Trailer movements is the heart of the system, it’s the recurring task in the middle of the system.

## Request for Components

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | Jack Watt | | **Date** | November-08-2012 |
| **Version** | 2.0 | |  | |
| **Use Case Name** | Request for components | | **Use Case Type:** | |
| **Use Case ID** | JGRC-2001 | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Dock foreman | | | |
| **Other Participating Actors** | Dispatcher , Driver | | | |
| **Other Interested Stakeholders** |  | | | |
| **Description** | This use case describes the event of requesting components from the warehouse to the docks. The dock foreman must notify the dispatcher of what components are needed. The dispatcher takes the part number, and the dock to be delivered to. Driver takes location of trailer from dispatcher, picks up trailer from yard, and delivers it to destination bay at dock. | | | |
| **Precondition(s)** | Production makes request for components | | | |
| **Trigger(s)** | This use case is triggered when Components are requested | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| **Step 1:** Foreman makes request to Dispatcher by TTCS for Components. Providing part number and destination bay.  **Step 3:** Dispatcher views request added by dock foreman , His front end of the system will show a list of tasks, he chooses the one he wants to deal with  **Step 5:** Dispatcher submits request through to the driver. The request should already have everything but driver and trailer when it arrives at dispatch. | **Step 2:** TTCS updates list of tasks . Dispatcher will see a request he hasn’t resolved yet. These will be added and sorted based on completion deadline.  **Step 4:** The system opens a dialog with the request information. The foreman should of provided part number, with this we give the dock foreman a list of trailers to choose from.  **Step 6:** Driver gets notice of new job. This is displayed through a standalone electronic device that will be left in the truck. It’s at the discretion of the driver which order they want to resolve the requests in. | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  |  | | |
| **Conclusion** | This use case concludes when driver delivers trailer with components to destination bay. | | | |
| **Postcondition** | The trailer is now at destination location  The driver confirms finishing the request through electronic device. | | | |
| **Business Rules** | * Dock foreman must provide part number and destination dock and bay to Dispatcher * Dispatcher provides what trailer is needed to driver * Driver shuttles trailer from yard to Bay | | | |
| **Implementation Constraints and Specifications** | * Varies how often this process will be invoked * Not performed after hours | | | |
| **Assumptions** | * Trailer is in yard * A driver is available * Destination bay is empty * Frequency: This use case is intended to be used on an as needed basis | | | |
| **Open Issues** |  | | | |

Request for components ties in as the heart of the system. Being a form of trailer movement this is going to be one of three major requests that the dock foreman can perform through the TTCS. One of the pertinent issues was the way the TTCS was being utilized in the system. Not everything can be automated, but things can be automated to help you with manual processes. We are looking to interface your TTCS with your business and employees to help keep everything running smoothly.

Resolving the break in communication comes down to creating a means which everyone has a system that speaks between the sections of business. Giving the dock foreman a form to submit for requesting components frees up the phone, doesn’t depend on someone being on the other end to receive, more than one can be received at once, processing each request becomes less resource intensive. Using a computer system to hold and keep track of all this data saves the dispatcher time as they only need to look at the data when they want to resolve the request. Opposed to using a telephone system the dispatcher needs to assign himself to taking down the request from the dock foreman.

The change in process ends up affecting everyone involved. Projected that this will save time for everyone by eliminating the need to record information for requests. The dock foreman saves the dispatcher from entering information like part, and destination. The dispatcher saves the driver from needing to write down or memorize tasks as the driver will have a list of tasks with them in their trucks.

## Request for Driver

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | Jack Watt | | **Date** | November-09-2012 |
| **Version** | 2.0 | |  | |
| **Use Case Name** | Request for driver | | **Use Case Type:** | |
| **Use Case ID** | JGRC-2002 | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Dock foreman | | | |
| **Other Participating Actors** | Dispatcher, Driver | | | |
| **Other Interested Stakeholders** |  | | | |
| **Description** | This use case describes the event of requesting a driver when one isn’t present at destination location | | | |
| **Precondition(s)** | * Production makes request for driver * No driver is present at dock | | | |
| **Trigger(s)** | This use case is triggered when Driver is needed and not present at destination location | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| **Step 1:** Dock foreman makes request through TTCS, including destination location, And time needed.  **Step 3:** Dispatcher opens the request. Choosing a driver  **Step 5:** Driver shuttles trailer to destination location | **Step 2:** Updates dispatcher task list to include this request.  **Step 4:** Updates driver task list to include this request | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  |  | | |
| **Conclusion** | This use case concludes when driver arrives at destination location | | | |
| **Postcondition** | The Driver is now at bay, available to carry out task requested for. | | | |
| **Business Rules** | * Dock foreman must provide destination bay and dock to Dispatcher * Driver carries out task requested for | | | |
| **Implementation Constraints and Specifications** | * Varies how often this process will be invoked. * Not performed after hours * Frequency: This use case is intended to be used on an as needed basis | | | |
| **Assumptions** | * A driver is available * Driver has their own truck | | | |
| **Open Issues** |  | | | |

