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# **Software Requirement Specification**

## User Requirement Specification

### Shift Head requirement

* A group has one shift head and two staff. Shift head has higher authority of using the system than staff. Shift head can use the following functions:
  + View request detail
  + Accept request
  + Process request
  + Reject request
  + View server detail
  + View IP Address
  + View list location
  + View report
  + View daily schedule
  + Add IP Address
  + Add rack
  + Change server’s location
  + Receive notification (customer’s request status, unfinished task)
  + Export procedure
  + Assign task
  + Reassign task
  + Write note about “Pending” and “Processing” requests
  + View profile
  + Change password

### Staff requirement

* Staff is a person who supports shift head to observe data centre’s information. Staff can only view data and be able to process a request if assigned. These are some functions staff can use:
  + View request detail
  + Process request (if assigned)
  + Reject request (if assigned)
  + View server detail
  + View IP Address
  + View list location
  + View report
  + View daily schedule
  + Add IP Address
  + Add rack
  + Change server’s location
  + Receive notification (task only)
  + Export procedure (if assigned)
  + View profile
  + Change password

### Shift Manager requirement

* There’s only one manager who takes charge in managing this system. He is super user who can use more functions than shift head as below:
  + Create customer account
  + Update customer account
  + Create staff account
  + Update staff account
  + Deactivate account
  + Configure system

### Customer requirement

* Customer is a person who owns servers and want to keep it in a good condition. Customer interacts with the system when he wants to make a request or observe his server’s information. With customer role, the system will support some functions as below:
  + Create request “Add server”, “Bring Server Away”, “Assign IP Address”, “Change IP Address”, “Return IP Address”, “Rent Rack”, Return Rack”
  + Cancel request
  + View request history
  + View his server’s information
  + View profile
  + Change password

## System Requirement Specification

### External Interface Requirement

#### User interface

* General requirement for graphics user interface of website is the GUI should be simple, clear, intuitive, and reminiscent.
* Some design principle will be taken into consideration:
* UI for business web applications - Janko Jovanovic [Ref: Appendix 1]
* Ten principles of effective web design – Vitaly Friedman [Ref: Appendix 2]

#### Hardware Interface

* N/A

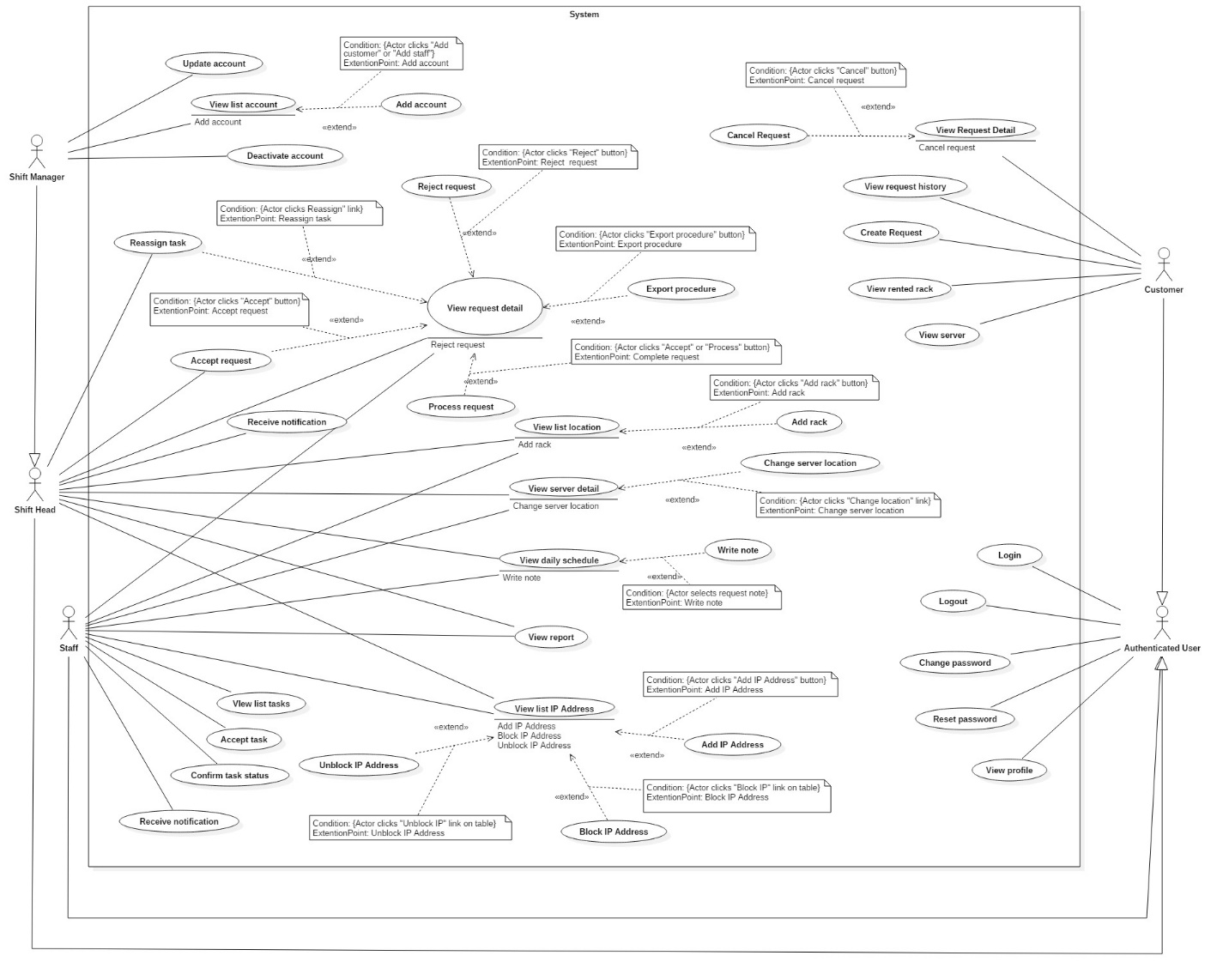
#### Software Interface

* Chromes (version 41.0.2272.118), Firefox (version 37.0.1) with resolution (1024 x 768) or bigger and must support JavaScript and HTML5.

#### Communication Protocol

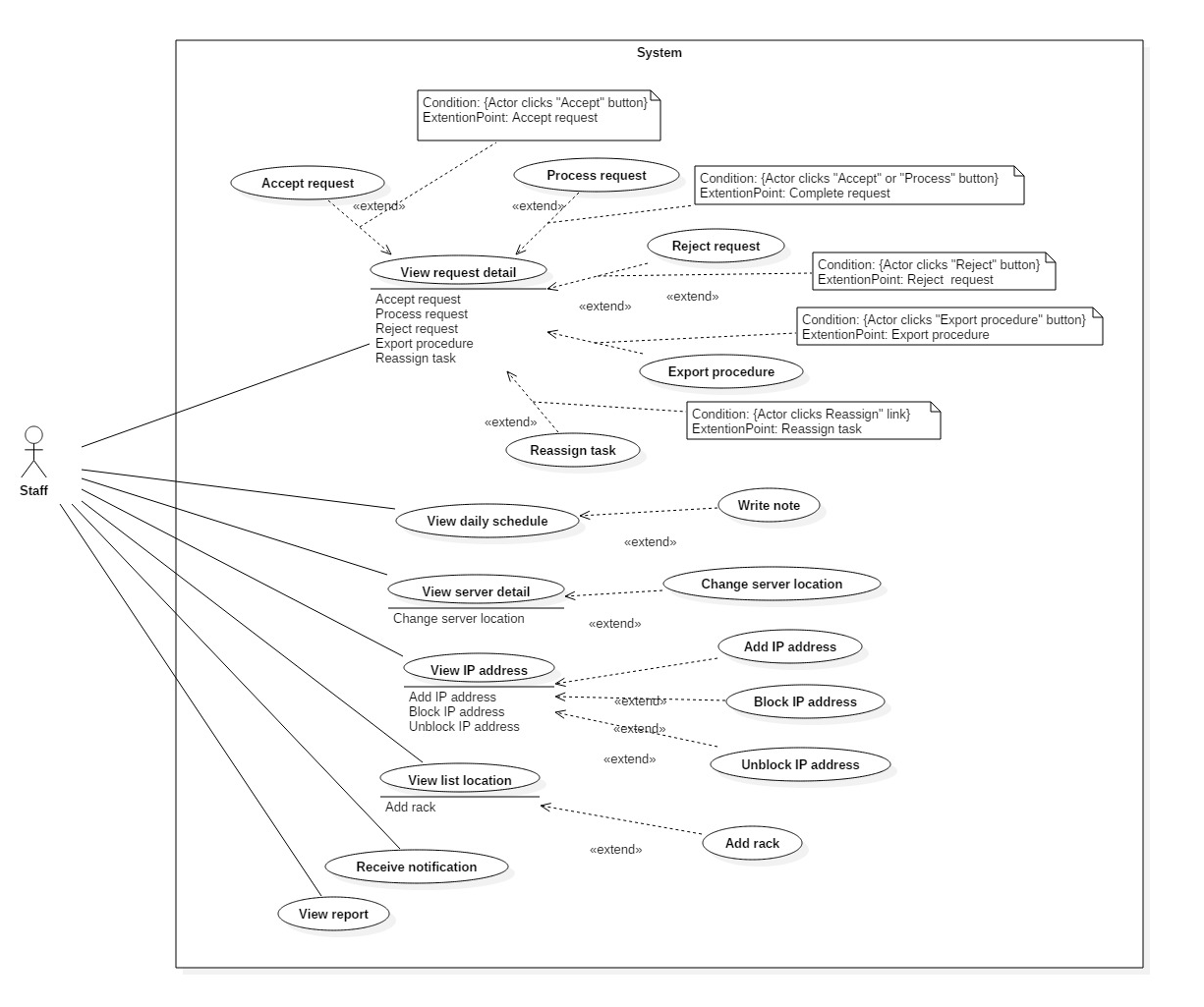
* Using HTTP/HTTPS and SMTP protocol.

