***Tech Notes***

# ToDo

### - 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

### - Pagination Parked

Backup code: /Feature-Pagination-DropOff-backupwork & /src\_20190212-1300-incl-AWB-Pagination

Key Files: *app\_module.ts* - to plug in new providers

component

*dropoff.component.ts*  - all pagination logic

*dropoff.html.ts*  - pagination view

services

*awb.service.ts* - new endpoint ('api/airwaybills/getdropoffairwaybills/) & XHR full request with *httpOptions* to extract param

*http-encode-params-interceptor.ts* - new interceptor

*custom-uri-serializer.ts* - now not needed - just for routing

### - Encoding Blocker

***Stripped back testing***

replace *app.module.ts* providers… backup in C:\work

..\app\dropoff\dropoff.component.html

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

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

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

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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

%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

encodeURIComponent correct… only if pass string not obj

%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

%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

*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)

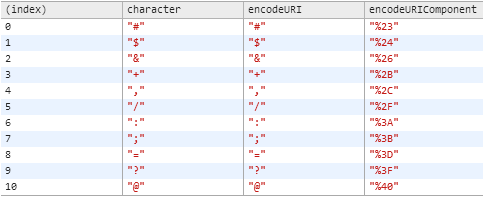
JSON: {"extra":"a:b,c=d"}

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)



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"}}

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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**

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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**

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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()**

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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()**

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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 +:==,**

https://localhost:44392/api/airwaybills/getdropoffairwaybills/dev/177?ctkn=%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

**Native JavaScript**

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

var t = JSON.stringify({"token":"+RID:fwwvAITMjogSAAAAAAAAAA==#RT:1#TRC:2#FPC:ARIAAAAAAAAAFgAAAAAAAAA=","range":{"min":"","max":"FF"}});

encodeURIComponent(t)

*output:*

"%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"

# General

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

***Application***

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

*Data:* 172, 173, 175

***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

service plan: **ng-dev-asp** app serice: **ngcheckin-dev-wa**

## Switch Local Debug

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 environmentVariables - "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 };

### 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**

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

**GET -** URL: https://localhost:44392/**api/airwaybills**/dev/172

https://hngcoreapis-dev-wa.azurewebsites.net/api/checkin/AWB-019389-HHB ????

last part of URL is AWB number that should be existing

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

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

Paging & location backend api changed (published)

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

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...

*example* 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 ?????~~

*example: 7 base AWBs - 177 - LHR - (1330005)*  Note: add in order to Cosmos, so can check default ordering

{

"awbNumber": "177-70150101",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "8",

"weight": "2100",

"volume": "0.7",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

{

"awbNumber": "177-70150102",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "5",

"weight": "500",

"volume": "0.5",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

{

"awbNumber": "177-70150103",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "3",

"weight": "100",

"volume": "0.3",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

{

"awbNumber": "177-70150093",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "1",

"weight": "100",

"volume": "0.3",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

{

"awbNumber": "177-70150092",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "1",

"weight": "100",

"volume": "0.3",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

{

"awbNumber": "177-70150091",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "1",

"weight": "100",

"volume": "0.3",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

{

"awbNumber": "177-70150090",

"origin": "LHR",

"destination": "SYD",

"numberOfPieces": "13",

"weight": "13131",

"volume": "1.3",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": "",

"agentIATAAddress": "1330005"

}

## VCTs

***GET***

***DropOff > get AWBs***

https://ngcoreapis-dev-wa.azurewebsites.net/api/airwaybills/dev/172

[

{

"id": "36542feb-23e9-402d-ab2b-a001c747b405",

"awbNumber": "172-34051814",

"origin": "LHR",

"destination": "DEL",

"numberOfPieces": "5",

"weight": "1471",

"volume": "0.6",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": ""

},

{

"id": "a8e8d5f6-c70e-4be3-9787-0131bb30c572",

"awbNumber": "172-14051814",

"origin": "LHR",

"destination": "DEL",

"numberOfPieces": "5",

"weight": "1471",

"volume": "0.6",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": ""

},

{

"id": "03b0ca1c-c1b5-40d2-87c3-956ea6304634",

"awbNumber": "172-24051814",

"origin": "LHR",

"destination": "DEL",

"numberOfPieces": "5",

"weight": "1471",

"volume": "0.6",

"assignedTo": "",

"assignedByUser": "",

"vctRequestRefId": ""

}

]

