



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	K-2	Aptean Reference	315766	Estimate Version	0.2
Prepared By	A Walker			Estimate Date	27/02/2014
Invoice Reference	Unknown			Priority	3
Customer	N/A			System Version	Latest

Client Request

Consolidation of Arrival time for same delivery points

Aptean Solution

CALIDUS ePOD will consolidate jobs when received from Partnerlink members through the Job Share interface under the following conditions:

- Delivery jobs on the same Load with the same Delivery address (i.e. Lines 1-5 and Postcode)
- Collection jobs on the same Load with the same Collection address (i.e. Lines 1-5 and Postcode)

Jobs that have been pre-consolidated in this way will be displayed as a single line on the Job List screen on the Android device. The layout of these rows will be modified slightly to make it clear that this row represents a consolidated group of jobs, and the number of jobs in that group.

The user will also be able to create a consolidated group of jobs manually, by long holding on a row, starting a 'Consolidation Mode', and selecting the jobs (or existing groups of jobs) to merge together. There will be some criteria that will be checked when selecting jobs, to ensure that only jobs that can be consolidated together are selected. When complete, these selected rows will be merged into one on the device, displaying just like a pre-consolidated group of jobs. It will also be possible to break these groups back down, in case of any mistakes.

This manual consolidation of jobs can be completed before leaving the depot, on all jobs that need it, or as the deliveries are being made, on demand. In either case, the device will remember any consolidations made on this load for the duration of the load, as long as the load is not taken away from the user, or reloaded onto the device from scratch.

Completing consolidated groups of jobs will be very similar to completing a single job. For example, the user will still be able to:

- Select the group to see the details
- Start and Arrive to the group of jobs
- Scan, enter or select the containers (parcels) to be delivered or collected on that group of jobs
- Obtain a customer signature for the group of jobs, showing the containers and any terms and conditions.

The differences in processing are to allow the user to see details of each of the jobs in the group. For example:

- When the group is selected, the Job Detail screen will allow the user to scroll through all the jobs in the group, so that they can see the details of all the individual jobs in the group, including:
 - ◆ Contact details (Name, telephone)
 - ◆ Job Address details
 - ◆ Any special instructions for the group of jobs, all collected onto one scrollable page, for ease of use.
- When arrived at jobs and starting to complete the group of collections or deliveries, the user will also be able to scroll through these job details again, to help find the right contacts for the jobs.
- The list of pallets to be delivered will show all the pallets for all the grouped jobs together. The list will be grouped by the sequence *CALIDUS* ePOD received them, for deliveries, and the reverse order, for collections. The list of pallets will also show a little more information, allowing the user to see the Job that the item came from, to help in visually identifying items together.
- The user can break all the items from a job out of a consolidation from the list of all the pallets in one long-press from the list of pallets, in order to reflect where a user is refusing to sign for one or more of the jobs in the consolidation, but will sign for others. In that case, the jobs broken out (deconsolidated) will be put back on the Job List for completion as single jobs.

When all pallets have been collected or delivered, the device will move on to job confirmation. This will work as it does for single jobs, in that it will request only one customer signature. This screen will show all the collected or delivered items here, as well as the chosen terms and conditions from the first job. Collection from and deliveries to a depot (i.e. loading and unloading tasks) may be configured to not require a signature at all.

When complete, all the jobs will be updated to the Partners' TMS systems with the same signature information for all the jobs that were consolidated together.

 **Note:**

- This functionality will be developed in the Android application only.
- The scanning functionality for Containers/pallets depends on the IDs for these items being unique for all the packages for jobs within the network.
- No functionality will be added to the *CALIDUS* ePOD Admin screens to allow for jobs to be consolidated there before execution by the device.

 **Warning:** Unknown costs for client/year (PART/2014)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	1.00	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	5.00	0.00	£0.00
Testing and Release	2.00	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	1.00	0.00	£0.00
TOTAL	9.50		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2014.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.

Contents

1 EST 315767 K-5 Load Complete (Amended) Status.....	1
2 EST 316159 Partnerlink Cancel and Redelivery method.....	2
3 EST 318572 PART Job Group Level Clausung.....	4
4 EST 324096 Pall-Ex Interface.....	6
5 EST 324098 ForTrack Interface.....	8
6 EST 333427 PART TPN - Pallet Network Interface.....	10
7 EST 337049 Hathaways Europa Interface.....	12
8 EST 337120 Sterling Portal Interface.....	14
9 EST 341168 PalletLine Integration.....	16
10 EST 341328 KOO-GAP-SCR1 GAP Display Store Barcode.....	18
11 EST 341479 Pallex Integration at AE Parker.....	19
12 EST 342131 EPOD HazChem Integration.....	21
13 EST 344795 Palletline Integration Arrival Info.....	23
14 EST 345134 KOO DFDS Implementation.....	25
15 EST 345337 Prevent Export of Cancelled Jobs.....	27
16 EST 346014 Pallex TWINE Update.....	29
17 EST 353023 KOO - Artex Customer Group in Portal.....	31
18 EST 353579 PART Vigo ePOD Performance Report.....	33
19 EST 355181 Artex Scan Out of Depot Report.....	35
20 EST 377534 PART EPOD New Palletforce Interface.....	37

1 EST 315767 K-5 Load Complete (Amended) Status



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	K-5	Aptean Reference	315767	Estimate Version	0.2
Prepared By	A Walker			Estimate Date	27/02/2014
Invoice Reference	Unknown			Priority	3
Customer	N/A			System Version	Latest

Client Request

Admin Portal - Load Summary Screen - Loads stay green even with a clause on a pallet

Aptean Solution

This functionality will be modified as follows:

- A Load that holds modified Jobs will be updated to show that amendments have occurred.
- Whenever a Job is marked as Amended or Cancelled, the Load containing the Job will be tagged as "Complete (Amended)" status within the *CALIDUS* ePOD Admin Load screen.
- The functionality that highlights Jobs as amended will be made available:

Whenever a product is cancelled claused or the quantity changed, the PDA client will mark the parent Container and Job records with a status showing that the job was completed with amendments.
The *CALIDUS* ePOD Admin Job, Job Product and Containers screens display items marked as amended with "Complete (Amended)" status.

Warning: Unknown costs for client/year (PART/2014)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	0.50	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	1.50	0.00	£0.00
Testing and Release	0.25	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.25	0.00	£0.00
TOTAL	3.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2014.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



2 EST 316159 Partnerlink Cancel and Redelivery method



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference		Aptean Reference	316159	Estimate Version	0.2
Prepared By	A Walker			Estimate Date	27/03/2014
Invoice Reference	Unknown			Priority	3
Customer	N/A			System Version	Latest

Client Request

ePOD functionality required for Cancellation and Redelivery.

Aptean Solution

Description of problem

The Auto-Import functionality for the Partnerlink JobShare format currently checks whether the job already exists by checking the Site, Job Code and Type (Collection or Delivery) passed in the uploaded data file. If the job is found, this is seen to be an update of the existing job. As the job that is found has been cancelled already in the application, the system will not update the job to preserve the activity trail.

Solution

The upload process will be modified to recognise that confirmed jobs (at completed or cancelled status) should not be updated, but instead a new job created if the Load specified on the incoming file is different to what the system already has recorded against the job.

If the job is found in progress or pending, the job will be updated - this means that the job will be moved from the existing load to a different one and the details updated, if the incoming file specifies this.

This change allows the TMS systems to re-plan jobs until they have been completed. Re-planning jobs after completion result in new jobs being created.

Note: This does not allow for jobs with the same reference to be planned onto multiple loads at the same time (for example, multi-legged trips, split deliveries). This is not expected to occur for Partnerlink.

In detail:

- If the Job does not exist, a new job will be created.
- If the Job exists, at status Completed or Cancelled, and the Load ID on file is different to that in the incoming file, a new job will be created.
- If the Job exists, at status Completed or Cancelled, and the Load ID on file is the same as the incoming file, the job update will not occur - the file will not be rejected, the processing for other jobs will occur.
- If the Job exists, at status In Progress or Pending, the job found will be updated with the details on the incoming file.