### System Overview Use Case



### List of Use Case

##### <Shift Head> Overview Use Case

Figure 5: <Shift Head> Overview Use Case

###### <Shift Head> View request detail

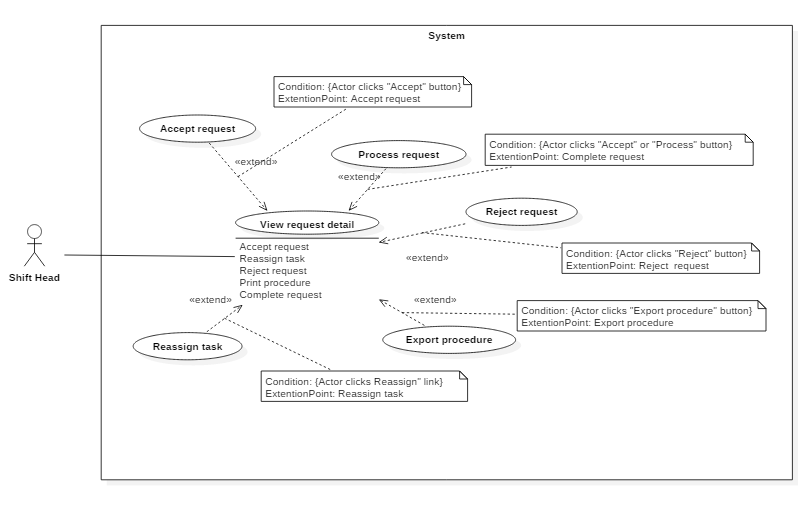


Figure 8 <Shift Head> View request detail

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS001 | | | |
| Use Case No. | IMS001 | **Use Case Version** | 2.0 |
| Use Case Name | View request detail | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Shift Head   Summary:   * This use case allows Shift Head to view request detail.   Goal:   * Shift Head can access to appropriate request detail.   Triggers:   * Shift head clicks view notification or “Request” page in sidebar.   Precondition:   * The Shift Head must login to the system with Shift Head role at right shift.   Post Conditions:   * Success: Shift Head can view request detail * Fail: Nothing will be created. Show message error with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks on notification in header | Navigate to appropriate request detail |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks “Request” tab in sidebar | List of requests will be displayed. New request is placed on the first line of the table |  |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks “Server” tab in sidebar | If request has information related to “Server”, there’s a link of this request displayed in “Action” field. |   Exceptions: N/A  Relationships: Extend to Accept request, Process request, Reject request, Export procedure, Reassign task  Business Rules:   * In “Server” page, link of the request only appeared when this request status is “Pending”, “Waiting” and “Processing” | | | |

Table 19: Use case IMS001 - <Shift Head> Write note

###### <Shift Head> Accept request “Add Server”



Figure 8 <Shift Head> Accept request “Add Server”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Add Server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Add Server” from customer.   Goal:   * Request status changes from “Pending” to “Waiting”, button “Process” will appear to ready when customer arrives. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Add Server.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Add Server” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Add Server.” * Request status changes to “Waiting” * Assignee drop down list and “Process” button are showed. * Changed request status is notified to customer via both system and email. |   Alternative Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Waiting”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. | | | |

Table 19: Use case IMS002 - <Shift Head> Accept request “Add Server”

###### <Shift Head> Accept request “Bring Server Away”

Figure 8 <Shift Head> Assign task

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Bring Server Away” from customer.   Goal:   * Request status changes from “Pending” to “Waiting”, button “Process” will appear to ready when customer arrives. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Bring Server Away.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Bring Server Away” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Bring Server Away.” * Request status changes to “Waiting” * Assignee drop down list and “Process” button are showed. * Changed request status is notified to customer via both system and email. |   Alternative Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Waiting”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. | | | |

Table 19: Use case IMS002 - <Shift Head> Assign task

###### <Shift Head> Accept request “Assign IP Address”

Figure 8 <Shift Head> Assign task

Table 19: Use case IMS002 - <Shift Head> Assign task

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Assign IP Address” from customer.   Goal:   * Request status changes from “Pending” to “Processing”, button “Complete” will appear right that. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Assign IP Address.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Assign IP Address” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page without reselect assignee. | * System shows message “Success! You’ve ACCEPTED Request Assign IP Address.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Shift head is default assignee. * Changed request status is notified to customer via both system and email. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Assign IP Address” request detail page. | | 2 | * Shift Head selects who will process this request * Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Assign IP Address.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Selected member will take charge in processing this request * Changed request status is notified to customer via both system and email. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Processing”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. * If Shift Head is busy and can’t process the request or assign it to another staff, Shift Manager will take over it | | | |

###### <Shift Head> Accept request “Change IP Address”

Figure 8 <Shift Head> Assign task

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Change IP Address” from customer.   Goal:   * Request status changes from “Pending” to “Processing”, button “Complete” will appear right that. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Change IP Address.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Change IP Address” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page without reselect assignee. | * System shows message “Success! You’ve ACCEPTED Request Change IP Address.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Shift head is default assignee. * Changed request status is notified to customer via both system and email. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Change IP Address” request detail page. | | 2 | * Shift Head selects who will process this request * Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Change IP Address.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Selected member will take charge in processing this request * Changed request status is notified to customer via both system and email. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Processing”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. * If Shift Head is busy and can’t process the request or assign it to another staff, Shift Manager will take over it | | | |

Table 19: Use case IMS002 - <Shift Head> Assign task

###### <Shift Head> Accept request “Return IP Address”

Figure 8 <Shift Head> Return IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Return IP Address” from customer.   Goal:   * Request status changes from “Pending” to “Processing”, button “Complete” will appear right that. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Return IP Address.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Return IP Address” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page without reselect assignee. | * System shows message “Success! You’ve ACCEPTED Request Return IP Address.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Shift head is default assignee. * Changed request status is notified to customer via both system and email. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Return IP Address” request detail page. | | 2 | * Shift Head selects who will process this request * Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Return IP Address.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Selected member will take charge in processing this request * Changed request status is notified to customer via both system and email. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Processing”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. * If Shift Head is busy and can’t process the request or assign it to another staff, Shift Manager will take over it | | | |

Table 19: Use case IMS002 - <Shift Head> Return IP Address

###### <Shift Head> Accept request “Rent Rack”

Figure 8 <Shift Head> Accept request “Rent Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Rent Rack” from customer.   Goal:   * Request status changes from “Pending” to “Processing”, button “Complete” will appear right that. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Rent Rack.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Rent Rack” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page without reselect assignee. | * System shows message “Success! You’ve ACCEPTED Request Rent Rack.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Shift head is default assignee. * Changed request status is notified to customer via both system and email. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Rent Rack” request detail page. | | 2 | * Shift Head selects who will process this request * Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Rent Rack.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Selected member will take charge in processing this request * Changed request status is notified to customer via both system and email. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Processing”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. * If Shift Head is busy and can’t process the request or assign it to another staff, Shift Manager will take over it | | | |

Table 19: Use case IMS002 - <Shift Head> Accept request “Rent Rack”

###### <Shift Head> Accept request “Return Rack”

Figure 8 <Shift Head> Accept request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS004 | | | |
| Use Case No. | IMS004 | **Use Case Version** | 2.0 |
| Use Case Name | Accept request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 19/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to accept request “Return Rack” from customer.   Goal:   * Request status changes from “Pending” to “Processing”, button “Complete” will appear right that. After “Accept” button is clicked, customer will immediately receive notification from this system and also via email.   Triggers:   * Shift head clicks “Accept” button on request detail page.   Preconditions:   * User logins will Shift Head role. * Request status is “Pending”.   Post Conditions:   * Success: System shows message “Success! You’ve ACCEPTED Request Return Rack.” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Return Rack” request detail page. | | 2 | Shift Head checks request detail and clicks on “Accept” button at the bottom of the page without reselect assignee. | * System shows message “Success! You’ve ACCEPTED Request Return Rack.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Shift head is default assignee. * Changed request status is notified to customer via both system and email. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | Navigated to “Return Rack” request detail page. | | 2 | * Shift Head selects who will process this request * Shift Head checks request detail and clicks on “Accept” button at the bottom of the page. | * System shows message “Success! You’ve ACCEPTED Request Return Rack.” * Request status changes to “Processing” * “Complete” button is replaced for “Accept” button * Selected member will take charge in processing this request * Changed request status is notified to customer via both system and email. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail.  Business Rules:   * When Shift Head accepts the request, system will log the time when he changed the request status from “Pending” to “Processing”. * Four shift heads of data center can be able to click on the “Accept” button of a request anytime. But as the rule, only the one who is responsible for confirming request at current shift is authorized. Unauthorized person will be discovered by log system. * If Shift Head is busy and can’t process the request or assign it to another staff, Shift Manager will take over it | | | |

Table 19: Use case IMS002 - <Shift Head> Accept request “Return Rack”

###### <Shift Head> Process request “Add Server”

Figure 8 <Shift Head> Process request “Add Server”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Add Server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Add Server”, recording customer officially brought his servers into the data center. Furthermore, necessary information as Default IP Address and Server Location are also processed in this phase.   Goal:   * Complete the request with “Done” status. Customer’s servers are already placed in a rack of data center.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: Server status will be changed from “Waiting” to “Running”. Request status is updated to “Done”. Notification will be sent automatically to customer via system and also email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Add Server” request detail | | 2 | Shift Head clicks on “Add IP” | The picked up IP Address Popup will be displayed. | | 3 | Shift Head searches suitable IP Address, select it and clicks “OK” button. | Return to Request Add New Server Page and the selected IP Address will be display on field “Default IP” | | 4 | Shift Head clicks on “Add location” | The picked up Location Popup will be displayed. | | 5 | Shift Head selects suitable location and clicks “OK” button. | Return to Request Add New Server Page and the selected location will be display on field “Location” | | 6 | Shift Head clicks on “Complete” button | * System will save new information of this server into database. * System will change status of this server(s) to “Running” * System will log who processed the request at this time |   Alternatives Scenario: N/A  Exceptions:   |  |  |  | | --- | --- | --- | | Step | Cause | System Response | | 1 | Shift Head not assign default IP to server | System will show message: “You must assign default IP Address to server.” | | 2 | Shift Head not assign location to server | System will show message: “You must assign location to server.” | | 3 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail  Business Rules:   * When customer want to entrust his servers to datacenter, he must input server configuration by himself using the “Add Server” request. * After finishing setting up servers, then Shift Head will assign Default IP Address to each server and decide where to place the servers to data center. * In data center, Default IP is an identity of server. On each server will be tagged Default IP | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Add Server”

###### <Shift Head> Process request “Bring Server Away”

Figure 8 <Shift Head> View request

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Bring Server Away”, he can check server’s information before customer brings their servers away.   Goal:   * Complete the request with “Done” status. Server status changed to “Deactivate” and all information related to this server such as IP Address, location,.. will be set to “Available”   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: Server status will be changed from “Running” to “Deactivate”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Bring Server Away” request detail | | 2 | Shift Head clicks on “Complete” button | * System will change server status to “Deactivate”. * IP Address and location related to this server will be reset to “Available” * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Shift Head will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Bring Server Away”

###### <Shift Head> Process request “Assign IP Address”



Figure 8 <Shift Head> View request

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Assign IP Address”, he can select which IP Address to assign to requested server. The number of IP Address is allocated by customer.   Goal:   * Complete the request with “Done” status. New IP Addresses are assigned to appointed server   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: Assigned IP Address will be changed its status from “Available” to “Used”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Shift Head checks request detail and necessary action for this request | IP Address will be randomly selected by the system, and the number of it is equals to the number appointed by customer. | | 3 | Shift Head clicks on “Complete” button | * System will change IP Address status to “Used”. * New IP Address is assign to appropriate server * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Shift Head selects available IP Address to assign |  | | 3 | Shift Head clicks on “Complete” button | * System will change IP Address status to “Used”. * New IP Address is assign to appropriate server * Request status changed to “Done” * System will log who processed the request at this time |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Shift Head assigns the number of IP Address more or less than customer requirement | System shows message “You need to choose the number of IP Address as customer requirement. Please try again.” | | 2 | Number of available IP Addresses is less than customer requirement | System shows message “Number of available IP Address is less than required number. Please confirm with customer to change IP range.” | | 3 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Shift Head will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Assign IP Address”

