/g37nxiz0LQO9o="

},

"QueueNames": {

"Q\_AirWayBills": "q\_airwaybills",

"Q\_VCTRequests": "q\_vctrequests"

},

"AzureAdB2C": {

"ClientId": "33a556a7-37dd-4748-a443-ff75bee404ca",

"Tenant": "hermesdevb2c.onmicrosoft.com",

"AadInstance": "https://login.microsoftonline.com/{0}/v2.0/.well-known/openid-configuration?p={1}",

"PostLogoutRedirectUri": "https://localhost:44392/",

"SignUpPolicyId": "B2C\_1\_b2c\_1\_sign\_up",

"SignInPolicyId": "B2C\_1\_b2c\_1\_sign\_in",

"SignUpSignInPolicyId": "B2C\_1\_signup\_in\_b2c",

"GraphClientId": "6dd0df60-d619-4705-bcf3-089c9927e918",

"GraphClientSecret": "Gb6plTukGfKH5U+3vZPd/nGfXguPtYYCELR7yhir2Ow="

},

"KeyVault": { /\* same as old \*/

"KeyVaultURI": "https://ng-dev-kv.vault.azure.net/",

"DBKeySuffix": "-key",

"DBUriSuffix": "-uri"

},

"CustomClaims": { /\* same as old \*/

"DBStore": "extension\_DBStore",

"OrganizationId": "extension\_OrganizationId",

"OrganizationIdADStyle": "extension\_9a0f97ae58b34369b9241e3d4ca3e329\_OrganizationId",

"OrganizationName": "extension\_OrganizationName",

"OrganizationNameADStyle": "extension\_9a0f97ae58b34369b9241e3d4ca3e329\_OrganizationName"

},

"CosmosDBGraph": { /\* same as old \*/

"Hostname": "hermesorgs.gremlin.cosmosdb.azure.com",

"Port": "443",

"AuthKey": "jDbOSEd9UT1oGP07zFxKddaoj5pJeWqC8k62EzHD9uRFCFy7I88QxcDNx31l4A17ngtrgIL9bUAxzfeIbOuK0A==",

"Database": "hermesgraph",

"Collection": "orgslayout"

},

"CosmosDB": {

"CheckInDBName": "checkin", /\* prev ”checking2” \*/

"FWBMsgCollectionName": "fwbmsgs",

"FSUMsgCollectionName": "fsumsgs",

"VCTRequestsCollectionName": "vctrequests"

}

}

### Change Paging Size

..\HermesNGCore\Data\**AirwayBillsCosmosDBContext**.cs

Task<AirwayBillsPaged> GetDropOffAirwayBills

...

var option = new FeedOptions { EnableCrossPartitionQuery = true, MaxItemCount = 10 };

### Local Model

cf Model Layer - our new Models not published immediately to DevOps Feed (so… Core & fn builds latest vers may will fail without correct model ver)

- need open Models prj & compile it locally - then can reference it from Core & fn prjs

### CORS - local dev

**1)** public void ConfigureServices(IServiceCollection services)

{

// TODO: Need for local debuggin but review for security

//services.AddCors();

services.AddCors(options =>

{

options.AddPolicy("localCORSPolicy",

builder => builder.WithOrigins("https://localhost:44355").AllowAnyHeader().AllowAnyMethod()

.WithExposedHeaders("ContinuationToken"));

});

**2)** public void Configure(IApplicationBuilder app, IHostingEnvironment env, IServiceScopeFactory scopeFactory)

{

// Shows UseCors with CorsPolicyBuilder.

//app.UseCors(builder =>

// builder.WithOrigins("\*").AllowAnyHeader());

app.UseCors("localCORSPolicy");

## get Token

***get Bearer token***

***1) \*\**** get Bearer token **direct from a current request in app** - Chrome DevTools >**network**

***2)*** or use following url (not working at mo)

https://hermesdevb2c.b2clogin.com/hermesdevb2c.onmicrosoft.com/oauth2/v2.0/authorize?p=B2C\_1\_signup\_in\_b2c&client\_id=bde5bded-25ba-4689-ac11-cb51d677fbd0&nonce=defaultNonce&redirect\_uri=http%3A%2F%2Flocalhost%3A62017%2Fe-checkin%2F&scope=openid&response\_type=id\_token&prompt=login

old version

https://login.microsoftonline.com/hermesdevb2c.onmicrosoft.com/oauth2/v2.0/authorize?p=B2C\_1\_signup\_in\_b2c&client\_id=33a556a7-37dd-4748-a443-ff75bee404ca&nonce=defaultNonce&redirect\_uri=https%3A%2F%2Flocalhost%3A44392%2F&scope=openid&response\_type=id\_token&prompt=login

response - can extract the token

**https://localhost:44392/#id\_token=**eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImtpZCI6Ilg1ZVhrNHh5b2pORnVtMWtsMll0djhkbE5QNC1jNTdkTzZRR1RWQndhTmsifQ..j6t8TvjKtRXZL1\_ik\_09D40FbrDpQgvYHlq-MJ76FA\_Z4-BUjM8uQ5iwkSDzd0a8PimT-A7T702aRuhJvPQFu7urqNvqMmVnGg6pjPCsHXSf73aJlRWXZ5e7K-lduxfUbcvgxWlu6qyq02GJ\_3q7J33UnKkerohGYAecrX\_EPrTJOmoUqijOKT0ZEGd6NNJ1CChwauBxdj3eXsncwFoV6qi9R66qTLzgmrGL3tT2Lhoa8HQffWWtPxGTxiP8P6RTn7wuBiLklhBL9qFlinJ3D9ft-Kl0QaHCCKJctiuEnA4MC6LUI6-3jIMdHdTo1DaR07QW3gRdDQu82lhgpbDVvQ

https://Iocalhost:4439 
GET 
Authorization 
KEY 
https://localhost:44392/api/checkin/AWB-019389-HHB 
Params 
DESCRIPTION 
Description 
Send 
Headers (2) 
Pre-request Script 
VALUE 
Tests 
Bulk Edit 
Content-Type 
Key 
application/json 
Bearer yJOeXAiOiJKV1 QiLCJhbGciOiJSUz11Nilslmt... 
Value 

## PostMan

***PostMan header****:* Authorization Bearer …

Content-Type application/json

Note: for localhost with https file*(menu)* >s**ettings** >general > SSL Certificate Validation: off

## AWBs

**Get Airway Bill**

***- new endpoint for DropOff AWB***

Paging & location backend api changed (published)

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/172

[HttpGet("{groundHandlerId}/{partAWBnumber}")]

***Paging***

API now also supports Paging. Max items returned are 10 (should be made configurable at later point)

> if are more than 10 items, client get Response Header by name "continuationtoken”

> if header present (will be json content), encode it with URI encoding & pass as query string value for "ctkn" to get next batch of 10 & so on...