Cost Details

Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0	£0.00
Change Request Evaluation	0.25	0	£0.00
Functional Specification	0.25	0	£0.00



Technical Specification	0.00	0	£0.00
Development	1.00	0	£0.00
Testing and Release	0.50	0	£0.00
Implementation	0.00	0	£0.00
Project Management	0.00	0	£0.00
TOTAL	2.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Apteau 2014.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



3 EST 318572 PART Job Group Level Clausung



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference		Aptean Reference	318572	Estimate Version	2.0
Prepared By	A N Walker			Estimate Date	16/01/15
Invoice Reference				Priority	3
Customer				System Version	1.4

Client Request


New Clausung Requirement:

1. Clausung Reason Codes to be used on all job groups (applicable only to Palletforce currently as per log 314964)
2. Separate Reason codes will apply for 3 different Job Groups
 - a Palletforce (Palletforce or other Pallet Network codes only)
 - b Partnerlink (Delivery for a different Partner - Partnerlink agreed codes to be used only)
 - c Partner (Owned and executed jobs to use own set of codes that link back to the Partner TMS).
3. Import change, need to split Partnerlink and Owned&executed jobs.
4. Can the TAB on the signature capture screen be changed from "Pallets" to "Clause".

Aptean Solution

The *CALIDUS* ePOD system will be modified as follows:

The Reason Codes Maintenance screen will be modified to allow the users to maintain the Group for which the code entered is valid - this may be left blank to indicate codes that may be used for all jobs. A new flag against each reason code will indicate whether this reason code is partner-specific or generic.

 **Note:** Reason codes themselves must still be unique to the system - a reason code must not exist for the Palletforce job group and also for the Partners job group or Partnerlink reason codes.

The Site maintenance screen will be modified to add a new configuration flag to control whether the system should check if there are different reason codes for owners and operators. This will be set up enabled for Partnerlink's system.

The Job Group maintenance screen will be modified to add a new configuration flag to control whether reason codes for this Job Group are exclusive i.e. no generic Partnerlink codes may be used for jobs of this Job Group, only ones that have been specifically assigned to the Job Group. It is expected that the Pallet Network (for example Palletforce) job group will have this set. It is also possible that other Partner job groups will have this enabled, in case it is decided that the generic Partnerlink codes may not be used for jobs that are owned and operated by the same partner. In the examples contained in this estimate, I have assumed that the Partner Job Codes will allow the use of the generic codes as well as specific codes, although this configuration may be changed at any time.


These new flags and Reason codes fields will be sent to the Android PDA application.

When prompting for Clause Reason Codes at job confirmation, the device will check the settings to decide which clause reason codes to display:

- If this is a Palletforce job (i.e. in the Palletforce Job Group), the device will show only Palletforce clause reason codes.
- If this is a job owned and operated by the same partner, the device will show all generic Partnerlink clause reason codes, and also all clause reason codes specific to that partner.
- If this job is being operated on behalf of a different partner, the device will show only the generic Partnerlink



clause reason codes.

 **Note:** All other reason codes (e.g. cancellation reason codes) will be unaffected by this change.

The signature screen will be modified so that the title of the current Pallets tab will be displayed as "Clause" instead, only for the Partnerlink style.

 **Warning:** Unknown costs for client/year (PART/2015)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	1.00	0.00	£0.00
Functional Specification	1.25	0.00	£0.00
Technical Specification	1.00	0.00	£0.00
Development	4.25	0.00	£0.00
Testing and Release	1.25	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	1.00	0.00	£0.00
TOTAL	10.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2015.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



4 EST 324096 Pall-Ex Interface



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference		Aptean Reference	324096	Estimate Version	0.3
Prepared By	A N Walker			Estimate Date	30/03/2015
Invoice Reference				Priority	3
Customer	AE Parker			System Version	1.X

Client Request

AE Parker will be rolling out *CALIDUS* ePOD to their fleet and will need to send ePOD information/confirmation on deliver completion through to Pall-Ex systems.

Aptean Solution

Note: This change requires integration with another system, so up to 1 day has been added to the specification and testing time to allow for this. If the specification time increases beyond this time allowed due to additional work required during this stage, the estimate will be increased to cover the actual time taken.

Assumptions:

- Jobs will be sent to Partnerlink and through to *CALIDUS* ePOD using the existing JobShare interfaces.
- Pallets for these Pallet Networks will be labelled with their own network's pallet labels, and not Partnerlink labels, like PalletForce. It is expected that pallets will be created by *CALIDUS* ePOD in the normal way, identifying the individual pallets by assigning each pallet a unique ID, counting from the 1 to the total number of pallets.
- The new partners will accept updates into their Transport systems from *CALIDUS* EPOD in the standard OBS format - the pallet network system will be updated separately. This will require a modification to identify consignments as being completed for Pall-Ex.
- The Consignment will already exist within the Pall-Ex TWINE system, ready for updating with POD information from *CALIDUS* ePOD.
- AE Parker will be assigned a Partner Code by Partnerlink, which will be provided to OBS Logistics prior to implementation of this change.

Note: This process is dependent on multiple reason codes for pallet networks change, specified in EST 318572 PART Job Group Level Clousing - No Duplicates. The work for this change must be completed before or as part of this change.

Note: The reason codes used by Pall-Ex are not currently used in the Partnerlink system (2 character numeric values from 01 to 19), so these will not cause any contention in the system.

Process:

- The new partner A.E.Parker will be set up with a new partner code within *CALIDUS* ePOD, will be configured for their use following the standard configuration. This partner will be configured for export to the TMS system in use.
- Pall-Ex specific reason codes will be set up as required by the Pall-Ex TWINE system.
- New Pall-Ex Jobs will be sent to Partnerlink through the existing JobShare format, or directly to the back-end TMSs.
- When planned, these jobs will be sent to *CALIDUS* ePOD through the existing interface in use for the existing partners, and will be identified with a new Job Group e.g. PALLEX. Note: This will require change to the sending process from the TMS system to accommodate this new job group.
- The jobs will be completed like any other normal delivery.
- When jobs are completed, the existing AutoExport functionality will update the Partners (identified through their Partner Codes) using a flat-file export of the job details in OBS Logistics' XML format, as it does with each existing partner.
- The AutoExport process will also export the files to Pall-Ex TWINE system, identified through the Job's Group and the configuration attached to it.
- The AutoExport functionality will store the success or failure of the export, along with any of the returned reasons from the export.



The Admin Export Configuration screen will be changed to allow the parameters for the new Pall-Ex extract to be specified against it.

The Partnerlink Import process will be modified to add a field to the import process to identify the Pallet System in use (for example, Palletforce, Pall-Ex, Fortec).

The new Pall-Ex Export process will work as follows:

At least 2 messages will be sent to update the Pall-Ex TWINE system, by connecting through three methods of their existing webservice:

- AddEpodPallet - One message sent per pallet on the consignment, to update a pallet and consignment with delivery and signatory information.
- AddEpodConsignment - One message sent per cancelled consignment, to update the consignment as cancelled delivery, with an appropriate reason code. **Note:** It is possible that the TMS systems may not be able to accurately identify the actual Pall-Ex pallet identity for the individual pallets. In this case (decided at functional specification stage), the process may be amended to always use this webservice to confirm the consignment as delivered rather than the above AddEpodPallet webservice.
- AddMPodImage - to upload the signature image from the delivery to the consignment.

The process will check the responses of sending these messages to the webservice, and will store the results in the Audit tables within CALIDUS ePOD. Messages that process in error will be marked as such, so that they may be identified and reprocessed manually if required.

Warning: Unknown costs for client/year (PART/2015)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	1.25	0.00	£0.00
Functional Specification	2.00	0.00	£0.00
Technical Specification	1.50	0.00	£0.00
Development	7.75	0.00	£0.00
Testing and Release	1.50	0.00	£0.00
Implementation	1.00	0.00	£0.00
Project Management	1.00	0.00	£0.00
TOTAL	16.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2015.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



5 EST 324098 ForTrack Interface



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference		Aptean Reference	324098	Estimate Version	0.3
Prepared By	A N Walker			Estimate Date	7/08/2018
Invoice Reference				Priority	3
Customer	Swains			System Version	4.X

Client Request

A working interface to Fortec.