###### <Shift Head> Process request “Change IP Address”



Figure 8 <Shift Head> Process request “Change IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Change IP Address”, he will change selected IP Addresses to the new ones that are in the same range.   Goal:   * Complete the request with “Done” status. New IP Addresses are assigned to appointed server. Old IP Addresses will be changed status to “Available”.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: Assigned IP Address will be changed its status from “Available” to “Used”. Old IP Addresses will be changed status to “Available”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Change IP Address” request detail | | 2 | Shift Head selects IP Address to assign for each IP Address that customer wants to change. |  | | 3 | Shift Head clicks on “Complete” button | * System will change new IP Address status to “Used”. * System will change old IP Address status to “Available”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Shift Head forgot to select new IP Address from drop down list | System shows message “You need to select new IP Address. Please try again.” | | 2 | Number of available IP Addresses is less than customer requirement | System shows message “Number of available IP Address is less than required number. Please confirm with customer to change IP range.” | | 3 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Shift Head will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Change IP Address”

###### <Shift Head> Process request “Return IP Address”

Figure 8 <Shift Head> Process request “Return IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Return IP Address”, he will approve IP Addresses that customer wants to return to data center.   Goal:   * Complete the request with “Done” status. IP Addresses will be returned to data center with status “Available”   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: IP Address will be changed its status from “Used” to “Available”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Shift Head checks request detail |  | | 3 | Shift Head clicks on “Complete” button | * System will change IP Address status to “Available”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Shift Head will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Return IP Address”

###### <Shift Head> Process request “Rent Rack”

Figure 8 <Shift Head> Process request “Rent Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Rent Rack”, he will select rack for customer to rent.   Goal:   * Complete the request with “Done” status. Rack status will be changed to “Rented”   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: Rack status will be changed from “Available” to “Rented”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Rent Rack” request detail | | 2 | Shift Head selects number of racks as customer requirement |  | | 3 | Shift Head clicks on “Complete” button | * System will change rack status to “Rented”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Rent Rack” request detail | | 2 | Shift Head selects alphabet letter that ruled as the first character of rack name. | The system will return appropriate racks with the first letter as selected. | | 3 | Shift Head selects number of racks as customer requirement |  | | 3 | Shift Head clicks on “Complete” button | * System will change rack status to “Rented”. * Request status changed to “Done” * System will log who processed the request at this time |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Shift Head forgot to select rack | System shows message “You need to select rack for rent. Please try again.” | | 2 | Shift Head selected the number of racks that is different from customer requirement | System shows message “Please select the number of racks equal to customer requirement.” | | 3 | Available racks are less than customer requirement | System shows message “Available racks are not enough for rent. Please add more racks to the system.” | | 4 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Shift Head will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Rent Rack”

###### <Shift Head> Process request “Return Rack”

Figure 8 <Shift Head> Process request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to process request “Return Rack”.   Goal:   * Complete the request with “Done” status. Rack status will be changed to “Available”.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success: Rack status will be changed from “Returning” to “Available”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return Rack” request detail | | 2 | Shift Head checks request detail |  | | 3 | Shift Head clicks on “Complete” button | * System will change rack status to “Available”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Shift Head will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Shift Head> Process request “Return Rack”

###### <Shift Head> Reject request “Add Server”

 Figure 25 <Shift Head> Reject request “Add Server”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Add Server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Add Server”.   Goal:   * Reject request “Add Server” which was sent by customer.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Add Server” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * The new server information which customer sent will be deleted from database. * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Add Server” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Add Server” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”, “Waiting” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Reject request “Add Server”

###### <Shift Head> Reject request “Bring Server Away”

 Figure 25 <Shift Head> Reject request “Bring Server Away”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Bring Server Away”.   Goal:   * Reject request “Bring Server Away” successfully.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Bring Server Away” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * Servers that customer wants to bring away will be changed its status from “Bringing away” to “Running” * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Bring Server Away” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Bring Server Away” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”, “Waiting” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Reject request “Bring Server Away”

###### <Shift Head> Reject request “Add IP Address”

 Figure 25 <Shift Head> Reject request “Assign IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Assign IP Address”.   Goal:   * Reject request “Assign IP Address” successfully.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Assign IP Address” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Accept request

###### <Shift Head> Reject request “Change IP Address”

Figure 25 <Shift Head> Reject request “Change IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Change IP Address”.   Goal:   * Reject request “Change IP Address” successfully.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Change IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Change IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Change IP Address” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Reject request “Change IP Address”

###### <Shift Head> Reject request “Return IP Address”

 Figure 25 <Shift Head> Reject request “Return IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Return IP Address”.   Goal:   * Reject request “Return IP Address” successfully.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Change IP Address” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Reject request “Return IP Address”

###### <Shift Head> Reject request “Rent Rack”

 Figure 25 <Shift Head> Reject request “Rent Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Rent Rack”.   Goal:   * Reject request “Rent Rack” successfully.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Rent Rack” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Rent Rack” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Reject request “Rent Rack”

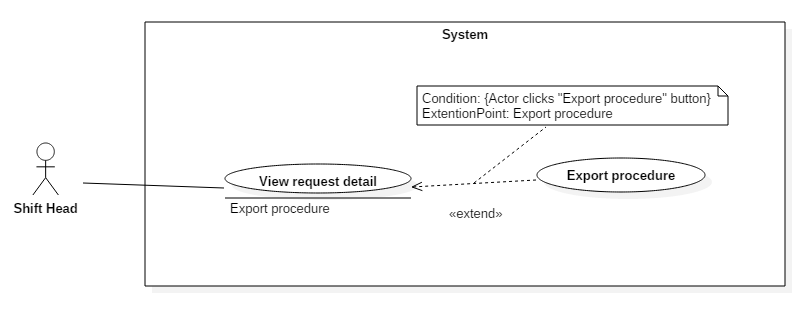
###### <Shift Head> Reject request “Return Rack”

 Figure 25 <Shift Head> Reject request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to reject request “Return Rack”.   Goal:   * Reject request “Return Rack” successfully.   Triggers:   * Shift Head accesses to the appropriate request detail page.   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return Rack” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on not-viewed notification on the header panel. | The system will display “Return Rack” request detail | | 2 | Shift Head clicks on “Reject” button | System shows pop-up to confirm | | 3 | Shift Head clicks “Cancel” button | “Return Rack” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Shift Head> Reject request “Return Rack”

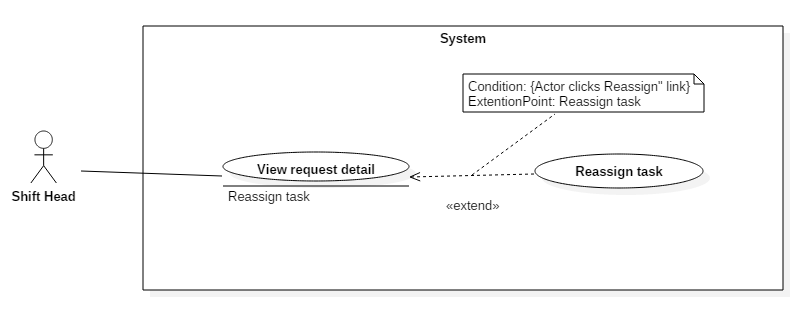
###### <Shift Head> Export procedure

 Figure 11: <Shift Head> Export Procedure

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS014 | | | |
| Use Case No. | IMS014 | **Use Case Version** | 2.0 |
| Use Case Name | Export procedure | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to export procedure after completing request “Add Server”   Goal:   * Export procedure successfully and hand it to customer   Triggers:   * Shift Head clicks on “Export procedure” button on “Add Server” request detail page   Preconditions:   * Shift Head must login into the system with role Shift Head. * The request must be already completed.   Post Conditions:   * Success: Export file word corresponding to request content. * Fail: Show message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on “Export procedure” button. | The system will fill the request information in the procedure and export file word. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | Step | Cause | System Response | | 1 | Template file is not placed in the right folder | System will show message: “Export file is not successful. Please try again.” |   Relationships:   * Extend to View request detail.   Business Rules:   * File procedure is only exported when the request was completed. * Staff can export procedure more than one time. All the action will be logged. | | | |

*Table 23: Use case IMS016 - <Shift Head> Assign IP to server.*

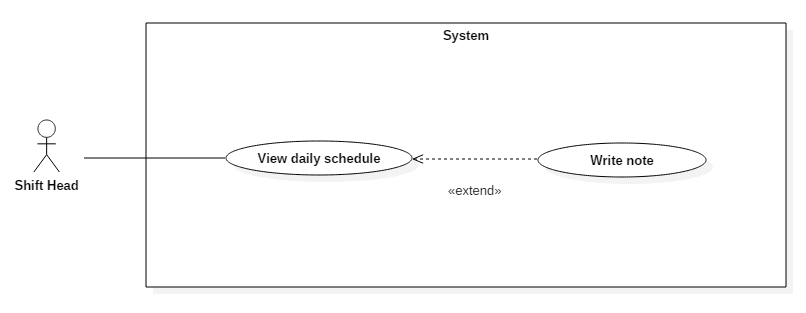
###### <Shift Head> Reassign task

 Figure 19: <Shift Head> Reassign task

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS002 | | | |
| Use Case No. | IMS002 | **Use Case Version** | 2.0 |
| Use Case Name | Reassign task | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Shift Head   Summary:   * This use case allows Shift Head to reassign task that was assigned but still not be accepted by staff.   Goal:   * Reassign task successfully.   Triggers:   * Shift head clicks “Reassign task” link on request detail page.   Precondition:   * Shift Head must login into the system with role Shift Head. * The request was sent to data center by customer. * Request is already assigned.   Post Conditions:   * Success: This task will be assigned to corresponding Staff. Staff will have notification about this assignment. * Fail: Show message error with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks “Reassign task” link on request detail page | Pop-up will display and show info:   * Assigned staff * Task status * Drop down list: includes name of member in current group. | | 2 | Shift Head selects himself in the drop down list | * Shift Head will be able to process this request. * If pre-assigned staff is not shift head, he will receive notification about his task status * Shift Head won’t receive notification about task. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks “Reassign task” link on request detail page | Pop-up will display and show info:   * Assigned staff * Task status * Drop down list: includes name of member in current group. | | 2 | Shift Head selects another staff in the drop down list | * Selected staff will be able to process this request. * If pre-assigned staff is not shift head, he will receive notification about his task status * New-assigned staff will receive notification about new task. |   Exceptions: N/A.  Relationships: Extend to View request detail.  Business Rules:   * Shift Head can only assign task for members in the same group. * If Shift Head assigns task for himself, he won’t receive notification related to task * Shift Head can reassign task until assigned staff clicks “Accept task”. * One request is just edited by one person. | | | |

*Table 29: Use case IMS018 - <Shift Head> Reassign task*

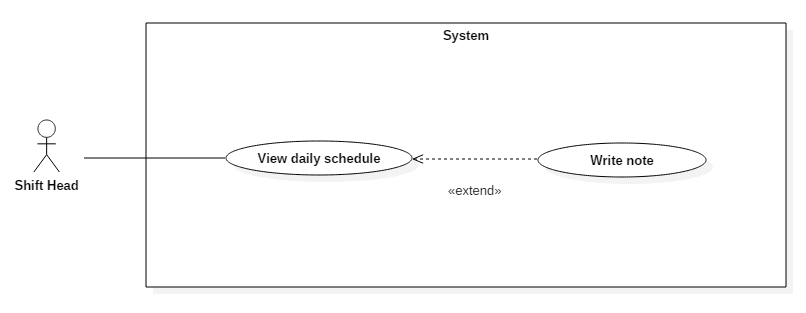
###### <Shift Head> View daily schedule

 Figure 15: <Shift Head> View daily schedule

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS006 | | | |
| Use Case No. | IMS006 | **Use Case Version** | 2.0 |
| Use Case Name | View daily schedule | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to view all of the today’s appointments and note from previous shift.   Goal:   * System provides schedule which helps Shift Head to control the appointments with customers.   Triggers:   * When Shift Head login to the system, the page contains daily schedule and the note of previous shift will be showed.   Preconditions:   * The Shift Head must login to the system with Shift Head role.   Post Conditions:   * Success: The daily schedule and note will be showed. * Fail: N/A   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head login to the system | The page contains daily schedule and note will be showed. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head login to the system and today does not have any customer’s arrival. | A message will be showed “Today does not have any appointment!” |   Exceptions: N/A  Relationships:   * Extended by Write note.   Business Rules:   * The customer link in daily schedule will be showed when today has appointments. | | | |