**ContinuationToken**

{"token":"+RID:fwwvAITMjogSAAAAAAAAAA==#RT:1#TRC:2#FPC:ARIAAAAAAAAAEgAAAAAAAAA=","range":{"min":"","max":"FF"}}

URL encoded (freeformatter)

%7B%22token%22%3A%22%2BRID%3AfwwvAITMjogSAAAAAAAAAA%3D%3D%23RT%3A1%23TRC%3A2%23FPC%3AARIAAAAAAAAAEgAAAAAAAAA%3D%22%2C%22range%22%3A%7B%22min%22%3A%22%22%2C%22max%22%3A%22FF%22%7D%7D

to change max paging items: \HermesNGCore\Data\AirwayBillsCosmosDBContext.cs

var option = new FeedOptions { EnableCrossPartitionQuery = true, MaxItemCount = 10 };

*example: paging* https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/172**?ctkn=**%7B%22token%22%3A%22%2BRID%3AfwwvAITMjogNAAAAAAAAAA%3D%3D%23RT%3A1%23TRC%3A2%23FPC%3AAQ0AAAAAAAAADQAAAAAAAAA%3D%22%2C%22range%22%3A%7B%22min%22%3A%22%22%2C%22max%22%3A%22FF%22%7D%7D

**Post AWB** number

[HttpPost("[action]")]

**POST -** URL: [https://localhost:44392/](https://localhost:44392/api/airwaybills)**[api/airwaybills](https://localhost:44392/api/airwaybills)**

~~https://hngcoreapis-dev-wa.azurewebsites.net/api/checkin ?????~~

### Base Static Data Drop-Off

*example:* ***7 base Drop-Off AWB****s -* ***801*** *- LHR - (agentIATAAddress: 1330005)*  Note: add in order to Cosmos, so can check default ordering

{

"awbNumber": "801-70150101",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "8",

"expectedWeight": "2100",

"expectedVolume": "0.7"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "801-70150102",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "5",

"expectedWeight": "500",

"expectedVolume": "0.5"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "801-70150103",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "3",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "801-70150093",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "1",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "801-70150092",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "1",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "801-70150091",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "1",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "801-70150090",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "13",

"expectedWeight": "13131",

"expectedVolume": "1.13"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

*example:* ***additional 3 AWB****s -* ***901***  *- LHR - (1330005)*

{

"awbNumber": "901-90190901",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "9",

"expectedWeight": "999",

"expectedVolume": "0.9"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "901-90190902",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "8",

"expectedWeight": "888",

"expectedVolume": "0.8"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "901-90190903",

"liveUntil": 1569748849,

"origin": "LHR",

"destination": "SYD",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "7",

"expectedWeight": "777",

"expectedVolume": "0.7"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

### Base Static Data Pickup

Note: data same as drop-off (so familiar) just reversed origin/dest

*example:* ***7 base Pick-Up AWB****s -* ***802*** *- LHR - (1330005)*  Note: add in order to Cosmos, so can check default ordering

{

"awbNumber": "802-70150101",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "8",

"expectedWeight": "2100",

"expectedVolume": "0.7"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "802-70150102",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "5",

"expectedWeight": "500",

"expectedVolume": "0.5"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "802-70150103",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "3",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "802-70150093",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "1",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "802-70150092",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "1",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "802-70150091",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "1",

"expectedWeight": "100",

"expectedVolume": "0.3"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "802-70150090",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "13",

"expectedWeight": "13131",

"expectedVolume": "1.13"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

*example:* ***additional 3 Pickup AWB****s -* ***902*** *- LHR - (1330005)*

{

"awbNumber": "902-90190901",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "9",

"expectedWeight": "999",

"expectedVolume": "0.9"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "902-90190902",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "8",

"expectedWeight": "888",

"expectedVolume": "0.8"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

{

"awbNumber": "902-90190903",

"liveUntil": 1569748849,

"origin": "SYD",

"destination": "LHR",

"commodityInfo": null,

"shcs": null,

"airlineInfo": null,

"flightLegs": null,

"locations": null,

"consignmentInfo": {

"expectedNumberOfPieces": "7",

"expectedWeight": "777",

"expectedVolume": "0.7"

},

"deliveryInfo": null,

"agentInfo": {

"code": "ABC",

"name": "ABC Name",

"agentIATAAddress": "1330005",

"rakcCode": null

},

"assignedTo": null,

"assignedByUser": null,

"remarks": null,

"createdTime": 1554196849

}

## VCTs

### GET

[https://hgcoreapis-dev-wa.azurewebsites.net/](https://hngcoreapis-dev-wa.azurewebsites.net/api/vct/2)**[api/vct/2](https://hngcoreapis-dev-wa.azurewebsites.net/api/vct/2)**

https://localhost:44392/**api/vct/2**

**latest Endpoint**

Get VCTRequest API can now take 2 query param: **stime** & **etime** (start & end time respectively).

are Long type & should be Epoch/Unix point of time (https://en.wikipedia.org/wiki/Unix\_time)

/Data/VctRequestsCosmosDBContext.cs

public Task<List<ExportVCTRequest>> GetVctRequests(string originator, long? startTime, long? endTime)

**usage**

can either use both param or just one

- if both, all VCT requests between given times returned

- if only start time, all VCT requests since that time returned

- if only end time, all VCT requests prior to that time returned.