Request for a driver plays a major part in our system. Moving trailers is the main focus of Orenda. With a means in place to keep what they do productive, and the process of notifying them to their daily tasks we can eliminate time wasted in request for a driver. Implementing the ability to track at higher levels when requests are submitted and when the driver responds can and will increase efficiency. The current process is being shaped to allow data to be generated around where the break might be happening.

This process is a straight forward one, one that is invoked multiple times a day, every day. It’s a process that involves the dock foreman, dispatcher, and driver for The request itself. At a higher level this is important to everyone. Although the only three participants in the process are those listed.

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| --- | --- | --- | --- | --- |
| **Author** | Jack Watt | | **Date** | November-09-2012 |
| **Version** | 1.0 | |  | |
| **Use Case Name** | Dock foreman request through TTCS | | **Use Case Type:** | |
| **Use Case ID** |  | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Dock foreman | | | |
| **Other Participating Actors** |  | | | |
| **Other Interested Stakeholders** |  | | | |
| **Description** | This use case describes the event of dock foreman submitting a request through TTCS. | | | |
| **Precondition(s)** | Dock foreman has request to make | | | |
| **Trigger(s)** |  | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| 1) dock foreman decides which type of request they want to make. Selecting the request type in the system.  3) dock foreman fills in required information. | 2) Information displayed to dock foreman to fill out is based on option selected  4) System updates, Dispatchers system shows new request | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  |  | | |
| **Conclusion** | This use case concludes when dock foreman submits request | | | |
| **Postcondition** | Request is sent  Dispatcher’s system updated | | | |
| **Business Rules** | * Dock foreman must provide all required information for request | | | |
| **Implementation Constraints and Specifications** | * This use case will be invoked any time dock foreman has a request for parts, request for empty trailer, and request for trailer removal * Not performed after hours | | | |
| **Assumptions** |  | | | |
| **Open Issues** |  | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | Jack Watt | | **Date** | November-09-2012 |
| **Version** | 1.0 | |  | |
| **Use Case Name** | Dispatcher request through TTCS | | **Use Case Type:** | |
| **Use Case ID** |  | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Dispatcher | | | |
| **Other Participating Actors** |  | | | |
| **Other Interested Stakeholders** | Dock foreman, Driver | | | |
| **Description** | This use case describes the event of dispatcher receiving a request through TTCS. | | | |
| **Precondition(s)** | Dock foreman has made request | | | |
| **Trigger(s)** |  | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| 1) Dispatcher opens request  3) Dispatcher identifies driver, trailer, and submits the request to be sent off to a driver | 2) Systems displays request from dock foreman  4) System updates, Driver system shows new request | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  |  | | |
| **Conclusion** | This use case concludes when dispatcher submits request | | | |
| **Postcondition** | Request is sent  Driver’s system updated | | | |
| **Business Rules** | * Dock foreman must provide all required information for request | | | |
| **Implementation Constraints and Specifications** | * This use case will be invoked any time dock foreman has made a request for parts, request for empty trailer, and request for trailer removal * Not performed after hours | | | |
| **Assumptions** |  | | | |
| **Open Issues** |  | | | |

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| --- | --- | --- | --- | --- |
| **Author** | Jack Watt | | **Date** | November-09-2012 |
| **Version** | 1.0 | |  | |
| **Use Case Name** | Driver request through TTCS | | **Use Case Type:** | |
| **Use Case ID** |  | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Driver | | | |
| **Other Participating Actors** |  | | | |
| **Other Interested Stakeholders** | Dock foreman, Dispatcher | | | |
| **Description** | This use case describes the event of driver receiving a request through TTCS. | | | |
| **Precondition(s)** | Dock foreman has made request  Dispatcher has updated request | | | |
| **Trigger(s)** |  | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| 1) Driver opens request and sets as active.  3) Driver identifies duties and sets off to work. | 2) System displays request information  4) System updates, Dispatcher can see this is drivers active job. | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  |  | | |
| **Conclusion** | This use case concludes when driver sets job as complete | | | |
| **Postcondition** | Request is sent  Driver’s system updated | | | |
| **Business Rules** | * Dock foreman must provide all required information for request | | | |
| **Implementation Constraints and Specifications** | * This use case will be invoked any time dock foreman has made a request for parts, request for empty trailer, and request for trailer removal * Not performed after hours | | | |
| **Assumptions** |  | | | |
| **Open Issues** |  | | | |