Table 26: Use case IMS011 - <Shift Head> View daily schedule

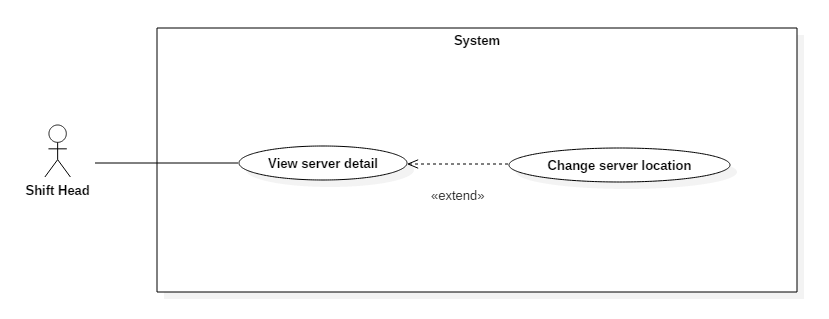
###### <Shift Head> Write note

 Figure 19: <Shift Head> Write note

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS001 | | | |
| Use Case No. | IMS001 | **Use Case Version** | 2.0 |
| Use Case Name | Write note | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Shift Head   Summary:   * This use case allows Shift Head to write note about customer’s arrival for the next shift.   Goal:   * Creating note about customer’s arrival for the next shift.   Triggers:   * Shift head clicks “Write note for the next shift” link on the Daily Schedule Page.   Precondition:   * The Shift Head must login to the system with Shift Head role at right shift.   Post Conditions:   * Success: The note of this shift will be created. * Fail: Nothing will be created. Show message error with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks “Write note for the next shift” link on the Daily Schedule Page. | The popup contains blank note will be showed. | | 2 | Shift head inputs data and clicks “Submit note” button | The note of this shift will be created. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift head clicks “Write note for the next shift” link on the Daily Schedule Page. | The popup contains blank note will be showed. | | 2 | Shift head inputs data and clicks “Cancel” button | Return to Daily Schedule Page. |   Exceptions:   |  |  |  | | --- | --- | --- | | Step | Cause | System Response | | 1 | The note is blank | Show message error: “The note is blank. Please input data!” |   Relationships: Extend to View daily Schedule.  Business Rules:   * The time when the note was created and the created Shift Head must be saved into database. * If the Shift Head login to the system at different people’s shift, the link “Write note for the next shift” is disabled. | | | |

*Table 29: Use case IMS019 - <Shift Head> Write note*

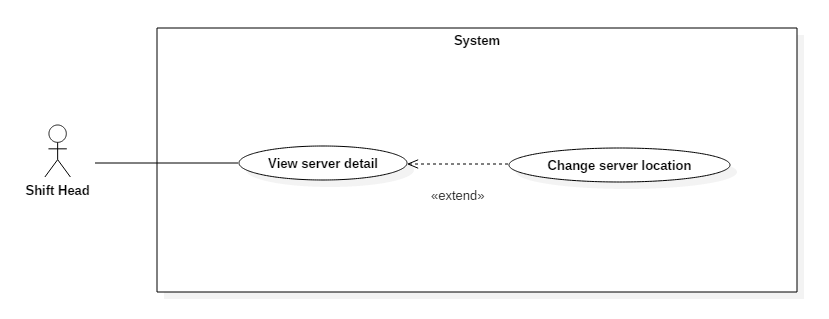
###### <Shift Head> View server detail

  
 Figure 10: <Shift Head> View server detail

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS015 | | | |
| Use Case No. | IMS015 | **Use Case Version** | 2.0 |
| Use Case Name | View server detail | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to view each server information of customers.   Goal:   * View each server information.   Triggers:   * Shift Head clicks a row in the Server Table.   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: Server detail will be showed. * Fail: Server detail will not be showed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks a row on Server Table in Server Index page | Navigate to Server Detail Page. |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: Extended to Change Server Location.  Business Rules: N/A. | | | |

Table 22: Use case IMS006 - <Shift Head> View server detail

###### <Shift Head> Change server location

 Figure 15: <Shift Head> Change server location

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS016 | | | |
| Use Case No. | IMS016 | **Use Case Version** | 2.0 |
| Use Case Name | Change server location | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to change location of server in data center   Goal:   * Change location of server successfully.   Triggers:   * Shift Head clicks on “Change location” link in “Server Detail” page   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: New location of server is updated successfully. * Fail: N/A.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on “Change location” link in “Server Detail” page | Navigate to “Change Location” page to select available location | | 2 | Shift Head selects suitable location and clicks “Save” button. | Redirect to the previous “Server Detail” page. “Location” field will be updated |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on “Change location” link in “Server Detail” page | Navigate to “Change Location” page to select available location | | 2 | Shift Head clicks “Cancel” button. | Return to Request Page. |   Exceptions: N/A.  Relationships:   * Extended to View server detail.   Business Rules:   * Shift Head makes sure that information saved in the system is the same with reality * All members in data center can update server location. Action will be logged. | | | |

*Table 26: Use case IMS014 - <Shift Head> Change server location*

###### <Shift Head> View IP address

 Figure 11: <Shift Head> View IP Address

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| --- | --- | --- | --- |
| USE CASE – IMS012 | | | |
| Use Case No. | IMS020 | **Use Case Version** | 2.0 |
| Use Case Name | View IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to view all IP address in the center   Goal:   * View and Search all IP Address in the system.   Triggers:   * Shift Head clicks “IP Address” tab on the Sidebar   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: IP address information will be showed. * Fail: IP address information will not be showed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks “IP Address” tab on the Sidebar | Navigate to View IP information page which contains:   * IP Address: label * Status: link * Gateway: label * Subnet mask: label * Status duration: label |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: Extend to Add IP Address.  Business Rules:   * The first, the last IP address and gateway are special IP addresses. It cannot be able to use. | | | |

Table 23: Use case IMS007 - <Shift Head> View IP Address

###### <Shift Head> Add IP address

 Figure 15: <Shift Head> Add IP Address

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| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Add IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to add range of IP address to the pool   Goal:   * Add information of IP address quickly.   Triggers:   * Shift Head clicks on “Add IP Address” on “IP Address” page   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: Shift Head enter the IP address, and the system automatically generate other IP address in the range. Shift Head click “Save” to save all of generated IP addresses to database * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on “Add IP Address” on “IP Address” page | System will display Add IP Address pop-up | | 2 | Input IP address and default gateway | After entering IP address range, system automatically return the subnet mask code | | 3 | Click “OK” | System generates all of IP address in the same range and return to previous “IP address” page |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on “Add IP Address” on “IP Address” page | System will display Add IP Address pop-up | | 2 | Input IP address and default gateway | After entering IP address range, system automatically return the subnet mask code | | 3 | Click “Cancel” | Return to view “IP Address” without changed information |   Exceptions: N/A.  Relationships: N/A.  Business Rules: N/A. | | | |

*Table 26: Use case IMS012 - <Shift Head> Add IP Address*

###### <Shift Head> Block IP address

 Figure 15: <Shift Head> Block IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS008 | | | |
| Use Case No. | IMS008 | **Use Case Version** | 2.0 |
| Use Case Name | Block IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to change IP address status from “Available” to “Blocked”   Goal:   * Change IP address status to “Blocked”. It can’t be used to assign until unblocked.   Triggers:   * Shift Head clicks “Block” link on a row on the table in “IP Address” page.   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: The status of IP address will be changed to “Blocked”. * Fail: The status of IP address will not be changed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks “Block” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “OK” | Return to previous page with updated status of selected IP address. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks “Block” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “Cancel” | Return to previous page with nothing changed. |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Only “blocked” status is able to be updated manually | | | |

*Table 26: Use case IMS012 - <Shift Head> Block IP Address*

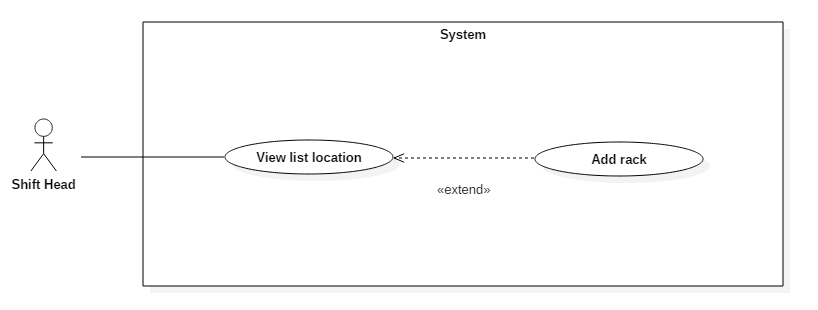
###### <Shift Head> Unblock IP address

 Figure 15: <Shift Head> Unblock IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS008 | | | |
| Use Case No. | IMS008 | **Use Case Version** | 2.0 |
| Use Case Name | Unblock IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to change IP address status from “Blocked” to “Available”   Goal:   * Selected IP address status will be changed to “Available”.   Triggers:   * Shift Head clicks “Unblock” link on a row on the table in “IP Address” page.   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: The status of IP address will be changed to “Available”. * Fail: The status of IP address will not be changed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks “Unblock” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “OK” | Return to previous page with updated status of selected IP address. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks “Unblock” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “Cancel” | Return to previous page with nothing changed. |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Only “Blocked” status is able to be updated manually | | | |

*Table 26: Use case IMS012 - <Shift Head> Unblock IP Address*

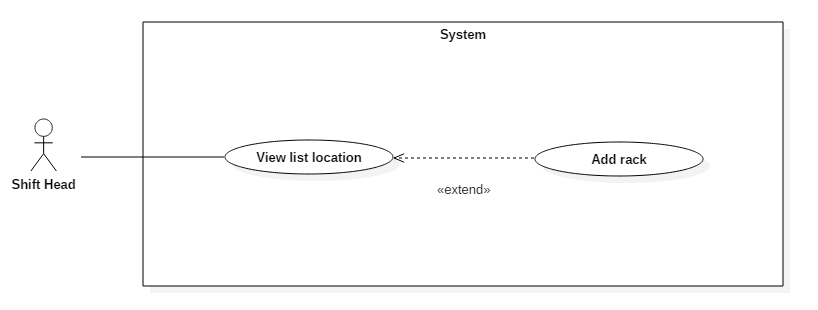
###### <Shift Head> View list location

 Figure 15: <Shift Head> View list location

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS012 | | | |
| Use Case No. | IMS021 | **Use Case Version** | 2.0 |
| Use Case Name | View list location | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to view list all location of the system   Goal:   * View location and filtered by rack name.   Triggers:   * Shift Head clicks on “Location” tab on the sidebar.   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: All location information will be showed. * Fail: N/A.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on “Location” tab on the sidebar. | Navigate to View location information page |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: Extend to Add Rack.  Business Rules:   * A rack has 42 location. * A server size can take 1,2 or 4 location. | | | |