Note: no paging for this atm

*eg. API calls:*

/api/vct/dev?stime=1549357623&etime=1549357624

/api/vct/dev?stime=1549481698

/api/vct/dev?&etime=1549357624

### POST

***API*** Export(Drop-off) VCT Request - from frontend via WebAPI to Hermes Core.

~~https://<BASE\_URL>/api/checkin/requestexportvct~~

~~https://hngcoreapis-dev-wa.azurewebsites.net/api/checkin/requestexportvct/~~

new

https://ngcoreapis-dev-wa.azurewebsites.net/api/vct/requestexportvct/dev POST returns 200 OK

VCT request message json format: (**ExportVCTRequest** DTO in backend /models)

*latest:* 13 feb (incl: "requestDateTime")

{

"vehicleInfo": {

"deliveryMethod": "",

"registrationNumber": "T1",

"registrationTrailorNumber": "T1",

"driver": "T1",

"driverId": "T1"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "172",

"serial": "34051814",

"bookingInfo": {

"pieces": "5",

"weight": "1471.0",

"airline": "172",

"destination": "DEL",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "1"

}

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "9bfbaab4-8343-4175-b8b5-2f91592638d5",

"vctRequestStatus": 1,

"customer": "customer1",

"queueName": "q\_vctrequests",

"scheduledEnqueueTimeUtc": null,

"**originator**": "43d4cfc8-f3ca-47a9-8152-f25d96d525f5",

"groundHandlerId": "dev",

"requestDateTime": 1550069798,

"\_rid": "fwwvANEck8oBAQAAAAAAAA==",

"\_self": "dbs/fwwvAA==/colls/fwwvANEck8o=/docs/fwwvANEck8oBAQAAAAAAAA==/",

"\_etag": "\"2300496e-0000-0000-0000-5c6430480000\"",

"\_attachments": "attachments/",

"\_ts": 1550069832

}

### Base Static Data

*example: 5 base VCTs*

{

"vehicleInfo": {

"deliveryMethod": "",

"registrationNumber": "Q",

"registrationTrailorNumber": "Q",

"driver": "testcurrentEndpoint",

"driverId": "Q"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "172",

"serial": "24051814",

"bookingInfo": {

"pieces": "4",

"weight": "1176.8",

"airline": "172",

"destination": "DEL",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "2"

}

},

{

"prefix": "172",

"serial": "99051814",

"bookingInfo": {

"pieces": "4",

"weight": "1176.8",

"airline": "172",

"destination": "DEL",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "2"

}

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "6c8f7671-19b8-4c11-968e-a5dee44f8dde",

"vctRequestStatus": 3,

"vctNumber": "30000287010001",

"customer": "customer1",

"queueName": "q\_vctrequests",

"scheduledEnqueueTimeUtc": null,

"originator": "43d4cfc8-f3ca-47a9-8152-f25d96d525f5",

"groundHandlerId": "dev",

"requestDateTime": 1549451698

}

{

"vehicleInfo": {

"deliveryMethod": "",

"registrationNumber": "AA1",

"registrationTrailorNumber": "AB1",

"driver": "Fred",

"driverId": "13579"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "172",

"serial": "34051814",

"bookingInfo": {

"pieces": "1",

"weight": "294.2",

"airline": "172",

"destination": "DEL",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "1"

}

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "6302eafe-7815-4d6f-ac98-61184dc2d046",

"vctRequestStatus": 3,

"vctNumber": "30000287010004",

"customer": "customer1",

"queueName": "q\_vctrequests",

"scheduledEnqueueTimeUtc": null,

"originator": "43d4cfc8-f3ca-47a9-8152-f25d96d525f5",

"groundHandlerId": "dev",

"requestDateTime": 1549481698

}

{

"vehicleInfo": {

"deliveryMethod": "SIDE",

"registrationNumber": "HL007",

"registrationTrailorNumber": "HL007T",

"driver": "Steve",

"driverId": "888111"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "177",

"serial": "70150101",

"bookingInfo": {

"pieces": "7",

"weight": "1837.5",

"airline": "177",

"destination": "SYD",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "1"

}

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "c14b4a94-6cee-46d7-8e3a-605557e2c22c",

"vctRequestStatus": 3,

"vctNumber": "30000287010002",

"customer": "customer1",

"queueName": "q\_vctrequests",

"scheduledEnqueueTimeUtc": null,

"originator": "43d4cfc8-f3ca-47a9-8152-f25d96d525f5",

"groundHandlerId": "dev",

"requestDateTime": 1550000698

}

{

"vehicleInfo": {

"deliveryMethod": "",

"registrationNumber": "AA1 AB",

"registrationTrailorNumber": "AA1 AB2",

"driver": "Driver A",

"driverId": "AAA1"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "177",

"serial": "70150093",

"bookingInfo": {

"pieces": "1",

"weight": "100.0",

"airline": "177",

"destination": "SYD",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "1"

}

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "2c99cf33-8fa4-4975-a427-54accfd2119c",

"vctRequestStatus": 3,

"vctNumber": "30000287010003",

"customer": "customer1",

"queueName": "q\_vctrequests",

"scheduledEnqueueTimeUtc": null,

"originator": "43d4cfc8-f3ca-47a9-8152-f25d96d525f5",

"groundHandlerId": "dev",

"requestDateTime": 1550069698

}

{

"vehicleInfo": {

"deliveryMethod": "",

"registrationNumber": "T1",

"registrationTrailorNumber": "T1",

"driver": "T1",

"driverId": "T1"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "172",

"serial": "34051814",

"bookingInfo": {

"pieces": "5",

"weight": "1471.0",

"airline": "172",

"destination": "DEL",

"commodityInfo": {

"value": "Test value"

},

"agentInfo": {

"code": "12345678",

"rakc": "AA/BB/00001-01",

"value": "TestAgent"

},

"shcs": []

},

"deliveryInfo": {

"pieces": "1"

}

}

]

}

]

},

"PreExecutionEvent": {},

"PostExecutionEvent": null,

"id": "9bfbaab4-8343-4175-b8b5-2f91592638d5",

"vctRequestStatus": 2,

"customer": "customer1",

"queueName": "q\_vctrequests",

"scheduledEnqueueTimeUtc": null,

"originator": "43d4cfc8-f3ca-47a9-8152-f25d96d525f5",

"groundHandlerId": "dev",

"requestDateTime": 1550069798

}

### ETicket Filtering Test Data

**Q** 1549451698 **2/6/2019**, 11:14:58 AM

**AA1** 1549481698 **2/6/2019**, 7:34:58 PM

**HL007** 1550000698 **2/12/2019**, 7:44:58 PM

**AA1 AB** 1550069698 **2/13/2019**, 2:54:58 PM

**T1**  1550069798 **2/13/2019**, 2:56:38 PM

### VCT Status

VCT Request tracked by status (enum defined in backend .models)

~~public enum VCTRequestStatus {Pending = 1, Submitted, Success, Failed };~~

public class Enums

{

public enum VCTRequestStatus {WaitingForSubmission = 1, Submitted(2), WaitingForDelivery(3), Delivered(4), Failed(5) };

}

Since we use **CQRS** pattern, immediate state of request once user clicked Submit and API call succeeds will be 'Pending'.