Aptean Solution

Note: This change requires integration with another system, so up to 1 day has been added to the specification and testing time to allow for this. If the specification time increases beyond this time allowed due to additional work required during this stage, the cost will be increased to cover the actual time taken.

Assumptions:

- Jobs will be sent to Partnerlink and through to *CALIDUS* ePOD using the existing JobShare interfaces.
- Pallets for these Pallet Networks will be labelled with their own network's pallet labels, and not Partnerlink labels.
- The partners will accept updates into their Transport systems from *CALIDUS* EPOD in the standard OBS format - the pallet network system will be updated separately.
- The Consignment will already exist within the ForTec ForTrack2 system, ready for updating with POD information from *CALIDUS* ePOD.

Warning: At this time, OBS Logistics is still expecting additional information regarding the interface to Fortec's ForTrack2 system. At this time, it is believed that the update will follow the process as laid out in this estimate. If details come to light at a later stage that affect this, the estimate or functional specification will be reissued with additional costs identified.

Process:

- A FORTRACK job group will be configured, following the same process as the other job groups in the system, configured the same way.
- ForTrack-specific reason codes will be set up as required by the ForTec ForTrack2 system. These will be set up as specific to job group FORTRACK and will be the only reason codes that may be selected when completing jobs of that group.
- Swains Jobs will be sent to Partnerlink through the existing JobShare format, or directly to the back-end TMSs.
- When planned, these jobs will be sent to *CALIDUS* ePOD through the existing interface in use for the existing partners, and will be identified with a new Job Group FORTRACK. **Note:** This will require change to the sending process from the TMS system to accommodate this new job group, and the consignment number will also be sent - Swain's TMS provider will be required to make these changes.
- The jobs will be completed like any other normal delivery.
- When jobs are completed, the existing AutoExport functionality will update the Partner (identified through the Partner Code) using a flat-file export of the job details in OBS Logistics' XML format, as it does with each partner.
- The AutoExport process will also export the files to ForTec ForTrack2 system, identified through the Job's Group and the configuration attached to it.
- The AutoExport functionality will store the success or failure of the exports, along with any of the returned reasons from the export.

The Admin Export Configuration screen will be changed to allow the parameters for the new ForTrack extract to be specified against it.



The *CALIDUS* ePOD system will be modified to store the GPS co-ordinates against the job at certain times:

- At Start Job
- At Arrive Job
- At Complete job

These will be included in the information sent to the ForTrack system.

The new ForTrack Export process will work as follows:

If a job is marked as successfully completed, a delivery file will be created, showing the status of all the pallets, confirming the delivery. This will include:

- The Consignee Code
- The Trip Number
- The Delivery details, consisting of:
 - ◆ The package number
 - ◆ The latitude and longitude when delivered (if available)
 - ◆ The Consignment Number
 - ◆ Discrepancy Codes (if applicable)
 - ◆ The Date and Time
- The signatory
- The signature for the job.

Discrepancy codes will be added only when an item has failed to be delivered - there are no specific clause codes for Fortec deliveries, although some may be added solely for internal Swains use.

Package numbers will be generated from the Consignment Number provided, plus a unique 3-digit numerical count.

If a job is marked as cancelled (i.e. not delivered), the same file will be created for the job, showing the reason the job failed. The reason description will be sent, from the list of Fortec reason codes.

The files will then be named appropriately and uniquely and sent via FTP to the ForTrack2 system. The result of the sending process will be stored in the Audit tables within *CALIDUS* ePOD. Messages that process in error will be marked as such, so that they may be identified and reprocessed manually if required.

Warning: Unknown costs for client/year (PART/2018)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	2.50	0.00	£0.00
Functional Specification	1.25	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	5.00	0.00	£0.00
Testing and Release	1.00	0.00	£0.00
Implementation	0.50	0.00	£0.00
Project Management	0.25	0.00	£0.00
TOTAL	10.50		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2018.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



6 EST 333427 PART TPN - Pallet Network Interface



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	TPN-HATH-SWAIN	Aptean Reference	333427	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	18/02/2016
Invoice Reference				Priority	3
Customer	Hathaways/Swains			System Version	3.X

Client Request

Partnerlink Partners David Hathaway and R Swain & Sons require an interface to update the POD Delivery details from *CALIDUS* ePOD into The Pallet Network (TPN).

Aptean Solution

Assumptions:

- Jobs will be sent to Partnerlink and through to *CALIDUS* ePOD using the existing JobShare interfaces.
- It is expected that pallets for TPN will be labelled with their own network's pallet labels. It is expected that pallets will be created by *CALIDUS* ePOD in the normal way, identifying the individual pallets by assigning each pallet a unique ID, counting from the 1 to the total number of pallets.
- Partners completing jobs for TPN will accept updates into their Transport systems from *CALIDUS* EPOD in the standard OBS format - the TPN Connect system will be updated separately. This will require a modification to identify consignments as being completed for TPN when jobs are interfaced from the external Transport systems.
- The Consignment will already exist within the TPN Connect application, ready for updating with POD information from *CALIDUS* ePOD.
- Any new partners will be assigned a Partner Code by Partnerlink, which will be provided to OBS Logistics prior to implementation of this change.

Note: There are no reason codes required on the interface to TPN Connect for failed deliveries.

Process:

- Any new partners will be set up with a new partner code within *CALIDUS* ePOD, will be configured for their use following the standard configuration. These will be configured for export to the TMS system in use.
- An export configuration for TPN will be created and linked to the TPN job code.
- New Jobs will be sent to Partnerlink through the existing JobShare format, or directly to the back-end TMSs.
- When planned, these jobs will be sent to *CALIDUS* ePOD through the existing interface in use for the existing partners, and will be identified with a new Job Group e.g. TPN. **Note:** This will require change to the sending process from the TMS system to accommodate this new job group. The Consignment number will also be provided.
- The Partnerlink Pallet IDs will be generated as now.
- The TPN pallet IDs will be generated as an ascending numeric sequence from 1.
- The jobs will be completed like any other normal delivery.
- When jobs are completed, the existing AutoExport functionality will update the Partners (identified through their Partner Codes) using a flat-file export of the job details in OBS Logistics' XML format, as it does with each existing partner.
- The AutoExport process will also export the files to TPN Connect application, identified through the Job's Group and the configuration attached to it.
- The AutoExport functionality will store the success or failure of the export, along with any of the returned reasons from the export.

The Admin Export Configuration screen will be changed to allow the parameters for the new TPN extract to be specified against it.

The new TPN Export process will work as follows:



A message will be sent to the TPN Connect application, by connecting through the AddPOD method of their existing ThirdPartyServices webservice. One message sent per pallet on the consignment, to update a pallet and consignment with delivery, signatory and signature information. Pallets that are not marked as delivered will still have a message sent, but with the Delivered flag set to false. The pallet ID used for this update will be the TPN pallet ID generated on receipt of the order (the numeric sequence) and the consignment will be set from that provided on the order.

The response will be captured by the process and handled for success or failure - the exact format of this response will be identified at functional specification stage, and is expected to identify success or failure.

Warning: Unknown costs for client/year (PART/2016)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	1.00	0.00	£0.00
Technical Specification	1.00	0.00	£0.00
Development	4.50	0.00	£0.00
Testing and Release	0.75	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.25	0.00	£0.00
TOTAL	8.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2016.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



7 EST 337049 Hathaways Europa Interface



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	HATH-EUROPA	Aptean Reference	337049	Estimate Version	0.1
Prepared By	A N Walker			Estimate Date	13/09/16
Invoice Reference				Priority	3
Customer	ALL			System Version	3.3.X

Client Request

Mark Middleton at Europa requests an interface between C-ePOD and Europa.

An update back to Europa is required, as well as maintaining the update back into ManPack3 for Hathaways.

OBSL have provided the interface documentation and this format is acceptable.