Table 26: Use case IMS009 - <Shift Head> Approve request Add New Server

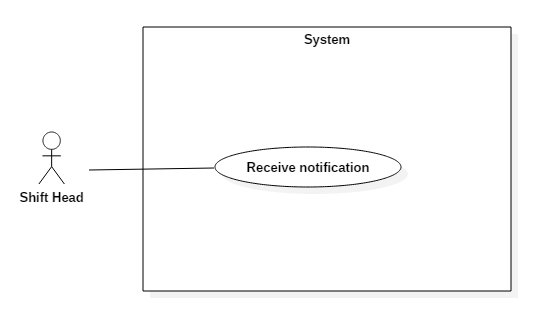
###### <Shift Head> Add rack

 Figure 15: <Shift Head> Add rack

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Add rack | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head add new rack information to database.   Goal:   * Add new location to the center quickly and easily manage   Triggers:   * Shift Head clicks on “Add rack” on “Location” page   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: Shift Head add new location successfully * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Add location” on “Location” page | System will display Popup | | 2 | Input rack name |  | | 3 | Click “OK” | System will automatically generate 42 location by each rack added and save to database |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Add location” on “Location” page | System will display Popup | | 2 | Input rack name |  | | 3 | Click “Cancel” | Return to previous view with nothing changed |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Input existed rack name | System shows message “Rack name is existed.” |   Relationships: N/A.  Business Rules:   * Rack name is ruled by the data center | | | |

*Table 26: Use case IMS013 - <Shift Head> Add rack*

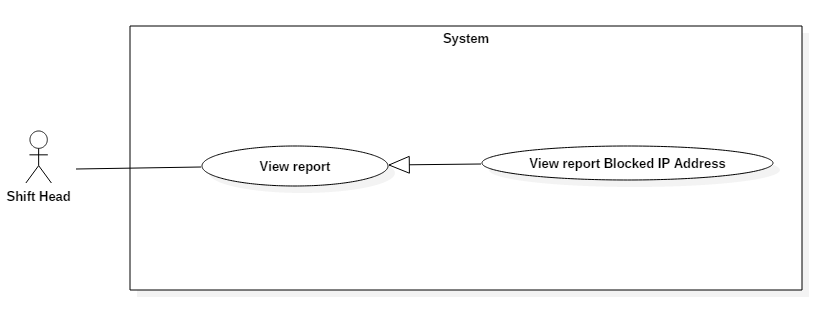
###### <Shift Head> Receive notification

 Figure 11: <Shift Head> Receive notification

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS013 | | | |
| Use Case No. | IMS013 | **Use Case Version** | 2.0 |
| Use Case Name | Receive Notification | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to receive notification.   Goal:   * View new request from customer.   Triggers:   * Shift Head clicks on a bell symbol on the header of website   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: Shift Head can view new request fast * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on a bell symbol on the header of website | List of new notification will be scrolled down. | | 2 | Shift Head clicks on an item in this list | Redirect to appropriate request detail. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks on a bell symbol on the header of website | List of new notification will be scrolled down. | | 2 | Shift Head clicks on “View All” notification | Redirect to list all notification. Unread notification will be highlighted. |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Each role will receive different content of notification * Only Shift Head who is working in current shift can be able to receive notification. Other Shift Heads don’t receive notification, but they can check new requests by accessing to request list. | | | |

Table 23: Use case IMS015 - <Shift Head> Receive notification

###### <Shift Head> View report Blocked IP Address

 Figure 15: <Shift Head> View report Blocked IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS014 | | | |
| Use Case No. | IMS014 | **Use Case Version** | 2.0 |
| Use Case Name | View report Blocked IP Address | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Head.   Summary:   * This use case allows Shift Head to view report related to blocked IP address.   Goal:   * View IP address which was block and still be blocked.   Triggers:   * Shift Head clicks “Report” tab on the sidebar   Preconditions:   * Shift Head must login into the system with role Shift Head.   Post Conditions:   * Success: Report of blocked IP addresses is showed * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Head clicks “Report” tab on the sidebar  Report” link on the panel. | Redirect to “Blocked IP report” page.  List all blocked IP address will be displayed |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Shift Head can view report block IP address to observe which IP address is blocked for a long time. * This page is only for view. If Shift Head want to unblock an IP address, he must access “IP Address” page. | | | |

Table 26: Use case IMS0010 - <Shift Head> View report Blocked IP Address

##### <Staff> Overview Use Case

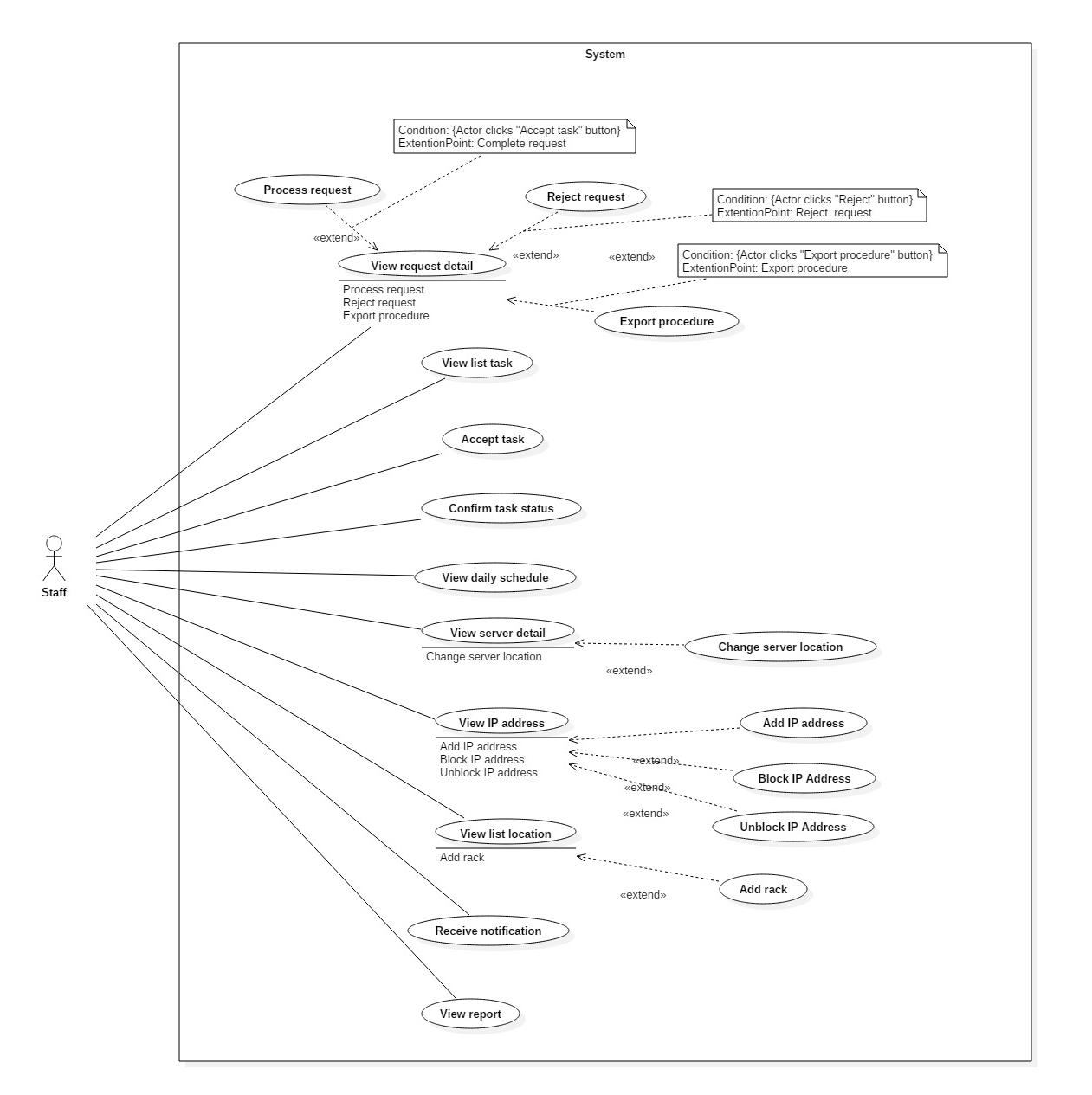


Figure 13: <Staff> Overview Use Case

###### <Staff> View request detail

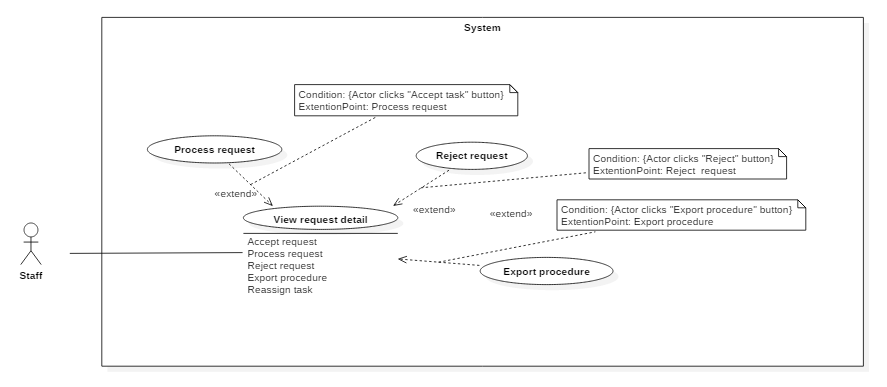


Figure 8 <Staff> View request detail

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS001 | | | |
| Use Case No. | IMS001 | **Use Case Version** | 2.0 |
| Use Case Name | View request detail | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Staff   Summary:   * This use case allows Staff to view request detail.   Goal:   * Staff can access to appropriate request detail.   Triggers:   * Staff clicks view notification or “Request” page in sidebar.   Precondition:   * The Staff must login to the system with Staff role at right shift.   Post Conditions:   * Success: Staff can view request detail * Fail: Nothing will be created. Show message error with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on notification in header | Navigate to appropriate request detail |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Request” tab in sidebar | List of requests will be displayed. New request is placed on the first line of the table |  |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Server” tab in sidebar | If request has information related to “Server”, there’s a link of this request displayed in “Action” field. |   Exceptions: N/A  Relationships: Extend to Accept request, Process request, Reject request, Export procedure, Reassign task  Business Rules:   * In “Server” page, link of the request only appeared when this request status is “Pending”, “Waiting” and “Processing” | | | |

Table 19: Use case IMS001 - <Staff> Write note

###### <Staff> Process request “Add Server”

Figure 8 <Staff> Process request “Add Server”