E-Tickets card can have refresh button that will get latest status of all submitted VCT requests through an API (still to be written)

## OrgsGraph

**/api/orgsgraph/getthisuserprofile**

**GetThisUserProfile()**

[Http**Get**("[action]")]

public async Task<ActionResult<User>> GetThisUserProfile()

{

"name": "Steve",

"email": "spalmer@hermes-cargo.com ",

"defaultGroundHandler": null

}

**/api/orgsgraph/updatethisuserdefaultgroundhandler/dev**

**UpdateThisUserDefaultGroundHandler(***string groundHandlerId***)**

[Http**Post**("[action]/{groundHandlerId}")]

public async Task<IActionResult> UpdateThisUserDefaultGroundHandler(string groundHandlerId)

## CQRS Query flow *(GET)*

***1)*** create **model** to be returned & create a **query** that implements IQuery interface

public class **Something**  //model to be returned

{

**public int** Id { get; set; }

**public string** Name { get; set; }

}

public class **GetSomething** : IQuery //query

{

**public int** Id { get; set; }

}

***2)*** next, create the **handler *tbc… assuming*** Note: named: [IQueryClass]QueryHandlerAsync

public class **GetSomethingQueryHandlerAsync** : IQueryHandlerAsync<GetSomething, Something>

{

public async Task<Something> RetrieveAsync(GetSomething query)

{

return await \_db.Somethings.FirstOrDefaultAsync(x => x.Id == query.Id);

}

}

***3)*** & finally, get result using dispatcher Note: GETResultAsync maps to: [ I ]QueryHandlerAsync defined above

var query = *new* GetSomething { Id = 123 };

var something = *await* \_dispatcher.GetResultAsync<GetSomething, Something>(query);

## CQRS Command flow *(POST)*

cf notepad…  ***tbc…***

# Model Layer

## Switch Local Debug

1) Build project - output dll written to: \bin\debug\Models.dll

- build location - C:\AzureDevOps\HermesNextGen\Models\Models\bin\Debug\netstandard2.0

- copy to NuGet area: C:\Users\StevePalmer\.nuget\packages\models\1.0.0\lib\netstandard2.0

2) in other prjs: Dependencies>NuGet >Models - ***rC****lick* properties - change path to your local models dll

*also*

options >debug>General >**□** Enable Just My Code

3) NgCore dependant Prjs (Dependencies > Assemblies) - BusinessLogic, Data, API,

current path for Models (properties) C:\AzureDevOps\HermesNextGen\Models\Models\bin\Debug\netstandard2.0\Models.dll

## Publish Artifact

**tbc…**

# Queues / Service Bus

*Issue:* Azure blade allows queue configuration but no views of queue content messages

***sol:***  https://code.msdn.microsoft.com/windowsapps/Service-Bus-Explorer-f2abca5a

**q\_airwaybills**  Active 16 GB true

**q\_sitamsgs** Active 16 GB true

**q\_vctrequests** Active 16 GB true (accept defaults)

**q\_vcts**  Active 16 GB true

**-dev- connection string**

file > connect > enter connection string: Azure >**Service** Bus >Shared Access Policies >RootManageSharedAccessKey >**Primary Connection String**

Endpoint=sb://ng-dev.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=++j7RqUaQ2Bf0uIOTLRRm3QaAJybH/g37nxiz0LQO9o=

old connection string

Endpoint=sb://hermesng-dev.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=cWtfIE63pkyZQ2vqk543sHQxrmnVvgIykRuUQWIqB3o=

***Issue:*** forgets connect string each time:

# Azure Functions

## Switch Local Debug

profile:

select profile: **AzFuncProfile**

executable

dotnet.exe

%userprofile%\AppData\Roaming\npm\node\_modules\azure-functions-core-tools\bin\func.dll host start

KeyVault:

***tbc… also need KeyVault entry for LocalDB***

typical local.settings.json

{

"version": "2.0",

"IsEncrypted": false,

"Values": {

"AzureWebJobsStorage": "DefaultEndpointsProtocol=https;AccountName=hermesngdev;AccountKey=F6Yk5ytfyQ4YxekJgAWbDjDN7zRUyQ7y3bnbG3Qr4mo9WK843yXObEnVfhLeQa0JTDW6gxPshwRO2BvDOAbFTw==;BlobEndpoint=https://hermesngdev.blob.core.windows.net/;TableEndpoint=https://hermesngdev.table.core.windows.net/;QueueEndpoint=https://hermesngdev.queue.core.windows.net/;FileEndpoint=https://hermesngdev.file.core.windows.net/",

"AzureWebJobsDashboard": "DefaultEndpointsProtocol=https;AccountName=hermesngdev;AccountKey=F6Yk5ytfyQ4YxekJgAWbDjDN7zRUyQ7y3bnbG3Qr4mo9WK843yXObEnVfhLeQa0JTDW6gxPshwRO2BvDOAbFTw==;BlobEndpoint=https://hermesngdev.blob.core.windows.net/;TableEndpoint=https://hermesngdev.table.core.windows.net/;QueueEndpoint=https://hermesngdev.queue.core.windows.net/;FileEndpoint=https://hermesngdev.file.core.windows.net/",

//"SBConnectionString": "Endpoint=sb://hermesng-dev.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=cWtfIE63pkyZQ2vqk543sHQxrmnVvgIykRuUQWIqB3o=",