Note: Europa consignments are being sent across to C-ePOD currently as 'L02' Hathaways owned and executed jobs.

Aptean Solution

Note: If data is to be back to Europa as well as to ManPack3, *CALIDUS* ePOD will need to have the Europa Jobs created with a EUROPA job group, to differentiate their processing and split it out to send it back to Europa. This will involve some changes to be made on C-ePOD and also for Mandata to send through Europa messages differently on the interface, setting the Tracking System (column 65 in the Job Share interface format) to "EUROPA".

The EUROPA Job Group may then be configured to require a data export in the C-ePOD XML format to a destination folder or external system through file transfer or FTP. The files will be named as per the normal processing.

C-ePOD will require modification to recognise this Tracking System on import.

It is expected that a tracking number will **not** be provided in column 64 of the Job Share import. The Container (Pallet) ID generated will then be the Partner Job ID plus a 3-digit counter for each pallet to be generated.

Note: If a Tracking Number is provided, the system will generate pallet IDs in the following format:

"506" + pfDepot (column 63) + serviceLevel (column 38) + PfTrackingNo (column 64) + a 2-digit counter for each pallet to be generated.

Note: If any other format of pallet ID is required for Europa pallets, this must be identified before sign-off of this estimate, as this will incur additional development. It is assumed that this is not required.

The EUROPA job group will be configured with a C-ePOD 'JOB' XML type export. It is expected that this will either be FILE or FTP transfer type, with details to be provided. It is expected that all EUROPA jobs will be exported to a single folder.

Note: If sub-folders are required based on the job data rather than the configuration, additional development will be required.

The Export process will be modified to identify the EUROPA job group and export configuration. This will export the C-ePOD Job XML to the destination as specified in the configuration.

Note: It is not expected that any changes are required to the naming convention of these files. If this is required, additional development will be required.



Note: The export of data from C-ePOD has been extended for multiple additional systems (i.e. the pallet network tracking exports) far beyond it's initial design. As such, the export process has at times reached its maximum capacity in the current form. As part of change 337120, the export process will have many efficiency changes put into it to improve the speed of processing. It is required that this efficiency change is completed before the changes here are implemented.

Warning: Unknown costs for client/year (PART/2016)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	0.25	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	1.50	0.00	£0.00
Testing and Release	0.50	0.00	£0.00
Implementation	0.00	0.00	£0.00
Project Management	0.00	0.00	£0.00
TOTAL	2.50		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2016.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



8 EST 337120 Sterling Portal Interface



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	PL-STERLING PORTAL	Aptean Reference	337120	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	13/09/16
Invoice Reference				Priority	3
Customer	ALL			System Version	3.3.X

Client Request

From Stirling - Phil Hall on Tuesday, 26 July, 2016 4:28 PM, cc John Davidson.

We have now got the import working for AKW, we would also like to get it working for all delivery partners in Partnerlink, with this in mind would it be possible for you to give us a single login with all of the signatures for Partnerlink partners? This way we could import them all and they would just match to the relevant job. Also configure the firewall to give Stirling access from the Partnerlink server IP address 81.138.72.158

Aptean Solution

Note: The export of data from C-ePOD has been extended for multiple additional systems (i.e. the pallet network tracking exports) far beyond its initial design. As such, the export process has at times reached its maximum capacity in the current form. As part of this change, the export process must have many efficiency changes put into it to handle:

- batching of FTP file sends, to reduce the overhead of connecting to FTP sites multiple times.
- reducing the number of times that the process builds export files, if the file is to be replicated to multiple destinations.
- distribute the decision as to whether files will be sent to the point of completing the jobs, rather than at the point of export.

A new export configuration will be added to each site, to control the sending of the Job Completion export file to Sterling's Portal. The rule allowing only one configuration per type to be added to a configuration will be relaxed, so that this export configuration may be added. The configuration will set the destination FTP directory and file naming specification and connectivity parameters to be the same for each of the sites.

The database will be modified to create an Export Control record for each job that requires it, at the point that a job is set to Completed or Cancelled status. This will be triggered by the database at the point of completion and will be largely sourced from the existing package that decides which configuration requires an export. These changes will reduce development costs and increase the speed of the export process. The process will be modified slightly to obey the configuration against the site, rather than requiring the configuration to be the same name as the site code - this is required to allow the control records to be written.

As the control records are being written based off the configuration against the site and job group, the new configuration added will result in a new control file being created for the new export to Stirling's Portal system.

The Export process for jobs will be changed to retrieve the control records rather than attempt to find each job that requires updating. The job associated to the control record will be retrieved at the same time. This will ensure a far more efficient export process.

The process will 'batch' similar export files together, and produce the XML once only, replicating this to several files. The process will produce the files in a temporary area, and will send all FTP files for the same destination at the same time. Only then will a file be marked as successfully sent. The files will be named based on the Export configuration, expected to be:

EPOD_STIRLING_<SITE>_<DATE>__<SEQ>.XML



For example:

EPOD_STIRLING_L01_20160805_093427_80.XML
 EPOD_STIRLING_L01_20160805_093427_81.XML
 EPOD_STIRLING_L03_20160805_093427_80.XML

Note that the sequence may only be unique for the site file being sent, rather than for all messages sent in that batch.

Any issues with creating or sending the export file will result in the Error or Reprocess status being set against the control record, as normal.

The changes above will result in a faster processing export process, as well as improving the capability and efficiency of the re-sending process should an individual record fail to process.

Access will be provided to Stirling to the Partnerlink server for the purposes of this change.

Warning: Unknown costs for client/year (PART/2016)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.75	0.00	£0.00
Functional Specification	2.50	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	10.25	0.00	£0.00
Testing and Release	2.50	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.75	0.00	£0.00
TOTAL	17.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2016.

This estimate has an expiry date of 30 days from the specified Estimate Date.
 The information contained herein is supplied without liability for errors or omissions.



9 EST 341168 PalletLine Integration



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	.
Client Reference	HATH-PALLETLINE	Aptean Reference	341168	Estimate Version	2.0
Prepared By	A N Walker			Estimate Date	09/03/17
Invoice Reference				Priority	3
Customer	David Hathaway			System Version	3.X

Client Request

Andy Ward advises that David Hathaway Transport are joining the Palletline network and require the POD debrief information to be sent from Calidus ePOD to Palletline's Contrado system.

Aptean Solution

Assumptions:

- Jobs will be sent to Partnerlink and through to *CALIDUS* ePOD using the existing JobShare interfaces.
- Pallets for the Palletline pallet network will be labelled with their own network's pallet labels, and not Partnerlink labels. It is expected that pallet IDs will be created by *CALIDUS* ePOD in the normal way, identifying the individual pallets by assigning each pallet a unique ID, counting from the 1 to the total number of pallets.
- Palletline's Contrado system will be updated separately to the partner's TMS systems. This will require a modification to identify consignments as being completed for Palletline.
- The Consignment will already exist within the Palletline Contrado system, ready for updating with POD information from *CALIDUS* ePOD.

The process will be as follows:

- Palletline-specific reason codes will be set up within *CALIDUS* ePOD, conforming to the list of delivery codes used by Palletline. These reason codes will be exclusive to the Palletline job group, and the Palletline job group will be configured so that only those codes can be used on Palletline jobs.
- New Palletline Jobs will be sent to Partnerlink through the existing JobShare format, or directly to the back-end TMSs.
- When planned, these jobs will be sent to *CALIDUS* ePOD through the existing interface in use for the existing partners, and will be identified with a new Job Group e.g. PLINE. The Pallet Depot will be set to the Palletline depot code provided to the carrier, in Hathaway's case, this is "053". The Pallet Consignment will be sent in as the Palletline ID. **Note:** This will require change to the sending process from the TMS system to accommodate these new values for every partner that wishes to join the Palletline network.
- **Note:** The Palletline ID is noted to be field 4 in the Palletline manifest download file.
- The jobs will be completed like any other normal delivery.
- When jobs are completed, the existing AutoExport functionality will update the Partners (identified through their Partner Codes) using a flat-file export of the job details in OBS Logistics' XML format, as it does now.
- The AutoExport process will also export the files to Palletline Contrado system, identified through the Job's Group and the configuration attached to it.
- The AutoExport functionality will store the success or failure of the export, along with any of the returned reasons from the export.