The process of interacting with the new TTCS will be more fluid and reliable. Through a simple database back end to control the flow of information and requests through the system and company. The TTCS system comes as a new form of communication. The dock foreman loses time calling the dispatcher to give them a request if the dispatcher isn’t in the office. This means if the person who initiates the chain of events has a means to enter their request without having to depend on another human entity to be present to take the request is crucial, and highly viable.

A system to tie together the processes of a business also has to tie together the communication. And mirror the flow of the business. A system that provides feedback through reporting; A means to build a support the chain of command within a business.

## Request for Empty Trailer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | Version 2: Jack Watt  Version 1: Ryan Vaughan | | **Date** | November-09-2012 |
| **Version** | 2.0 | |  | |
| **Use Case Name** | Request for empty trailer | | **Use Case Type:** | |
| **Use Case ID** | JGRC-2003 | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Dock Foreman | | | |
| **Other Participating Actors** | Dispatcher , Driver | | | |
| **Other Interested Stakeholders** |  | | | |
| **Description** | This use case describes the event of requesting an empty trailer to move finished product from the plant to the warehouse. | | | |
| **Precondition(s)** | Production makes request for empty trailer | | | |
| **Trigger(s)** | This use case is triggered when empty trailers are requested | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| **Step 1:** Dock foreman creates request in TTCS sending a request to dispatcher. (invokes JGRC-20xx)  **Step 3:** Dispatch identifies available empty trailer and driver from TTCS after receiving the request.  **Step 5:** Driver shuttles trailer to destination dock and bay once they have set the request as active on their electronic device. | **Step 2:** updates dispatchers system to display request  **Step 4:** TTCS submits request to driver. | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  |  | | |
| **Conclusion** | This use case concludes when empty trailer is delivered to dock. | | | |
| **Postcondition** | The trailer is now at bay, driver radios in to notify dispatcher of availability if not waiting for truck to be finished unloading. | | | |
| **Business Rules** | * Dock foreman must provide destination bay to Dispatcher * Driver shuttles trailer from yard to Bay | | | |
| **Implementation Constraints and Specifications** | * Frequency: This use case is intended to be used on an as needed basis * Not performed after hours * This isn’t a fluid process, It might take dispatch time to respond to request and driver might not start the task until others are completed. | | | |
| **Assumptions** | * Trailer is in yard * A driver is available * Destination bay is empty | | | |
| **Open Issues** |  | | | |

Request for empty trailer can be considered the heart of the system, adding a means to increase the flow of the process is crucial. The ability to put everything on a cloud and have someone else pull down that information from another location helps everyone involved spend less time back and forth on phones and radios.

The ability for the dispatcher to view information on drivers and trailers is crucial on a constant basis. Having a screen to view information on trailers, drivers, and requests is going to play a big role in the system. It will require no direct input. When the dispatcher assigns a trailer it will show on this monitor that the trailer is either in the yard, at the docks, or at the warehouse. This external screen has to be used for reporting to the dispatcher. The less interaction needed the better.

## 

## Request for Empty Trailer Removal

This process begins when a trailer has been emptied at a dock of the Warehouse or Plant, and the driver does not wait for the trailer to be unloaded. Once the Dock Foreman identifies that there is an empty trailer at the dock, he or she will call the dispatcher requesting a driver to come pick it up.

The Dock Foreman provides the dispatcher with the appropriate information. This includes the dock name and bay number at which the trailer is located, as well as the trailer number of the trailer. Once this call has been placed, the dispatcher must now find a driver to perform this task (See Use Case JGRC-2002).

The dispatcher must determine where the empty trailer will be placed in the yard after it is picked up. The dispatcher will provide the driver with the information given to him from the Dock Foreman as well as the end destination, determined beforehand. This process concludes when the trailer has been removed from the dock and placed in the specified parking spot in the yard.

## Identified Problems

One issue that can be encountered in this process is that the dispatcher may not always get the required information for pick-up. He may only get the bay number or the trailer number and this can cause problems for the driver. Without the appropriate information, the driver will have to search for the correct dock or for the specific trailer at the docks. This is very time consuming and slows down an otherwise simple process.