"SBConnectionString": "Endpoint=sb://ng-dev.servicebus.windows.net/;SharedAccessKeyName=RootManageSharedAccessKey;SharedAccessKey=++j7RqUaQ2Bf0uIOTLRRm3QaAJybH/g37nxiz0LQO9o=",

"CosmosDBConnection": "AccountEndpoint=https://hermesngcx.documents.azure.com:443/;AccountKey=BmLH7qLDNb0jwa5kLrjl6tWal1Jmzym9XOrI83AKa3HsZvLaj3hcIRLcJlMHEbKaYOyYF9OkLnjUveffKZ6LLw==;",

"AzureSignalRConnectionString": "Endpoint=https://hngtt-dev-sr.service.signalr.net;AccessKey=i3AN09MhuRY59z40v8XAdFFRCHvkAtrnmUxLvmY6wHU=;Version=1.0;",

"FUNCTIONS\_WORKER\_RUNTIME": "dotnet",

// Queue names

"FWBMsgQueueName": "q\_fwbmsgs",

"FSUMsgQueueName": "q\_fsumsgs",

"VCTRequestsQueueName": "q\_vctrequests",

"VCTsQueueName": "q\_vcts",

//DB & Collections

"CheckInDatabaseName": "checkin",

"FWBMsgCollectionName": "sitamsgs",

"SITAStatusDatabaseName": "sitastatus",

"SITAStatusCollectionName": "fsus",

"RequestVCTCollectionName": "vctrequests",

// Hybrid Connections / Relay

"RelayNamespace": "HermesNGRelay.servicebus.windows.net",

"KeyName": "HermesNGHCPolicy",

// KeyVault

"KeyVaultURI": "https://ng-dev-kv.vault.azure.net/"

}

}

***VCT Request Messages***

Mock inputs - can either drop messages straight into Message Bus (configure a new message bus for local **q\_vct\_steve**), or fire via postman

**Service Bus Explorer** >actions >**send message**  queue: **q\_vctrequests**

<?xml version='1.0' encoding='utf-8'?>

<EXPORT\_CARGO\_DELIVERY>

<REFERENCE>7bd039af-c9ee-4b02-af94-5d9c43c12e36</REFERENCE>

<VCT>30000287010001</VCT>

</EXPORT\_CARGO\_DELIVERY>

**Postman**

<http://localhost:7071/admin/functions/RequestExportVCTUpdate>

headers

Content-Type application/json

body >raw

{

"input": "<?xml version='1.0' encoding='utf-8'?>

<EXPORT\_CARGO\_DELIVERY>

<REFERENCE>b5bcf571-6d7c-48fa-a366-3a7ad7146546</REFERENCE>

<VCT>30000287010452</VCT>

</EXPORT\_CARGO\_DELIVERY>"

}

Message Properties

GroundHandlerId : dev

**Test Data**

<?xml version='1.0' encoding='utf-8'?>

<EXPORT\_CARGO\_DELIVERY>

<REFERENCE>6302eafe-7815-4d6f-ac98-61184dc2d046</REFERENCE>

<VCT>30000287010001</VCT>

</EXPORT\_CARGO\_DELIVERY>

GroundHandlerId : dev

{

"input": "<?xml version='1.0' encoding='utf-8'?>

<EXPORT\_CARGO\_DELIVERY>

<REFERENCE>6302eafe-7815-4d6f-ac98-61184dc2d046</REFERENCE>

<VCT>30000287010701</VCT>

</EXPORT\_CARGO\_DELIVERY>"

}

**Issues**

***Issue:*** LocalSettings.json (getting local debug env working)

***Sol:*** ensure specify dotnet

"Values": {

...

"FUNCTIONS\_WORKER\_RUNTIME": "dotnet"

}

***Issue:*** Azure Function Debug - Breakpoints not working (Error: symbols not loaded)

***Sol:*** Visual Studio >Debug >Windows >Modules >Load All Symbols (takes a while, writes to user area)

***Issue:*** Firing via Postman ”The given key 'GroundHandlerId' was not present in the dictionary.”

??… Need way to add Message properties into a Postman request

***Issue:*** Cross Partition query required, but is disabled (issue with querying CosmosDB)

***Sol:*** pass in option object with property set

var option = new FeedOptions { EnableCrossPartitionQuery = true };

...

Document doc = docClient.CreateDocumentQuery<Document>(collectionLink, option)

***Trace & Trace Messages***

queue: **q\_fsumsgs**

FSU/12

175-54061986JFKLUX/T1K10.0

DEP/14NOV0620/LUX/T1K10.0

# CosmosDB Layer

## Switch Local Debug

cf Azure doc for emulator

## Document

**Useful queries**

Note: field name caSe sensitive Note: collection alias c, can be anything..

**VCTs**

SELECT \* FROM c

ORDER BY c.\_ts DESC

WHERE c.originator = "43d4cfc8-f3ca-47a9-8152-f25d96d525f5" ORDER BY c.\_ts DESC

WHERE c.originator = "43d4cfc8-f3ca-47a9-8152-f25d96d525f5" AND c.vctRequestStatus = 1 ORDER BY c.\_ts DESC

**AWBs**

**drop-off**

WHERE c.agentInfo.agentIATAAddress = "1330005" ORDER BY c.\_ts DESC

WHERE c.agentInfo.agentIATAAddress = "1330005" AND c.origin = "LHR" ORDER BY c.\_ts DESC

**pickup**

WHERE c.agentInfo.agentIATAAddress = "1330005" ORDER BY c.\_ts DESC

WHERE c.agentInfo.agentIATAAddress = "1330005" AND c.destination = "LHR" ORDER BY c.\_ts DESC

## Graph

id:13

label:User

Name:Steve

ADId:43d4cfc8-f3ca-47a9-8152-f25d96d525f5

email:spalmer@hermes-cargo.com

Agent Id:'1330005'

Location:'LHR'

***Sql Query***

SELECT \* FROM c WHERE c.id = "13"

SELECT \* FROM c WHERE c.id = "14"

SELECT \* FROM c WHERE c.id = "19"

SELECT \* FROM c WHERE c.id = "dev"

SELECT c.Location FROM c WHERE c.Location[0].\_value = "LHR"