The development required will be as follows:

The mobile device application will be modified to capture the signature in vector format as well as the standard mechanism of an image format. The application will be configured to store this and use it for the Palletline export process.

The Admin Export Configuration screen will be changed to allow Palletline export types to be configured in it.

The Partnerlink Import process will be modified to identify the Palletline job group (e.g. "PLINE"). This will then generate Pallet Ids in the normal way.



The *CALIDUS* ePOD AutoExport function will be modified to recognise jobs with the Palletline job group and export a file in the Palletline format.

This format will identify the pallets delivered and any reason codes against them, including claused and cancelled pallets. This will also identify the signatory and signature (if delivered), the GPS coordinates (if available) and the status (POD Uploaded for pallets that were delivered, the selected reason code for clauses and cancellations).

The format will be in XML and will be named following the conventions specified by Palletline. A single file will be created per job completed or cancelled.

Note: It is as yet undecided what mechanism will be used to send this file to Palletline. It will however be one of the following:

- Create the file locally to the *CALIDUS* ePOD server and host an FTP service so that Palletline can pick up the file.
- Create the file and send immediately through FTP to the Palletline FTP server.

The process should support either case as standard.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	1.50	0.00	£0.00
Functional Specification	1.50	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	7.00	0.00	£0.00
Testing and Release	1.25	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.50	0.00	£0.00
			Hathaways Discount 50%
TOTAL	12.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Apteian 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



10 EST 341328 KOO-GAP-SCR1 GAP Display Store Barcode



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	KOO-GAP
Client Reference	KOO-GAP-SCR1	Aptean Reference	341328	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	22/02/17
Invoice Reference				Priority	2
Customer	GAP			System Version	3.X

Client Request

Store Barcode must be:

- passed back to the EPOD Server
- visible in EPOD Admin

Aptean Solution

Care must be taken with the non-visible characters in this field (<BEL> and <BS>) - these need to be stripped from or replaced in the barcode scan, as they may interfere with exporting data to GAP and other external systems.

The device application will be modified to remove any non-printable characters from the scanned store barcode, and will send this information to the *CALIDUS* ePOD server as part of the update when a job is complete or cancelled.

The server will store this against the job.

The Admin system will be changed to display the results in a 'Prejob' tab against the details of the job (accessed by clicking **Select** against a job on the jobs screen).

This data will also be accessible through the Job Update exports generated from *CALIDUS* ePOD when updating any external systems.

Note: This quote does not include any onward sending of this scanned store barcode value to the GAP system - the interface written for this purpose will already generate the required value, to prevent jobs being rejected by the GAP system.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.50	0.00	£0.00
Functional Specification	1.00	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	3.75	0.00	£0.00
Testing and Release	0.75	0.00	£0.00
Implementation	0.25	0.00	£0.00
TOTAL	6.25		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



11 EST 341479 Pallex Integration at AE Parker



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference		Aptean Reference	341479	Estimate Version	0.1
Prepared By	A N Walker			Estimate Date	07/03/17
Invoice Reference				Priority	3
Customer	AE Parker			System Version	3.X

Client Request

AE Parker's TMS system cannot provide Pall-Ex consignment barcode, which is required for Pall-Ex integration. Only the Consignment ID can be provided. However, the Pall-Ex integration piece is still required for AE Parker. A mechanism must be put in place where this integration can still be provided without this essential piece of information.

Aptean Solution

The *CALIDUS* ePOD system will be modified to obtain the consignment barcode from the Pall-Ex TWINE system using the provided Consignment ID.

This will be configured so that this additional extract of the barcode will only take place if the import is marked as requiring this for that particular site.

The Partnerlink Import configuration for AE Parker will be modified to add a flag to identify that this functionality is required - this will be configurable through the Admin Import/Export Configuration screen.

If flagged in this way, the process importing jobs will obtain the consignment barcode from the Pall-Ex TWINE interface using the provided consignment ID, using the TWINE webservice, for Pall-Ex jobs only (i.e. those with a PALLEX job group that are configured with an export to Pall-Ex).

⚡ Note:

- The manual import mechanism for Partnerlink jobs will not be modified - this is not seen as required as part of this change, and should be requested separately if required.
- The wrong data is being provided, resulting in this change
- The import processing will be slower, potentially affecting all partners, depending on the number of Pall-Ex jobs requiring importing for Parkers (or any partner that cannot provide the consignment barcode). This is especially true if the Pall-Ex TWINE system is unavailable when the jobs are being imported, as this will result in a time-out delay (usually 30 seconds) for each Pall-Ex job processed.
- Should this request for information fail, all the jobs in the file will be rejected, requiring the whole file to be re-imported. As per normal processing, an email will be sent to the defined recipient if this is the case.
- An alternative solution to this problem is for the Parker TMS to get the correct consignment barcode data before sending to *CALIDUS* ePOD.

⚠ Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.50	0.00	£0.00
Functional Specification	1.25	0.00	£0.00
Technical Specification	1.25	0.00	£0.00
Development	5.00	0.00	£0.00
Testing and Release	1.00	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.50	0.00	£0.00
TOTAL	9.75		£0.00



Estimate excludes training, release to live and go live support.

Copyright © Aptean 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



12 EST 342131 EPOD HazChem Integration



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	.
Client Reference	HAZCHEM	Aptean Reference	342131	Estimate Version	0.1
Prepared By	A N Walker			Estimate Date	29/03/17
Invoice Reference				Priority	3
Customer	Knights Of Old			System Version	3.X

Client Request

Colin Vickers advises that Knights of Old transport are completing work for the HazChem network and require the POD debrief information to be sent from Calidus ePOD to HazChem's HazchemOnline system.

Aptean Solution

Assumptions:

- Jobs will be sent to Partnerlink and through to *CALIDUS* ePOD using the existing JobShare interfaces.
- Pallets for the Hazchem network will be labelled with their own network's pallet labels, and not Partnerlink labels. It is expected that pallet IDs will be created by *CALIDUS* ePOD in the normal way, identifying the individual pallets by assigning each pallet a unique ID, counting from the 1 to the total number of pallets.
- Hazchem's HazchemOnline system will be updated separately to the partner's TMS systems. This will require a modification to identify consignments as being completed for Hazchem.
- The Consignment will already exist within the Hazchem HazchemOnline system, ready for updating with POD information from *CALIDUS* ePOD.

The process will be as follows:

- Hazchem-specific reason codes will be set up within *CALIDUS* ePOD, conforming to the list of delivery codes used by Hazchem. These reason codes will be exclusive to the Hazchem job group, and the Hazchem job group will be configured so that only those codes can be used on Hazchem jobs.
- New Hazchem Jobs will be sent to Partnerlink through the existing JobShare format, or directly to the back-end TMSs.
- When planned, these jobs will be sent to *CALIDUS* ePOD through the existing interface in use for the existing partners, and will be identified with a new Job Group e.g. HAZCHEM. The Pallet Depot will be set to the Hazchem depot code provided to the carrier, to be advised by the customer. The Pallet Consignment will be sent in as the Hazchem ID. **Note:** This will require change to the sending process from the TMS system to accommodate these new values for every partner that wishes to join the Hazchem network.
- The jobs will be completed like any other normal delivery.
- When jobs are completed, the existing AutoExport functionality will update the Partners (identified through their Partner Codes) using a flat-file export of the job details in OBS Logistics' XML format, as it does now.
- The AutoExport process will also export the files to Hazchem HazchemOnline system, identified through the Job's Group and the configuration attached to it.
- The AutoExport functionality will store the success or failure of the export, along with any of the returned reasons from the export.

Note: This development is dependent on the Palletline interface being developed within *CALIDUS* ePOD - if this is not complete, this estimate is invalid and will need to be re-estimated. See [EST 341168 PalletLine Integration](#) for details.

The development required will be as follows:

The mobile device application will be modified to capture the signature in vector format as well as the standard mechanism of an image format. The application will be configured to store this and use it for the Hazchem export process.