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| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Add Server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Add Server”, recording customer officially brought his servers into the data center. Furthermore, necessary information as Default IP Address and Server Location are also processed in this phase.   Goal:   * Complete the request with “Done” status. Customer’s servers are already placed in a rack of data center.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: Server status will be changed from “Waiting” to “Running”. Request status is updated to “Done”. Notification will be sent automatically to customer via system and also email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Add Server” request detail | | 2 | Staff clicks on “Add IP” | The picked up IP Address Popup will be displayed. | | 3 | Staff searches suitable IP Address, select it and clicks “OK” button. | Return to Request Add New Server Page and the selected IP Address will be display on field “Default IP” | | 4 | Staff clicks on “Add location” | The picked up Location Popup will be displayed. | | 5 | Staff selects suitable location and clicks “OK” button. | Return to Request Add New Server Page and the selected location will be display on field “Location” | | 6 | Staff clicks on “Complete” button | * System will save new information of this server into database. * System will change status of this server(s) to “Running” * System will log who processed the request at this time |   Alternatives Scenario: N/A  Exceptions:   |  |  |  | | --- | --- | --- | | Step | Cause | System Response | | 1 | Staff not assign default IP to server | System will show message: “You must assign default IP Address to server.” | | 2 | Staff not assign location to server | System will show message: “You must assign location to server.” | | 3 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail  Business Rules:   * When customer want to entrust his servers to datacenter, he must input server configuration by himself using the “Add Server” request. * After finishing setting up servers, then Staff will assign Default IP Address to each server and decide where to place the servers to data center. * In data center, Default IP is an identity of server. On each server will be tagged Default IP | | | |

Table 19: Use case IMS003 - <Staff> Process request “Add Server”

###### <Staff> Process request “Bring Server Away”

Figure 8 <Staff> View request

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Bring Server Away”, he can check server’s information before customer brings their servers away.   Goal:   * Complete the request with “Done” status. Server status changed to “Deactivate” and all information related to this server such as IP Address, location,.. will be set to “Available”   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: Server status will be changed from “Running” to “Deactivate”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Bring Server Away” request detail | | 2 | Staff clicks on “Complete” button | * System will change server status to “Deactivate”. * IP Address and location related to this server will be reset to “Available” * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Staff will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Staff> Process request “Bring Server Away”

###### <Staff> Process request “Assign IP Address”



Figure 8 <Staff> View request

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Assign IP Address”, he can select which IP Address to assign to requested server. The number of IP Address is allocated by customer.   Goal:   * Complete the request with “Done” status. New IP Addresses are assigned to appointed server   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: Assigned IP Address will be changed its status from “Available” to “Used”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Staff checks request detail and necessary action for this request | IP Address will be randomly selected by the system, and the number of it is equals to the number appointed by customer. | | 3 | Staff clicks on “Complete” button | * System will change IP Address status to “Used”. * New IP Address is assign to appropriate server * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Staff selects available IP Address to assign |  | | 3 | Staff clicks on “Complete” button | * System will change IP Address status to “Used”. * New IP Address is assign to appropriate server * Request status changed to “Done” * System will log who processed the request at this time |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Staff assigns the number of IP Address more or less than customer requirement | System shows message “You need to choose the number of IP Address as customer requirement. Please try again.” | | 2 | Number of available IP Addresses is less than customer requirement | System shows message “Number of available IP Address is less than required number. Please confirm with customer to change IP range.” | | 3 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Staff will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Staff> Process request “Assign IP Address”

###### <Staff> Process request “Change IP Address”



Figure 8 <Staff> Process request “Change IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Change IP Address”, he will change selected IP Addresses to the new ones that are in the same range.   Goal:   * Complete the request with “Done” status. New IP Addresses are assigned to appointed server. Old IP Addresses will be changed status to “Available”.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: Assigned IP Address will be changed its status from “Available” to “Used”. Old IP Addresses will be changed status to “Available”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Change IP Address” request detail | | 2 | Staff selects IP Address to assign for each IP Address that customer wants to change. |  | | 3 | Staff clicks on “Complete” button | * System will change new IP Address status to “Used”. * System will change old IP Address status to “Available”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Staff forgot to select new IP Address from drop down list | System shows message “You need to select new IP Address. Please try again.” | | 2 | Number of available IP Addresses is less than customer requirement | System shows message “Number of available IP Address is less than required number. Please confirm with customer to change IP range.” | | 3 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Staff will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Staff> Process request “Change IP Address”

###### <Staff> Process request “Return IP Address”

Figure 8 <Staff> Process request “Return IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Return IP Address”, he will approve IP Addresses that customer wants to return to data center.   Goal:   * Complete the request with “Done” status. IP Addresses will be returned to data center with status “Available”   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: IP Address will be changed its status from “Used” to “Available”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Staff checks request detail |  | | 3 | Staff clicks on “Complete” button | * System will change IP Address status to “Available”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Staff will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Staff> Process request “Return IP Address”

###### <Staff> Process request “Rent Rack”

Figure 8 <Staff> Process request “Rent Rack”

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| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Rent Rack”, he will select rack for customer to rent.   Goal:   * Complete the request with “Done” status. Rack status will be changed to “Rented”   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: Rack status will be changed from “Available” to “Rented”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Rent Rack” request detail | | 2 | Staff selects number of racks as customer requirement |  | | 3 | Staff clicks on “Complete” button | * System will change rack status to “Rented”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Rent Rack” request detail | | 2 | Staff selects alphabet letter that ruled as the first character of rack name. | The system will return appropriate racks with the first letter as selected. | | 3 | Staff selects number of racks as customer requirement |  | | 3 | Staff clicks on “Complete” button | * System will change rack status to “Rented”. * Request status changed to “Done” * System will log who processed the request at this time |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Staff forgot to select rack | System shows message “You need to select rack for rent. Please try again.” | | 2 | Staff selected the number of racks that is different from customer requirement | System shows message “Please select the number of racks equal to customer requirement.” | | 3 | Available racks are less than customer requirement | System shows message “Available racks are not enough for rent. Please add more racks to the system.” | | 4 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Staff will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Staff> Process request “Rent Rack”

###### <Staff> Process request “Return Rack”

Figure 8 <Staff> Process request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Process request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 21/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to process request “Return Rack”.   Goal:   * Complete the request with “Done” status. Rack status will be changed to “Available”.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success: Rack status will be changed from “Returning” to “Available”. Request status is updated to “Done”. Notification will be sent automatically to customer via both IMS system and email * Fail: System shows error message   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return Rack” request detail | | 2 | Staff checks request detail |  | | 3 | Staff clicks on “Complete” button | * System will change rack status to “Available”. * Request status changed to “Done” * System will log who processed the request at this time |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to Internet fail | Show message “Cannot send email to customer, please connect to the Internet and try again!” |   Relationships: Extend to View request detail detail  Business Rules:   * This system doesn’t handle whether customer paid enough money before he finishes the service at data center. Staff will confirm with sale man beforehand. | | | |

Table 19: Use case IMS003 - <Staff> Process request “Return Rack”

###### <Staff> Reject request “Add Server”

 Figure 25 <Staff> Reject request “Add Server”

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| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Add Server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Add Server”.   Goal:   * Reject request “Add Server” which was sent by customer.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Add Server” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * The new server information which customer sent will be deleted from database. * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Add Server” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Add Server” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”, “Waiting” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Reject request “Add Server”

###### <Staff> Reject request “Bring Server Away”

 Figure 25 <Staff> Reject request “Bring Server Away”

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| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Bring Server Away”.   Goal:   * Reject request “Bring Server Away” successfully.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Bring Server Away” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * Servers that customer wants to bring away will be changed its status from “Bringing away” to “Running” * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Bring Server Away” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Bring Server Away” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”, “Waiting” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Reject request “Bring Server Away”

###### <Staff> Reject request “Add IP Address”

 Figure 25 <Staff> Reject request “Assign IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Assign IP Address”.   Goal:   * Reject request “Assign IP Address” successfully.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Assign IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Assign IP Address” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Accept request

###### <Staff> Reject request “Change IP Address”

Figure 25 <Staff> Reject request “Change IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Change IP Address”.   Goal:   * Reject request “Change IP Address” successfully.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Change IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Change IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Change IP Address” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Reject request “Change IP Address”

###### <Staff> Reject request “Return IP Address”

 Figure 25 <Staff> Reject request “Return IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Return IP Address”.   Goal:   * Reject request “Return IP Address” successfully.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Change IP Address” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Reject request “Return IP Address”

###### <Staff> Reject request “Rent Rack”

 Figure 25 <Staff> Reject request “Rent Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Rent Rack”.   Goal:   * Reject request “Rent Rack” successfully.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Rent Rack” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return IP Address” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Rent Rack” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Reject request “Rent Rack”

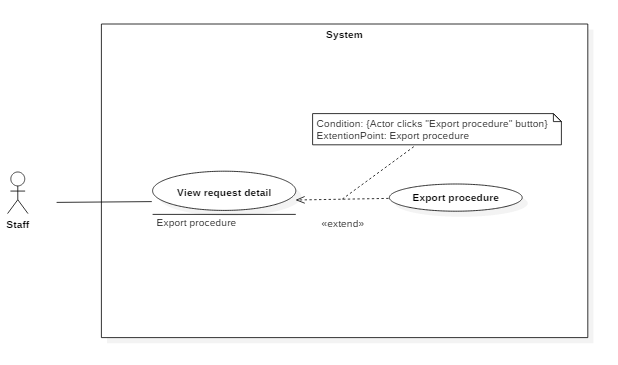
###### <Staff> Reject request “Return Rack”

 Figure 25 <Staff> Reject request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS017 | | | |
| Use Case No. | IMS017 | **Use Case Version** | 2.0 |
| Use Case Name | Reject request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to reject request “Return Rack”.   Goal:   * Reject request “Return Rack” successfully.   Triggers:   * Staff accesses to the appropriate request detail page.   Preconditions:   * Staff must login into the system with role Staff. * The request was sent to data center by customer.   Post Conditions:   * Success:   Customer will receive notification about reject request.  Request status will be changed to “Rejected”.  Server information will be removed from database.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return Rack” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “OK” button | * Request status will be changed to “Rejected”. * Customer will receive notification via both IMS system and email. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on not-viewed notification on the header panel. | The system will display “Return Rack” request detail | | 2 | Staff clicks on “Reject” button | System shows pop-up to confirm | | 3 | Staff clicks “Cancel” button | “Return Rack” request detail displays again. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Connect to Internet fail | Show message “Cannot send request, please connect to the Internet!” |   Relationships: Extend to View request detail.  Business Rules:   * “Reject” button appears when request status is “Pending”” or “Processing” * The system only deletes the information of new server which customer sent, does not delete different information of this request. | | | |

Table 20: Use case IMS004 - <Staff> Reject request “Return Rack”

###### <Staff> Export procedure

 Figure 11: <Staff> Export Procedure

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| --- | --- | --- | --- |
| USE CASE – IMS014 | | | |
| Use Case No. | IMS014 | **Use Case Version** | 2.0 |
| Use Case Name | Export procedure | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to export procedure after completing request “Add Server”   Goal:   * Export procedure successfully and hand it to customer   Triggers:   * Staff clicks on “Export procedure” button on “Add Server” request detail page   Preconditions:   * Staff must login into the system with role Staff. * The request must be already completed.   Post Conditions:   * Success: Export file word corresponding to request content. * Fail: Show message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Export procedure” button. | The system will fill the request information in the procedure and export file word. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | Step | Cause | System Response | | 1 | Template file is not placed in the right folder | System will show message: “Export file is not successful. Please try again.” |   Relationships:   * Extend to View request detail.   Business Rules:   * File procedure is only exported when the request was completed. * Staff can export procedure more than one time. All the action will be logged. | | | |