***ETickets > get VCTs***

<https://hngcoreapis-dev-wa.azurewebsites.net/api/vct/2>

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

***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

}

*original*

{

"id": "",

"vctRequestStatus": "1",

"customer": "GMR",

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

"vctNumber": "30000287010001",

"vehicleInfo": {

"deliveryMethod": "FRONT",

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

"registrationTrailorNumber": "tb2",

"driver": "abc",

"driverId": "123"

},

"manifestInfo": {

"looseCargoInfo": [{

"userProvidedAWBs": [{

"prefix": "177",

"serial": "88202675",

"bookingInfo": {

"pieces": "13",

"weight": "1846.5",

"airline": "GK",

"destination": "DNC",

"commodityInfo": {

"value": "HATSss"

},

"agentInfo": {

"code": "23477876013",

"rakc": "DE/RB/00118-10",

"value": "LUG Spesdfgtion"

},

"shcs": ["SPT", "BOP"]

},

"deliveryInfo": {

"pieces": "2"

}

}

]

}

]

}

}

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

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

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)

[https://ngcoreapis-dev-wa.azurewebsites.net/](https://ngcoreapis-dev-wa.azurewebsites.net/api/vct/requestexportvct/dev)**[api/vct/requestexportvct](https://ngcoreapis-dev-wa.azurewebsites.net/api/vct/requestexportvct/dev)**[/dev](https://ngcoreapis-dev-wa.azurewebsites.net/api/vct/requestexportvct/dev) POST returns 200 OK

latest request being sent (18/01/2019)

>>DropOffComponent.next - req: {

"id": "",

"vctRequestStatus": 1,

"assignedTo": "",

"originator": "",

"vctNumber": "",

"customer": "customer1",

"vehicleInfo": {

"deliveryMethod": "",

"registrationNumber": "AA1",

"registrationTrailorNumber": "AB1",

"driver": "Fred",

"driverId": "13579"

},

"manifestInfo": {

"looseCargoInfo": [

{

"userProvidedAWBs": [

{

"prefix": "172",

"serial": "34051814",

"deliveryInfo": {

"pieces": "1"

},

"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": []

}

}

]

}

]

}

}

## 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

(rename slightly & copy this 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

## 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**

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

WHERE c.agentIATAAddress = "1330005" AND c.origin = "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

\*\* switch **OFF** plugin Allow-Control-Allow-Origin - else get issue with 400 Bad Request

***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>

# 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***

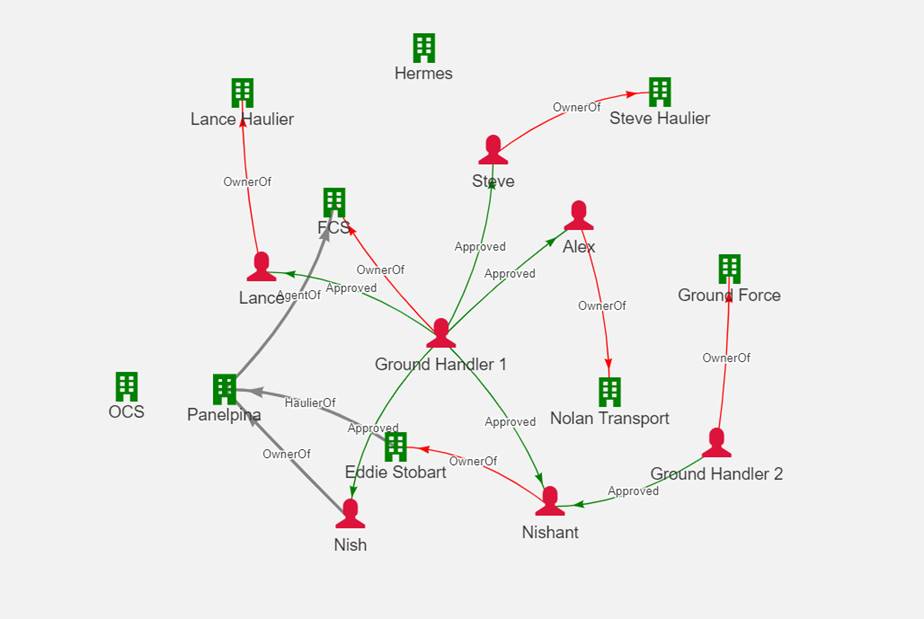
Note: will start with simple model of just one Owner per Organization

- 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

# Appendix

## Annual leave

**4** days 28-31 Jan

**1** day 7 Feb