The Admin Export Configuration screen will be changed to allow Hazchem export types to be configured in it.

The Partnerlink Import process will be modified to identify the Hazchem job group (e.g. "HAZCHEM"). This will then



generate Pallet Ids in the normal way.

The *CALIDUS* ePOD AutoExport function will be modified to recognise jobs with the Hazchem job group and export a file in the Hazchem format.

This format will identify the pallets delivered and any reason codes against them, including claused and cancelled pallets. This will also identify the signatory and signature (if delivered), the GPS coordinates (if available) and the status (EDC - Item Delivered - for pallets that were delivered, the selected reason code for clauses and cancellations).

The format will be in XML and will be named following the conventions specified by Hazchem. A single file will be created per job completed or cancelled.

Note: It is as yet undecided what mechanism will be used to send this file to Hazchem. It will however be one of the following:

- Create the file locally to the *CALIDUS* ePOD server and host an FTP service so that Hazchem can pick up the file.
- Create the file and send immediately through FTP to the Hazchem FTP server.

The process should support either case as standard.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	1.25	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	5.00	0.00	£0.00
Testing and Release	1.00	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.50	0.00	£0.00
TOTAL	8.25		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



13 EST 344795 Palletline Integration Arrival Info



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	.
Client Reference		Aptean Reference	344795	Estimate Version	0.1
Prepared By	A N Walker			Estimate Date	08/08/17
Invoice Reference				Priority	3
Customer	David Hathaway			System Version	3.X, 4.X

Client Request

A Palletline Arrival interface is required to Palletline's Contrado system, as an amendment to the existing Palletline interface.

Additionally, changes will be made to the Palletline interface resulting from changes to the Contrado interface (based on the latest specification received by OBS).

Aptean Solution

The existing Palletline interface will be modified for this change, in version 3.X and 4.X of *CALIDUS* ePOD.

The system will be modified to trigger a message to Palletline when the job is updated as Arrived. This occurs when the driver marks the job as Arrived on the mobile device.

No new Interface configuration is required - this will be triggered as part of the existing Palletline interface.

A message will be generated to Palletline, indicating that the job has arrived, with the following content:

- Arrival Date and Time
- GPS at the time of arrival, if known
- Each pallet, with the "ARRI" status and any known reason codes and notes. **Note:** It is not expected that these pallets will have any reason codes against them at the time of arrival.

All other tags will not be sent as part of this Arrival message.

In the case of Arrival ("ARRI") and Proof of Delivery ("EPOD") messages to the Palletline Contrado system, the Statuses sent will be modified to send through multiple lines:

- One for the message status (ARRI or EPOD)
- One for the delivery status (the cancellation or clause reason code and description/notes).

In all ways other than the statuses, the existing Palletline message will not be affected by this change - the system will still send the "EPOD" message when the job is updated to complete.

Note: The allowed reason codes for Palletline job group ("PLINE") have changed with the new definition of the Palletline interface provided to OBS Logistics. The reason codes set up for this job group will require reviewing and setting up for all partners that execute jobs on behalf of Palletline.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.50	0.00	£0.00



Functional Specification	1.00	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	3.50	0.00	£0.00
Testing and Release	0.75	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.25	0.00	£0.00
TOTAL	6.25		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Apteian 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



14 EST 345134 KOO DFDS Implementation



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	IMP	Site	PART-KOO
Client Reference		Aptean Reference	345134	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	01/09/17
Invoice Reference				Priority	3
Customer	Ken Hayes			System Version	3.X

Client Request

Use the existing partner code L23 for DFDS.

All existing transactional data to be removed from L23.

If possible, all existing data to be L23 to accessible through CALIDUS ePOD.

Aptean Solution

A backup copy of EPOD data for site L23 will be made to L23-BCK.

All transactional data in site L23 will be removed.

The backup copy will remain accessible through site L23-BCK.

Scope:

It is recommended that the system be unavailable during this backup copy.

CALIDUS PORTAL data will not be copied.

POD/POC reports for the backed up data for L23 will not be accessible through Portal, although this will be accessible through CALIDUS ePOD Admin.

Site L23 will function as it does now, working with Job Share files and exports. No changes will be made to this configuration.

Site L23-BCK will not process or export any data - there will be no import or export from this site.

Users, Vehicles, Job Groups, Reason codes and all configuration will be left in L23 and replicated in L23-BCK. It is the responsibility of the CALIDUS ePOD Admin operators to maintain their own standing data.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.00	0.00	£0.00
Functional Specification	0.00	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	0.00	0.00	£0.00
Testing and Release	0.00	0.00	£0.00
Implementation	2.00	0.00	£0.00
Project Management	0.00	0.00	£0.00
TOTAL	2.00		£0.00

Estimate excludes training, release to live and go live support.



Copyright © Aptean 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



15 EST 345337 Prevent Export of Cancelled Jobs



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	SUP	Site	PART-KOO
Client Reference		Aptean Reference	345337	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	06/09/17
Invoice Reference				Priority	3
Customer	Dan Street			System Version	3.X

Client Request

Request from Dan Street at Knight of Old 30/08/2017 13:07

Are we able to turn off transactions for when a job is cancelled on ePOD for depot L17 (AE Parkers)? There is a web service setup at the moment which sends over ePOD information to Twine, we just need any job that gets cancelled to not send any information.

Aptean Solution

The Job Exports from *CALIDUS* ePOD will be modified to allow each Job-level export to be configured to constrain the Job Statuses that are exported.

Currently, each Job export type exports both Cancelled and Complete jobs.

A configuration element will be added to the Import/Export Configuration Admin screen to allow the selection of which job statuses can be exported.

If this is left blank, the exports will work as now, in that they will export Cancelled and Completed jobs.

If this is populated, the process will only generate exports where the job status is in the configuration.

For example:

- If not populated, will export Cancelled and Completed jobs.
- If populated with "C", will export only Completed jobs.
- If populated with "X", will export only Cancelled jobs.
- If populated with "C!X", will export Cancelled and Completed jobs.

Note:

- This will allow each individual Partner's exports to be configured as required.
- As the default is to work as now, no existing exports will be affected if their export configurations are not changed.
- Only the AE Parker (L17) PALLEX export is expected to be changed to only exports Completed jobs.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	0.50	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	2.00	0.00	£0.00
Testing and Release	0.50	0.00	£0.00
Implementation	0.25	0.00	£0.00



Project Management	0.25	0.00	£0.00
TOTAL	3.75		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



16 EST 346014 Pallex TWINE Update



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	Pallex TWINE Update	Aptean Reference	346014	Estimate Version	0.3
Prepared By	A N Walker			Estimate Date	02/10/17
Invoice Reference				Priority	3
Customer	Pall-Ex			System Version	3.X/4.X

Client Request

Request from Chris Holland of Pall-Ex 18 September 2017 13:14:

Part of the discussions we were going to have this week was regarding enhancements we have made to our driver hand-held applications and core TWINE system, and how we can integrate with 3rd party TMS providers such as yourselves in a little more detail.

Our TWINE system, now has the ability to receive additional status information during the delivery/collection lifecycle, and each status has a GPS positioner that we can use to identify the location of the driver at that point in time.

Can you please review the attached documents, (TWINE_Webservices 3.2 DSC) and advise if it is possible for your system to send this information to us, and if so what the development timescale would be to do so.

Aptean Solution

The new TWINE interface specification has added new webservice methods that allow the notification of GPS latitude and longitude with the messages.

In all cases, the new messages are identical in content with the exception of the new GPS tags.

Note: The provided specifications in Word and PDF format are slightly different: the PDF does not contain definitions of the new webservice methods, just the old non-GPS methods. The Word document has only the *...WithGPS* definitions. It is noted that the following solution has been validated with Chris Holland of Pall-Ex.