Another issue is when a driver cannot be reached or is late. In either of these situations, the trailer will have to sit and wait at the bay. The main concerns here are that the trailers are unattended in an unsecure area, and that the empty trailer is now taking up a bay.

## Request for Empty Trailer Removal

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| --- | --- | --- | --- | --- |
| **Author** | Version 2: Jack Watt  Version 1: Ryan Vaughan | | **Date** | October-2-2012 |
| **Version** | 2.0 | |  | |
| **Use Case Name** | Request for empty trailer removal | | **Use Case Type:** | |
| **Use Case ID** | JGRC-2004 | | **Business Requirements**  **System Analysis** | |
| **Priority** | HIGH | |
| **Source** | Requirement | | | |
| **Primary Business Actor** | Dispatcher | | | |
| **Other Participating Actors** | Dock Foreman, Driver | | | |
| **Other Interested Stakeholders** |  | | | |
| **Description** | This use case describes the process followed by the Dispatcher when a request is made by the Dock Foreman, of either the warehouse or plant, to have an empty trailer removed from a bay. | | | |
| **Precondition(s)** |  | | | |
| **Trigger(s)** | Trailer is unloaded at the Warehouse or Plant | | | |
| **Typical Course of Events** | **Actor Action** | **System Response** | | |
| **Step 1**: Dock Foreman submits request through TTCS with dock and bay as well as a time the trailer needs to be removed by  **Step 3**: Dispatcher picks an available driver from the TTCS and assigns them the job.  **Step 5**: Driver picks up the empty trailer from bay specified and takes it to a specified parking spot once they have set the request as active on their electronic device.  **Step 7**: Driver sets task as complete. | **Step 2**: Updates dispatchers system to include request  **Step 4**: Updates drivers system to include request  **Step 6**: Request is set as active. dispatcher can see this on their end.  **Step 8**: System updates the request as complete. Dispatcher can see this on their end. | | |
| **Alternate Courses** | **Actor Action** | **System Response** | | |
|  | | | |
| **Conclusion** | This use case concludes when the trailer has been placed back in the yard | | | |
| **Postcondition** | The empty trailer is now located in the yard waiting to be used for shuttling components and shipping finished products. | | | |
| **Business Rules** | * Dock Foreman must provide Dock, Bay and Trailer information of the trailer waiting to be picked up. * Dispatch provides same information given by Dock Foreman as well as the end destination of trailer. | | | |
| **Implementation Constraints and Specifications** | * Frequency: This use case is intended to be used on an as needed basis * Not performed after hours * This isn’t a fluid process, It might take dispatch time to respond to request and driver might not start the task until others are completed. | | | |
| **Assumptions** | * Dock Foreman always provides required information. * Driver did not wait for trailer to be unloaded | | | |
| **Open Issues** | * Information given to Dispatch varies. * Trailer may wait for a while if driver can’t be reached. | | | |

## Request for Empty Trailer Removal

This process begins when a trailer has been emptied at a dock of the Warehouse or Plant, and the driver does not wait for the trailer to be unloaded. Once the Dock Foreman identifies that there is an empty trailer at the dock, he or she will call the dispatcher requesting a driver to come pick it up.

The Dock Foreman provides the dispatcher with the appropriate information. This includes the dock name and bay number at which the trailer is located, as well as the trailer number of the trailer. Once this call has been placed, the dispatcher must now find a driver to perform this task (See Use Case JGRC-2002).

The dispatcher must determine where the empty trailer will be placed in the yard after it is picked up. The dispatcher will provide the driver with the information given to him from the Dock Foreman as well as the end destination, determined beforehand. This process concludes when the trailer has been removed from the dock and placed in the specified parking spot in the yard.

## Identified Problems

One issue that can be encountered in this process is that the dispatcher may not always get the required information for pick-up. He may only get the bay number or the trailer number and this can cause problems for the driver. Without the appropriate information, the driver will have to search for the correct dock or for the specific trailer at the docks. This is very time consuming and slows down an otherwise simple process.

Another issue is when a driver cannot be reached or is late. In either of these situations, the trailer will have to sit and wait at the bay. The main concerns here are that the trailers are unattended in an unsecure area, and that the empty trailer is now taking up a bay.

Major concerns

Trailers being left at docks

Driver productivity

Requests coming

Use case for

Request for component

Request for driver

Request through TTCS (all 3)