## Azure Graph Explorer tool *(opensource)*

https://github.com/Azure-Samples/azure-cosmos-db-dotnet-graphexplorer

C:\work\_area\azure-cosmos-db-dotnet-graphexplorer-master\Web\**GraphExplorer.sln**

*appsettings.json*

"DocumentDBConfig": {

"endpoint": "https://hermesorgs.documents.azure.com:443/",

"authKey": "jDbOSEd9UT1oGP07zFxKddaoj5pJeWqC8k62EzHD9uRFCFy7I88QxcDNx31l4A17ngtrgIL9bUAxzfeIbOuK0A==",

"database": "hermesgraph"

},

**Issues:** Cannot find name 'AbortSignal'

**Sol:** AbortSignal interface wwas added to [typescript@2.7.0](mailto:typescript@2.7.0) - package.json increment *ts* to ^2.7.0

cd .\GraphExplorer\

npm i

then.. usual Visual Studio *f5* to run

# Theme stuff

# Issues in progress

1. ***Background image on mobile not disappearing - Eticket fixed, apply to T&T***

Nav Bar Service not selecting correct elem fix: move id="hl-app" from <div> to <body>

# Source Control & Build

Azure DevOps > HemresNextGen prj (**modularize** entire solution, switch to **git**, local **Nuget** Package feeds via Artifacts)

new Repos:

**eCheckInUI** (app)

**HermesNGCore**(app) - api’s & business logic

**AzFunctions** (app)

**Models** (library (dll) prj published as local Nuget pkgs via Azure DevOps Artifacts)

**B2CGraphClient** (library (dll) prj published as local Nuget pkgs via Azure DevOps Artifacts)

**HermesNGRelay** (app)

## TFVC Merge Branches

***Investigate Checking History***

changesets numers used across all branches.. to see changesets for specific branches, vs **Source Control Explorer > *rC****lick***View History**

Think: will see gaps in changeset numbers where not part of current branch

can select rows in *history* & ***rC****lick* Compare - drill down to each file > ***rC****lick* compare

***Dev / Story / Feature Isolation***

***20,000 ft***

***Main*** (**F**orward **I**ntegrate) to ***Branch*** - **resolve conflicts** then..(**R**everse **I**ntegrate) back to ***Main***

***Detail***

***Pre:*** check app build & run ok in Main

***1)* Main** - pull down latest changes - ***rC****lick* ‘Get Latest Version’

***2)*** Merge into **[User]-Branch** - resolve conflicts - clean & build soln - check app running ok - **Commit**

file >source control >**Branching & Merging** >Merge

***3)*** Merge back to **Main**  - clean & build soln - check app running ok - **Commit**

*Ongoing issues:*

***1)*** prj HermesNGApi build failing - remove & re-add dependencies **B2CGraphClient** & **NG.BusinessLogic**

## Git

cf my Azure notes

# Publish / Deployment

***Pipelines***

***Manual Publish (Visual Studio)***

Publish profile (name gets autonamed, can rename)

**Connection**

publish method: web Deploy

server: ngcheckin-dev-wa.scm.azurewebsites.net:443 Resource Group: NG-Dev UK South

site name: ngcheckin-dev-wa

user name: $ngcheckin-dev-wa

destination url: <https://ngcheckin-dev-wa.azurewebsites.net> (validate connection)

**Settings**

confiuration: release

target fw: netvoreapp2.1

deployment mode: fw-dependant

target runtime: portible

***ToDo***

1. **Publish process to DEV env - switch to production:false**

***In progress.. get redirect issues on login (back to a localhost!!)***

\*\* manually switch at the moment

<Exec WorkingDirectory="$(SpaRoot)" Command="npm run build" />

<Exec WorkingDirectory="$(SpaRoot)" Command="npm run build -- --prod" -->

https://docs.microsoft.com/en-us/aspnet/core/client-side/spa-services?view=aspnetcore-2.2#publishing-the-application

HermesNextGen\eCheckInUI\**eCheckInUI**.csproj

...

<Target Name="PublishRunWebpack" AfterTargets="ComputeFilesToPublish">

<!-- As part of publishing, ensure the JS resources are freshly built in production mode -->

<Exec WorkingDirectory="$(SpaRoot)" Command="npm install" />

<Exec WorkingDirectory="$(SpaRoot)" Command="npm run build -- --prod" />

<Exec WorkingDirectory="$(SpaRoot)" Command="npm run build:ssr -- --prod" Condition=" '$(BuildServerSideRenderer)' == 'true' " />

<!-- Include the newly-built files in the publish output -->

<ItemGroup>

<DistFiles Include="$(SpaRoot)dist\\*\*; $(SpaRoot)dist-server\\*\*" />

<DistFiles Include="$(SpaRoot)node\_modules\\*\*" Condition="'$(BuildServerSideRenderer)' == 'true'" />

<ResolvedFileToPublish Include="@(DistFiles->'%(FullPath)')" Exclude="@(ResolvedFileToPublish)">

<RelativePath>%(DistFiles.Identity)</RelativePath>

<CopyToPublishDirectory>PreserveNewest</CopyToPublishDirectory>

</ResolvedFileToPublish>

</ItemGroup>

</Target>

***Issues***

**re-add project references** for **>HermesNGAPIs**

<ProjectReference Include="..\B2CGraphClient\**B2CGraphClient**.csproj" />

<ProjectReference Include="..\BusinessLogic\**BusinessLogic**.csproj" />

**HermesNextGen** - issue with ssl port - in new project the ports are slightly diff & can’t edit

https://localhost:**44355** <http://localhost:57410>

**Manual VS Publish: Error** ‘Could not find file 'D:\home\site\wwwroot\App\_Offline.htm'

issue with VSTS default deployment mode - need to reset

azure portal >app services >application settings >delete WEBSITE\_RUN\_FROM\_… - then retry deploy from VS

# HermesNG: User & Orgs Management

***Feature 24 - User & Orgs Management***

NG platforms prime entities ***Organizations*** & ***Users*** managed via Cosmos DB Graph db

- Orgs can only be created by Hermes User

- every HermesNG **User** must be ***either*** '***OwnerOf***' or '***MemberOf***' an **Org**