*Table 23: Use case IMS016 - <Staff> Assign IP to server.*

###### <Staff> View daily schedule

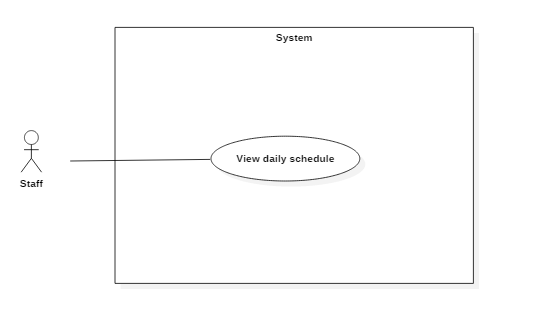
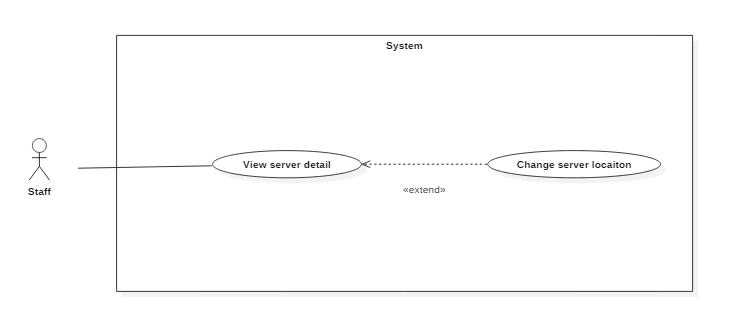


Figure 15: <Staff> View daily schedule

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS006 | | | |
| Use Case No. | IMS006 | **Use Case Version** | 2.0 |
| Use Case Name | View daily schedule | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to view all of the today’s appointments and note from previous shift.   Goal:   * System provides schedule which helps Staff to control the appointments with customers.   Triggers:   * When Staff login to the system, the page contains daily schedule and the note of previous shift will be showed.   Preconditions:   * The Staff must login to the system with Staff role.   Post Conditions:   * Success: The daily schedule and note will be showed. * Fail: N/A   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff login to the system | The page contains daily schedule and note will be showed. |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff login to the system and today does not have any customer’s arrival. | A message will be showed “Today does not have any appointment!” |   Exceptions: N/A  Relationships:   * Extended by Write note.   Business Rules:   * The customer link in daily schedule will be showed when today has appointments. | | | |

Table 26: Use case IMS011 - <Staff> View daily schedule

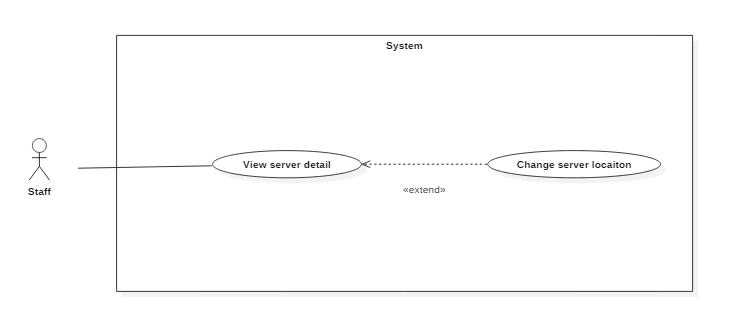
###### <Staff> View server detail

  
 Figure 10: <Staff> View server detail

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS015 | | | |
| Use Case No. | IMS015 | **Use Case Version** | 2.0 |
| Use Case Name | View server detail | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to view each server information of customers.   Goal:   * View each server information.   Triggers:   * Staff clicks a row in the Server Table.   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: Server detail will be showed. * Fail: Server detail will not be showed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks a row on Server Table in Server Index page | Navigate to Server Detail Page. |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: Extended to Change Server Location.  Business Rules: N/A. | | | |

Table 22: Use case IMS006 - <Staff> View server detail

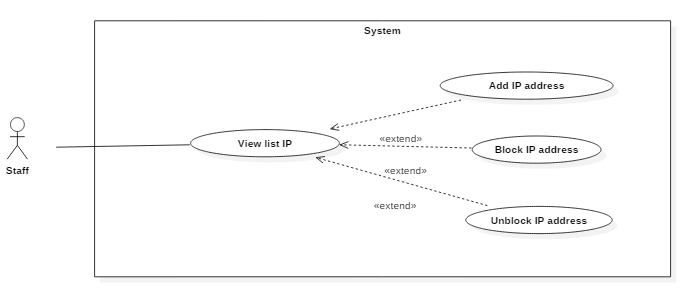
###### <Staff> Change server location

 Figure 15: <Staff> Change server location

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS016 | | | |
| Use Case No. | IMS016 | **Use Case Version** | 2.0 |
| Use Case Name | Change server location | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to change location of server in data center   Goal:   * Change location of server successfully.   Triggers:   * Staff clicks on “Change location” link in “Server Detail” page   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: New location of server is updated successfully. * Fail: N/A.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Change location” link in “Server Detail” page | Navigate to “Change Location” page to select available location | | 2 | Staff selects suitable location and clicks “Save” button. | Redirect to the previous “Server Detail” page. “Location” field will be updated |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Change location” link in “Server Detail” page | Navigate to “Change Location” page to select available location | | 2 | Staff clicks “Cancel” button. | Return to Request Page. |   Exceptions: N/A.  Relationships:   * Extended to View server detail.   Business Rules:   * Staff makes sure that information saved in the system is the same with reality * All members in data center can update server location. Action will be logged. | | | |

*Table 26: Use case IMS014 - <Staff> Change server location*

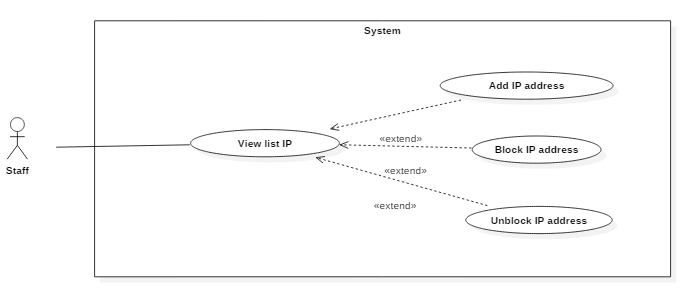
###### <Staff> View IP address

 Figure 11: <Staff> View IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS012 | | | |
| Use Case No. | IMS020 | **Use Case Version** | 2.0 |
| Use Case Name | View IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to view all IP address in the center   Goal:   * View and Search all IP Address in the system.   Triggers:   * Staff clicks “IP Address” tab on the Sidebar   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: IP address information will be showed. * Fail: IP address information will not be showed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “IP Address” tab on the Sidebar | Navigate to View IP information page which contains:   * IP Address: label * Status: link * Gateway: label * Subnet mask: label * Status duration: label |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: Extend to Add IP Address.  Business Rules:   * The first, the last IP address and gateway are special IP addresses. It cannot be able to use. | | | |

Table 23: Use case IMS007 - <Staff> View IP Address

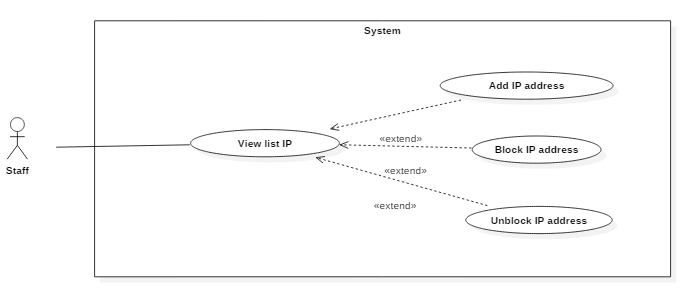
###### <Staff> Add IP address

 Figure 15: <Staff> Add IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Add IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to add range of IP address to the pool   Goal:   * Add information of IP address quickly.   Triggers:   * Staff clicks on “Add IP Address” on “IP Address” page   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: Staff enter the IP address, and the system automatically generate other IP address in the range. Staff click “Save” to save all of generated IP addresses to database * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Add IP Address” on “IP Address” page | System will display Add IP Address pop-up | | 2 | Input IP address and default gateway | After entering IP address range, system automatically return the subnet mask code | | 3 | Click “OK” | System generates all of IP address in the same range and return to previous “IP address” page |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Add IP Address” on “IP Address” page | System will display Add IP Address pop-up | | 2 | Input IP address and default gateway | After entering IP address range, system automatically return the subnet mask code | | 3 | Click “Cancel” | Return to view “IP Address” without changed information |   Exceptions: N/A.  Relationships: N/A.  Business Rules: N/A. | | | |

*Table 26: Use case IMS012 - <Staff> Add IP Address*

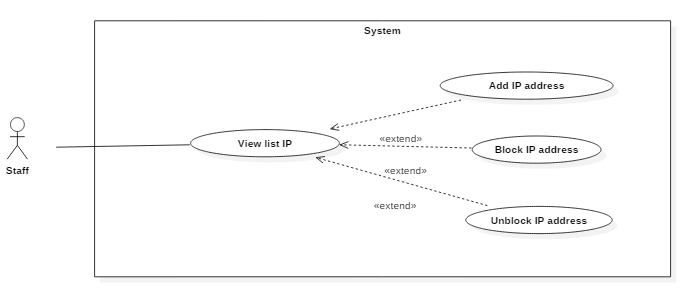
###### <Staff> Block IP address

 Figure 15: <Staff> Block IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS008 | | | |
| Use Case No. | IMS008 | **Use Case Version** | 2.0 |
| Use Case Name | Block IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to change IP address status from “Available” to “Blocked”   Goal:   * Change IP address status to “Blocked”. It can’t be used to assign until unblocked.   Triggers:   * Staff clicks “Block” link on a row on the table in “IP Address” page.   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: The status of IP address will be changed to “Blocked”. * Fail: The status of IP address will not be changed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Block” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “OK” | Return to previous page with updated status of selected IP address. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Block” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “Cancel” | Return to previous page with nothing changed. |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Only “blocked” status is able to be updated manually | | | |

*Table 26: Use case IMS012 - <Staff> Block IP Address*

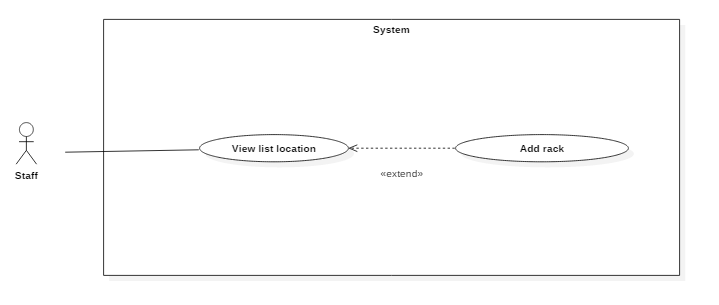
###### <Staff> Unblock IP address

 Figure 15: <Staff> Unblock IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS008 | | | |
| Use Case No. | IMS008 | **Use Case Version** | 2.0 |
| Use Case Name | Unblock IP Address | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to change IP address status from “Blocked” to “Available”   Goal:   * Selected IP address status will be changed to “Available”.   Triggers:   * Staff clicks “Unblock” link on a row on the table in “IP Address” page.   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: The status of IP address will be changed to “Available”. * Fail: The status of IP address will not be changed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Unblock” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “OK” | Return to previous page with updated status of selected IP address. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Unblock” link on a row on the table in “IP Address” page. | Confirmation pop-up will display | | 2 | Click “Cancel” | Return to previous page with nothing changed. |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Only “Blocked” status is able to be updated manually | | | |