The C-ePOD Export Pall-Ex TWINE interface processes will be changed to use these replacement messages, as follows:

- The GPS coordinates of the Job Update message will be extracted and stored, so that they can be used on the subsequent messages to the Pall-Ex TWINE system. If the GPS coordinates are blank or not found, these stored values will be blank.
- A message of type *addEpodConsignmentWithGPS* is sent per job updated, adding tags GPSSLAT and GPSSLON, populated from the stored coordinates.
- A message of type *addMpodImageWithGPS* is sent per job updated, adding tags GPSSLAT and GPSSLON, populated from the stored coordinates.
- A message of type *addEpodPalletWithGPS* is sent per pallet per job updated, adding tags GPSSLAT and GPSSLON, populated from the stored coordinates.

The new GPS tags will always be sent, even if the stored GPS coordinate values are blank.

If the job being sent to the Pall-Ex TWINE webservice is a collection, there are slightly different messages sent in this case, substituting "POC" for "POD" the tag names.

Warning: Unknown costs for client/year (PART/2017)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00



Change Request Evaluation	0.00	0.00	£0.00
Functional Specification	0.00	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	3.50	0.00	£0.00
Testing and Release	0.00	0.00	£0.00
Implementation	0.00	0.00	£0.00
Project Management	0.00	0.00	£0.00
TOTAL	3.50		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2017.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



17 EST 353023 KOO - Artex Customer Group in Portal



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART-KOO
Client Reference	T20180911.0006	Aptean Reference	353023	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	21/09/18
Invoice Reference				Priority	3
Customer	Artex			System Version	4.X

Client Request

Filter access to the TTM portal by account code.

We would like to be able to grant access to clients via this code and in some instances where a client has more than one account via multiple linked codes. i.e ART001, ART002 & ART003.

Visibility of jobs must be limited to jobs with that account codes/s.

Aptean Solution

CALIDUS ePOD (C-ePOD) is sent across the Account ID via the Jobshare CSV and these are sent on to CALIDUS Portal TTM (C-PORTAL).

The solution proposed is as follows:

1. C-PORTAL TTM Admin users will be required to create Customer Groups matching the account codes they use.
2. Once created, the users will identify the customers that match this group and apply them to the group.
3. The Admin users will create user groups for each Artex user/business area.
4. The users will then be restricted to see only jobs for the customer groups required, using the standard C-PORTAL TTM Customer Group restrictions. Multiple customer groups may be selected.
5. The Admin users will create users for each Artex user/business area and assign them to these user groups.

During implementation, OBS will configure the C-PORTAL Partnerlink implementation to allow selection of customer group on the Trip/Order Enquiry screen.

C-PORTAL TTM will be modified to achieve this as follows:

- Trip/Order Enquiry screen
 - ◆ Add Customer Group functionality linked to Partner to the screen.
 - ◆ Fix Trip stops to not display address for restricted customer groups.
 - ◆ Add Customer Group functionality linked to Partner to the extracts from this screen.
- ETA Enquiry screen
 - ◆ Add Customer Group functionality linked to Partner to the screen.
 - ◆ Fix Trip stops to not display address for restricted customer groups.

When this solution is developed:

- The Trip/Order Enquiry screen will only display Orders with customers in the restricted customer group(s) for that user's group.
- The Trip/Order Enquiry screen will display all trip stops, but will only display orders, addresses and order details for orders with customers in the restricted customer group(s) for that user's group.
- The extracts from these enquiries will show only display orders, addresses and order details for orders with customers in the restricted customer group(s) for that user's group.
- The ETA Enquiry screen will show only orders with customers in the restricted customer group(s) for that user's group.
- The ETA Enquiry screen will display only addresses for orders with customers in the restricted customer group(s) for that user's group.



Scope:

- Analysis has shown that the accounts may be set up against the Customers incorrectly - this must be checked and confirmed by the customer.
- This estimate the set-up, creation and maintenance of the Customer Groups, User Groups and Users and applying the relevant restrictions will be undertaken by the customer. OBS can configure this data but all configuration time will be chargeable on a Time & Materials basis.

Warning: Unknown costs for client/year (PART/2018)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	0.50	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	2.50	0.00	£0.00
Testing and Release	0.75	0.00	£0.00
Implementation	0.75	0.00	£0.00
Project Management	0.25	0.00	£0.00
TOTAL	5.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Apteau 2018.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



18 EST 353579 PART Vigo ePOD Performance Report



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	ePOD performance rep	Aptean Reference	353579	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	17/10/18
Invoice Reference				Priority	3
Customer	Knights of Old			System Version	4.X

Client Request

The Vigo TMS system produces an ePOD performance report from the data returned to the Vigo system from *CALIDUS* ePOD.

Currently, this report cannot track:

- Cancelled Jobs
- Cancelled Loads
- Loads that have been started but no jobs have been completed.

Ken Hayes at Knights of Old requests that the Load Status is sent to Vigo, so that the report can be made more accurate.

Aptean Solution

The *CALIDUS* ePOD system will be configured to return Load Updates as well as Job Updates.

The Load Update functionality will be modified to trigger a message to be sent when the Load is set to In Progress status and when it is completed (set to status Complete or Cancelled).

Furthermore, it will be modified so that the Load message is configurable (through the *CALIDUS* ePOD Admin console) so that it does not send through details of the jobs within the load.

The existing Job Update process will be checked to ensure that cancelled jobs and cancelled loads are sent to Vigo as well as completed ones. This will include jobs and loads that have been cancelled through the Admin console.

Note: The Vigo TMS will require modification to:

- Process the new load messages.
- Add statuses to the jobs based on the load (manifest) information provided.
- Add or remove statuses to reflect whether jobs or loads have been cancelled.
- Modify the report to take these new statuses into account.

None of this work on the Vigo system has been estimated here.

Warning: Unknown costs for client/year (PART/2018)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.50	0.00	£0.00
Functional Specification	1.00	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	3.50	0.00	£0.00
Testing and Release	0.75	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.25	0.00	£0.00



TOTAL	6.25		£0.00
--------------	------	--	-------

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2018.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



19 EST 355181 Artex Scan Out of Depot Report



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART-KOO
Client Reference	T20181029.0016	Aptean Reference	355181	Estimate Version	0.1
Prepared By	A N Walker			Estimate Date	15/01/2019
Invoice Reference				Priority	3
Customer	Artex			System Version	Latest (4.X)

Client Request

From Ken Hayes, Monday, 14 January, 2019 3:35 PM:

Artex have asked for a "scanned out of depot report" which will enable them to monitor their Fork Lift drivers performance.

I have reviewed data on the portal and have identified the following fields which should be usable in the report:

- User: FLT driver
- Vehicle: FLT truck
- Start date
- Arrive date
- End date
- Start time
- Arrive time
- End time
- Container (pallet) quantity

Aptean Solution

A new report will be added to the *Reports* menu item in the *CALIDUS* ePOD Admin application, selectable from the drop-down list of reports, labelled as "Loading/Unloading Items Report".

When the user selects this report, the following criteria will be prompted for:

- Date Range, which will default yesterday's date for both Date From and Date To.
- Loading or Unloading selection, defaulting to "Loading". This will also allow the user to select Unloading jobs.

Report Name:

Date From: Date To:

Type:

Clear Create Excel Spreadsheet

When the user clicks the **Create Excel Spreadsheet** button, the screen will retrieve the data and build a spreadsheet for the user.

Based on analysis the data that the Artex customer is currently generating (for example load "010801L"), the report will select all complete jobs for the user's current site, the type selected (loading or unloading), that **ended** within the date range selected (inclusive), the load on which they were received, and a count of all containers (items) successfully confirmed. The data will be summed per:

- Site
- User
- Vehicle
- Start date
- Start time
- Arrive date
- Arrive time



- End date
- End time

The browser will offer to save the report generated. Note that this is dependent on the user's browser settings.

The report will be named "Loading Unloading Items Report_YYYYMMDD_HHMMSSNN.xls", where:

- YYYYMMDD is the date the user ran the report.
- HHMMSSNN is the time the user ran the report.

The report will show:

- The selection criteria.
- The results.