- users won't be able to use NG unless is either 'MermberOf' or 'OwnerOf' some Org

- only one owner per org - every user can either be Owner or Member of only one organization

***- roles*** - all **Orgs**could either be **Ground Handler**, **Agent**, **Haulier** or *combination* of these - initially, assumption is just one role

***Owner***

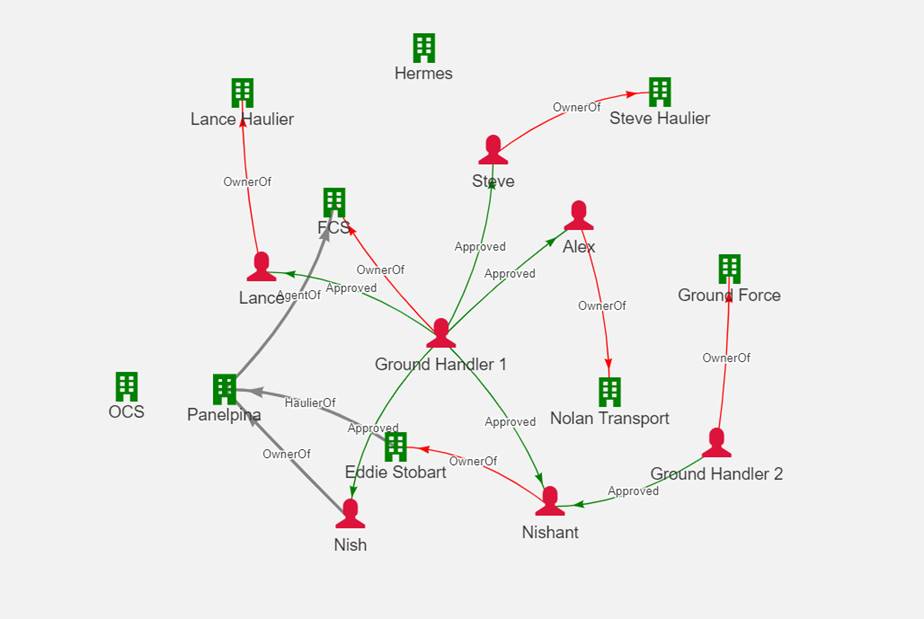
Note: will start with simple model of just one Owner per Organization

- Owner can modify Org profile - key attribute: Org Role: Ground Handler, Agent, Haulier or *combination*

- Orgs will be linked with other Orgs via ‘Request-Accept’ Relationship models initiated by respective Owners-(approved by GH's org owner)

- Org Owners can add other members to their Org & assign authorization permissions for thier Org

*case example:* while *FCS* owner may have approved *Panalpina* to be their Agent but essentially they will only be approving *Panalpina* Owner to perform their Agent duties. If *Panalpina* owner wants another member of her org to be able to do stuff for *FCS*, there will be approval process from *FCS* owner to new Panalpina member



***Feature 90 - User Landing Pages***

***Login Validation***

**a)** once user log in, check which organization he is associated with - if none, display message of sort (further clarify with BAs):

"You are not Member/Owner of any Organization. To be able to use Hermes app, either some existing Organization owner needs to invite you as Member of their Org or contact Hermes to create Organization for you."

**b)** if Hermes added this user as Owner of some Organization in backend, the API/Model will have info if User has accepted the request. If user hasn't accepted yet, display message: Note: angle brackets <> are variable retruned via API call

"<Hermes> requested you to be <Owner/Member> of <Organization>. You can accept this with 4 letter PassCode which <Hermes> shared with you" [ACCEPT BUTTON]

- accepting this will complete User association with Org.

***Screen Content***

check Org type & depending on type:

**if OrgRole==Ground Handler && User==Owner**

- landing page should be to '**Manage Connections**' - GH will mostly be adding Agents & Hauliers

- show two lists for 'Agents' & 'Hauliers' - should be able to see their existing approved Agents & Hauliers & also add them if needed

if OrgRole==**Agent** && User==Owner

- query if any pending **association requests** for given Agent - if any, go to "Manage Connections" where will be two lists for **GH**s & **Hauliers**

**GHs**

- *FCS* (owner email) requested *Panalpina* to be Agent for their Org [ACCEPT BUTTON with 4 letter PassCode]

**Hauliers**

- <For now, GH assigned Hauliers for this Agent will appear here but in future, we will provide a way for Agent to start approval process for a specific Haulier through their linked GH>

- if **no** pending requests, ‘**Search page for AWB**s’ of linked GHs that they can then assign to linked Hauliers

**If Org==Haulier && User==Owner**

- query if any pending **association requests** for given Haulier - If any, go to "Manage Connections" where will be two lists for **GH**s and **Agent**s

**GH**s

-*FCS* (owner email) requested you (Eddie Stobart) to be Haulier for Panalpina (owner email) [ACCEPT BUTTON with 4 letter PassCode]

**Agent**s

<Once Haulier accepts request above, that Agent will appear in this list>

- if **no** pending requests, go to ‘**Search screen for assigned AWB**s**’** to be able to create VCTs

***Client Ids***

hermesdevb2c (tennant) > search ‘b2c’ > applications > can see the **Client Ids** (Application Ids)

B2CClientID: "334b1bc2-4969-4052-b13a-d42da78470d1",

core.js:1449 ERROR Error: Uncaught (in promise): AADB2C90205: This application does not have sufficient permissions against this web resource to perform the operation.

# Appendix

## Encoding BlockerTesting

*JSON:* {"basic":"string"}

freeFormater.com & asp.net core %7B%22basic%22%3A%22string%22%7D

Ng 5.2 %7B%22basic%22:%22string%22%7D (incorrect)

Angular pending fix - PR Issue #19710: %7B%22basic%22%3A%22string%22%7D (correct)

\*\* Hermes app custom encoder %7B%22basic%22%3A%22string%22%7D (correct)

JSON: {"extra":"a:b,c=d"}

freeFormater.com & asp.net core %7B%22extra%22%3A%22a%3Ab%2Cc%3Dd%22%7D

Ng 5.2 %7B%22extra%22:%22a:b,c=d%22%7D (incorrect)

Angular pending fix - PR Issue #19710 %7B%22extra%22%3A%22a%3Ab%2Cc%3Dd%22%7D (correct)

\*\* Hermes app custom encoder %7B%22extra%22%3A%22a%3Ab%2Cc%3Dd%22%7D (correct)

Code used to test

<!--<button pButton type="button" class="ui-button-info"-->

<!--(click)="onCustomUrlSerializerTEST()" icon="fa fa-search" iconPos="left" label="TEST Encoding"></button>-->

// encodeToken(s:String):String{

// return s.replace(/\:/g,"%3A")

// .replace(/\+/g,"%2B")

// .replace(/\=/g,"%3D")

// .replace(/\,/g,"%2C");

// }

// onCustomUrlSerializerTEST () {

// console.info('>>encoding test');

// // const token = {"basic":"string"};

// const token = {"extra":"a:b,c=d"};

//

// // const token = {"token":"+RID:fwwvAITMjogSAAAAAAAAAA==#RT:1#TRC:2#FPC:ARIAAAAAAAAAFgAAAAAAAAA=","range":{"min":"","max":"FF"}};

// const params = new HttpParams().set('ctkn', JSON.stringify(token));

// //const params = new HttpParams({fromString: 'ctkn={"token":"+RID:fwwvAITMjogSAAAAAAAAAA==#RT:1#TRC:2#FPC:ARIAAAAAAAAAFgAAAAAAAAA=","range":{"min":"","max":"FF"}}'});

//

// const resp = this.http.get<string>('https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177', {params})

// // .map(res => JSON.parse(JSON.stringify(res)))

// .do(resp => {

// console.log(resp);

// })

// .subscribe(

// data => {

// console.log('XHR call made successfully');

// console.log(data);

// },

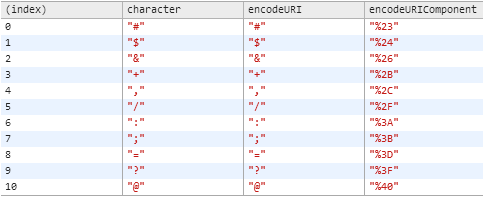
// err => {

// console.log("PUT call in error", err);

// }

// );

// }



some example output... just can't get comparable encoding through Angular. httpClient..

**target encoding**

**---------------**

{"token":"+RID:fwwvAITMjogSAAAAAAAAAA==#RT:1#TRC:2#FPC:ARIAAAAAAAAAFgAAAAAAAAA=","range":{"min":"","max":"FF"}}

%7B%22token%22%3A%22%2BRID%3AfwwvAITMjogSAAAAAAAAAA%3D%3D%23RT%3A1%23TRC%3A2%23FPC%3AARIAAAAAAAAAFgAAAAAAAAA%3D%22%2C%22range%22%3A%7B%22min%22%3A%22%22%2C%22max%22%3A%22FF%22%7D%7D

**Native JavaScript** (matches)

**------------------------------------**

%7B%22token%22%3A%22%2BRID%3AfwwvAITMjogSAAAAAAAAAA%3D%3D%23RT%3A1%23TRC%3A2%23FPC%3AARIAAAAAAAAAFgAAAAAAAAA%3D%22%2C%22range%22%3A%7B%22min%22%3A%22%22%2C%22max%22%3A%22FF%22%7D%7D

**Angular httpClient encoding**

**-------------------------------------**

**using just raw JSON token**

%7B%22token%22:%22+RID:fwwvAITMjogSAAAAAAAAAA==%23RT:1%23TRC:2%23FPC:ARIAAAAAAAAAFgAAAAAAAAA=%22,%22range%22:%7B%22min%22:%22%22,%22max%22:%22FF%22%7D%7D

**using stringified token**

%22%7B%5C%22token%5C%22:%5C%22+RID:fwwvAITMjogSAAAAAAAAAA==%23RT:1%23TRC:2%23FPC:ARIAAAAAAAAAFgAAAAAAAAA=%5C%22,%5C%22range%5C%22:%7B%5C%22min%5C%22:%5C%22%5C%22,%5C%22max%5C%22:%5C%22FF%5C%22%7D%7D%22

**using manually encodeURIComponent()**

%257B%2522token%2522%253A%2522%252BRID%253AfwwvAITMjogSAAAAAAAAAA%253D%253D%2523RT%253A1%2523TRC%253A2%2523FPC%253AARIAAAAAAAAAFgAAAAAAAAA%253D%2522%252C%2522range%2522%253A%257B%2522min%2522%253A%2522%2522%252C%2522max%2522%253A%2522FF%2522%257D%257D

**using stringified and then manually encodeURIComponent()**

%2522%257B%255C%2522token%255C%2522%253A%255C%2522%252BRID%253AfwwvAITMjogSAAAAAAAAAA%253D%253D%2523RT%253A1%2523TRC%253A2%2523FPC%253AARIAAAAAAAAAFgAAAAAAAAA%253D%255C%2522%252C%255C%2522range%255C%2522%253A%257B%255C%2522min%255C%2522%253A%255C%2522%255C%2522%252C%255C%2522max%255C%2522%253A%255C%2522FF%255C%2522%257D%257D%2522

**using raw token after manual string replacement/encoding for chars +:==,**

%7B%22token%22%253A%22%252BRID%253AfwwvAITMjogSAAAAAAAAAA%253D%253D%23RT%253A1%23TRC%253A2%23FPC%253AARIAAAAAAAAAFgAAAAAAAAA%253D%22%252C%22range%22%253A%7B%22min%22%253A%22%22%252C%22max%22%253A%22FF%22%7D%7D

## Business Terminology

1. ‘**Expected**’ is same as ‘**Booked**’. So when you see ‘**ExepectedPieces**’, that is actually what customer booked with Airlines

2. While Hermes customers are always GroundHandlers, shipments are always booked with Airlines. Hermes system at GroundHandler facility is notified of the booking via SITA messages (in most cases) and we then manage it for GroundHandler form ‘**Received**’ to ‘**Released**’

3. ‘Received’ is into GroundHandler facility and ‘Released’ is when it leaves the facility - the ‘Release’ can be delivered to customer or released from facility to be uploaded on the flight. Similarly, ‘Received’ is either received of import shipment from flight or export shipment from agent.