The Selection criteria will show:

- Date From
- Date To
- Type

The report will consist of the following columns:

- User - the name of the user that processed the load.
- Vehicle - the vehicle registration assigned to the load.
- Start Date - the actual date when the tasks started.
- Arrive Date - the actual time when the tasks started.
- End Date - the actual date when the tasks ended.
- Start Time - the actual time when the tasks ended.
- Arrive Time - the actual date when the tasks arrived.
- End Time - the actual time when the tasks arrived.
- Item Quantity - a sum of all the confirmed loaded or unloaded items (containers)

	A	B	C	D	E	F	G	H	I	J
1	Date From:	15/01/2019								
2	Date To:	15/01/2019								
3	Type	Loading								
4										
5	User	Vehicle	Start Date	Arrive Date	End Date	Start Time	Arrive Time	End Time	Item	Quantity
6	John Jones	TW15 ANW	15/01/2019	15/01/2019	15/01/2019	09:00	09:05	10:07		7
7	John Jones	TW15 ABC	15/01/2019	15/01/2019	15/01/2019	10:00	10:10	10:54		3
8	Kevin Smith	KS18 PQR	15/01/2019	15/01/2019	15/01/2019	09:30	09:25	10:55		26
9										

Warning: Unknown costs for client/year (PART/2019)

Cost Details			
Activity	Hours	Rate per hour (£)	Cost (£ Exc. VAT)
Requirements	0.00	0.00	£0.00
Change Request Evaluation	0.25	0.00	£0.00
Functional Specification	0.25	0.00	£0.00
Technical Specification	0.00	0.00	£0.00
Development	1.75	0.00	£0.00
Testing and Release	0.25	0.00	£0.00
Implementation	0.25	0.00	£0.00
Project Management	0.25	0.00	£0.00
TOTAL	3.00		£0.00

Estimate excludes training, release to live and go live support.

Copyright © Aptean 2019.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.



20 EST 377534 PART EPOD New Palletforce Interface



STATEMENT OF WORK CHANGE REQUEST ESTIMATE

Client	PART	Project	DEV	Site	PART
Client Reference	DEV	Aptean Reference	377534	Estimate Version	1.0
Prepared By	A N Walker			Estimate Date	14/09/2020
Invoice Reference				Priority	3
Customer	Palletforce			System Version	4.5.x

Client Request

As a network, Palletforce put enormous effort into collecting more than 100,000 tracking events each day and every consignment is made up of over 50 individual pieces of data.

To further enhance their tracking capabilities and customer experience, they have improved their ePOD tracking integrations by creating a new ePOD and Tracking API, as well as allowing current processes to receive additional tracking data. Last year, Palletforce invested £2m in a new state of the art ePOD hardware and software.

A number of Palletforce members (including Partnerlink partners) take advantage of the flexibility of using their own technology to integrate with Alliance, however over time the number of compulsory tracking events has diminished in comparison to tracking events that their newly-revamped ePOD solution offers.

With this in mind, from 27th November 2020 the following tracking events will become mandatory for every consignment delivered in Alliance:

- Scanned onto Delivery Vehicle (DELV)
- En Route (DONR)
- Arrived at Delivery Location (ARDL)
- Proof of Delivery (POD) and all equivalent statuses indicating end of consignment.

In addition to the above, the following tracking and data will also become mandatory to provide:

- Proof of Collection (POC) confirmation for collections performed on behalf of other members.
- Delivery order and total number of Palletforce deliveries on the route.

These changes will provide a universal and consistent service for all customers, ensuring that every customer receives the same high-quality tracking data, whilst providing members with the flexibility of using their own ePOD and scanning technology.

This will further enhance Palletforce's current services such as consignment notifications, and provide them with a platform to develop even better consignment tracking that will enhance their customer experience, reduce queries and provide a solid foundation for future development around real-time tracking.

Aptean Solution

Scope:

The Scanned onto Delivery Vehicle event (DELV) will not sent by *CALIDUS* ePOD, as the partners do not use loading tasks within this application. This status event is required by Palletforce. This will be achieved through the partners' TMS solutions or through the use of Palletforce-provided scanners. This is not part of the development to *CALIDUS* systems indicated as part of this solution. If the partners want this functionality to be included through *CALIDUS* ePOD, this will require additional assessment and development. This is not included in this estimate.

The new Palletforce interface requires that the message identify the address type, Commercial or Retail. This information is not provided to *CALIDUS* ePOD from the partners' TMS systems. As such, the interface below will be identifying each address type as "U" - Unknown, which is currently acceptable to Palletforce. However, in the future, further development may be required, both to the partners' TMS solutions (to pass this data to C-ePOD) and to C-ePOD (to receive and store this data). The time for this is not included in this estimate.

The details of this Palletforce test system have not yet been provided or assessed. Once provided, this may affect this estimate. At this time, it is not expected that this will affect the estimate in a significant way.



The old Palletforce method of interfacing is being decommissioned and will no longer be available after a changeover period.

Solution:

The C-ePOD Admin screen will not require modification, as the screen already supports the Palletforce (PALLET) interface type, which will now be configured as a SOAP webservice.

There are no expected modifications to the data being passed to the partners' TMS solutions for Palletforce jobs, nor to the data being passed to C-ePOD for those jobs. There are no expected modifications to the configuration of the job processes to support this new interface, for example process changes for the driver, or reason code changes for Palletforce jobs. Jobs will be received into the C-ePOD system in the same way that they are now, with no changes to how these are processed by this interface.

The existing Palletforce export will be modified to change from the existing FTP file-based (CSV/PNG) interface to sending the files directly to a webservice endpoint provided by Palletforce.

The interface will send all required information to the Palletforce systems at certain events:

- DONR - En Route. The status is used when the job is a delivery and the job has been set to In Progress i.e. the driver has started this job.
- ARDL - Arrived at Delivery Location. The status is used when the job is a delivery and the job has been updated with an arrival date and time.
- Proof of Delivery (POD) and all equivalent statuses indicating end of consignment, including:
 - ◆ POD - POD Received. The status is used when the job is a delivery, the container (pallet) status is "C" - complete, with no notes or reason code.
 - ◆ PODE - POD Received with Exception. The status is used when the job is a delivery, container status is "C" - complete by also contains notes and/or a reason code (i.e. claused).
 - ◆ DMGD - Delivered Damaged. The status is used when the job is a delivery, container status is "X" - cancelled with reason code i.e. pallet has not been delivered.
 - ◆ POC - POC Received. The status is used when the job is a collection.
- ABRT - Delivery aborted. The status is used when the whole job has been cancelled.

At each trigger point, an event status update will be sent to the Palletforce system, detailing the information required for that status update.

All sites (i.e. partners) within Partnerlink will be assigned a unique Access Key, that uniquely identifies the partner to Palletforce. This replaces the existing mechanism of using Palletforce Depot codes.

Unique tracking codes will be provided for the Palletforce jobs, which will be used to identify the consignments in the new interface.

Latitude and longitude will be provided on the status update message, if the applications knows of it.

Each status update message will include the drop number and total drops on the trip.

For end-of-job statuses as listed above, the signatory and signature will also be included.

Where exceptions are indicated, the system will provide details (i.e. the notes and reason code descriptions) in notes against the consignment.

The system will audit the messages sent and will audit the response from the Palletforce webservice, to indicate whether the update was successful or has failed.

Additional time has been added to this estimate to account for data set-up of the new interface on behalf of the customers, both for the test and production environments. Additional testing time has been added to test this fully with the test Palletforce system. The details of this Palletforce test system have not yet been provided or assessed.



Cost Details			
Activity	No. of Days	Rate per Day (£)	Cost (£ Exc. VAT)
Requirements	0.00	850	£0.00
Change Request Evaluation	2.00	850	£1,700.00
Functional Specification	1.50	850	£1,275.00
Technical Specification	0.00	850	£0.00
Development	6.00	850	£5,100.00
Testing and Release	3.00	850	£2,550.00
Implementation	3.00	850	£2,550.00
Project Management	3.00	850	£2,550.00
			Discount 10%
TOTAL (FIXED COST)	18.50		£First argument to "number_format" must be a number.

Copyright © Aptean 2020.

This estimate has an expiry date of 30 days from the specified Estimate Date.
The information contained herein is supplied without liability for errors or omissions.