*Table 26: Use case IMS012 - <Staff> Unblock IP Address*

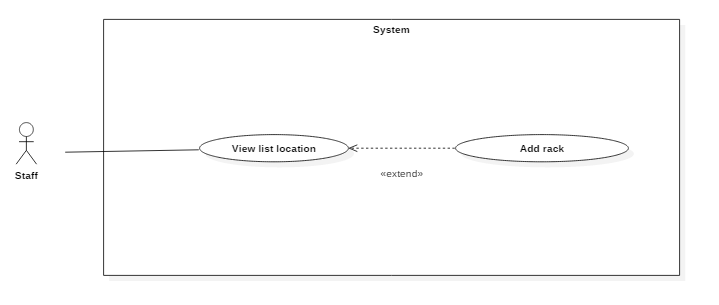
###### <Staff> View list location

 Figure 15: <Staff> View list location

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS012 | | | |
| Use Case No. | IMS021 | **Use Case Version** | 2.0 |
| Use Case Name | View list location | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to view list all location of the system   Goal:   * View location and filtered by rack name.   Triggers:   * Staff clicks on “Location” tab on the sidebar.   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: All location information will be showed. * Fail: N/A.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Location” tab on the sidebar. | Navigate to View location information page |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: Extend to Add Rack.  Business Rules:   * A rack has 42 location. * A server size can take 1,2 or 4 location. | | | |

Table 26: Use case IMS009 - <Staff> Approve request Add New Server

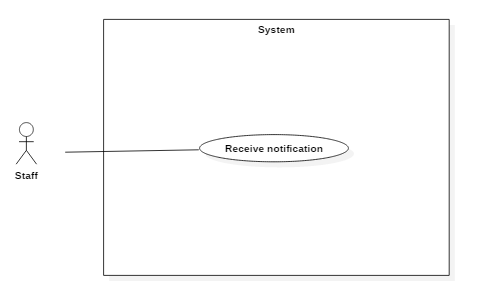
###### <Staff> Add rack

 Figure 15: <Staff> Add rack

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Add rack | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff add new rack information to database.   Goal:   * Add new location to the center quickly and easily manage   Triggers:   * Staff clicks on “Add rack” on “Location” page   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: Staff add new location successfully * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Add location” on “Location” page | System will display Popup | | 2 | Input rack name |  | | 3 | Click “OK” | System will automatically generate 42 location by each rack added and save to database |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Add location” on “Location” page | System will display Popup | | 2 | Input rack name |  | | 3 | Click “Cancel” | Return to previous view with nothing changed |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Input existed rack name | System shows message “Rack name is existed.” |   Relationships: N/A.  Business Rules:   * Rack name is ruled by the data center | | | |

*Table 26: Use case IMS013 - <Staff> Add rack*

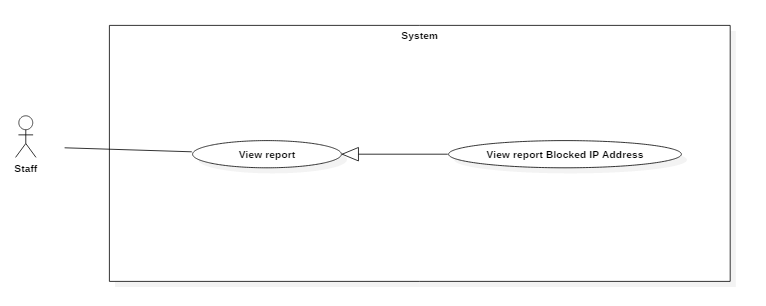
###### <Staff> Receive notification

 Figure 11: <Staff> Receive notification

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS013 | | | |
| Use Case No. | IMS013 | **Use Case Version** | 2.0 |
| Use Case Name | Receive Notification | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to receive notification.   Goal:   * View new request from customer.   Triggers:   * Staff clicks on a bell symbol on the header of website   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: Staff can view new request fast * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on a bell symbol on the header of website | List of new notification will be scrolled down. | | 2 | Staff clicks on an item in this list | Redirect to appropriate request detail. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on a bell symbol on the header of website | List of new notification will be scrolled down. | | 2 | Staff clicks on “View All” notification | Redirect to list all notification. Unread notification will be highlighted. |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Each role will receive different content of notification * Only Staff who is working in current shift can be able to receive notification. Other Staffs don’t receive notification, but they can check new requests by accessing to request list. | | | |

Table 23: Use case IMS015 - <Staff> Receive notification

###### <Staff> View report Blocked IP Address

 Figure 15: <Staff> View report Blocked IP Address

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS014 | | | |
| Use Case No. | IMS014 | **Use Case Version** | 2.0 |
| Use Case Name | View report Blocked IP Address | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Staff.   Summary:   * This use case allows Staff to view report related to blocked IP address.   Goal:   * View IP address which was block and still be blocked.   Triggers:   * Staff clicks “Report” tab on the sidebar   Preconditions:   * Staff must login into the system with role Staff.   Post Conditions:   * Success: Report of blocked IP addresses is showed * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Report” tab on the sidebar  Report” link on the panel. | Redirect to “Blocked IP report” page.  List all blocked IP address will be displayed |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Staff can view report block IP address to observe which IP address is blocked for a long time. * This page is only for view. If Staff want to unblock an IP address, he must access “IP Address” page. | | | |

Table 26: Use case IMS0010 - <Staff> View report Blocked IP Address

###### <Staff> View list task

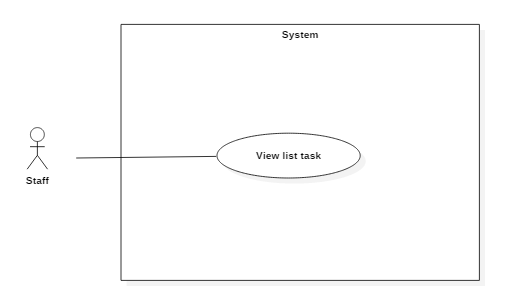


Figure 19: <Staff> View list task

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | View list task | | |
| Author | Lê Thị Thu Hà | | |
| Date | 22/01/2016 | **Priority** | medium |
| Actor: Staff  Summary:   * This use case allows Staff to view his tasks.   Goal:   * View all of tasks and its status.   Triggers:   * Staff clicks on “Task” tab on the sidebar   Preconditions:   * Staff must login into the system with role Staff. * Staff was assigned this task.   Post Conditions:   * Success: Staff can see all of his tasks * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks on “Task” tab on the sidebar | Navigate to “Task” page. List of this staff’s tasks are showed | | 2 | Staff views and searches by task status | Appropriate values are displayed |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: Extend to View daily schedule.  Business Rules:   * Staff in the same group and Shift Manager can assign task to Staff. * Only when task status is “Doing”, staff can be able to edit it. | | | |

*Table 29: Use case IMS011 - <Staff> View list task*

###### <Staff> Accept task

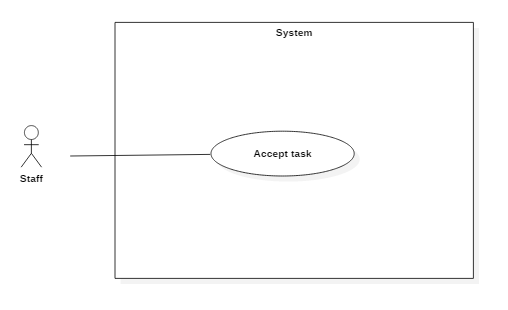


Figure 19: <Staff> Accept task

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Accept task | | |
| Author | Lê Thị Thu Hà | | |
| Date | 22/01/2016 | **Priority** | medium |
| Actor: Staff.  Summary:   * This use case allows Staff to accept task, and then he will be able to process his task.   Goal:   * Task status is changed from “Waiting” to “Doing”. Staff can be able to edit this request.   Triggers:   * Staff clicks “Accept task” link on request detail page   Preconditions:   * Staff must login into the system with role Staff. * Staff was assigned this task.   Post Conditions:   * Success: Staff can be able to process this request. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Accept task” link on request detail page | Task status will be changed from “Waiting” to “Doing” |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Staff have to click “Accept task” to let Staff know that he has started to process the request | | | |

*Table 29: Use case IMS011 - <Staff> Accept task*

###### <Staff> Confirm task status

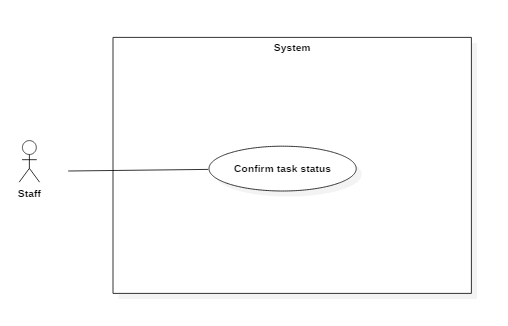
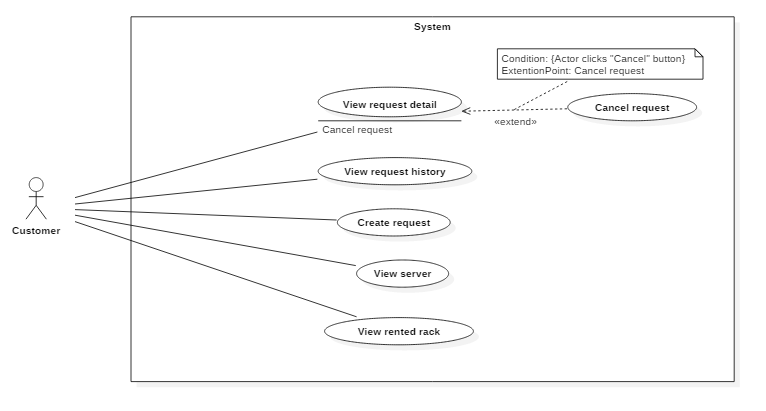


Figure 19: <Staff> Confirm task status

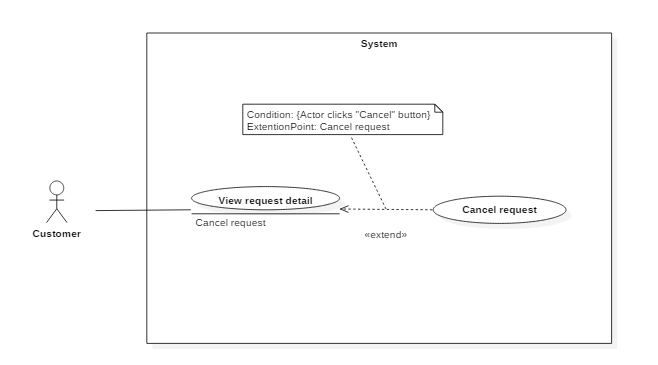
|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Confirm task status | | |
| Author | Lê Thị Thu Hà | | |
| Date | 22/01/2016 | **Priority** | medium |
| Actor: Staff.  Summary:   * This use case allows Staff confirm his current task status   Goal:   * Task status will be changed to “Not Finished” or “Completed”.   Triggers:   * If Staff still not finish his task before he finishes his work, he have to click “Not Finish” link in request detail page. If Staff finished the request by clicking on “Complete” button, his task status will be change to “Completed”.   Preconditions:   * Staff must login into the system with role Staff. * Staff was assigned this task.   Post Conditions:   * Success: Task status is changed to “Not Finished” or “Completed” * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staffclicks on “Not Finish” link in request detail page | Pop-up will display to confirm and note the reason. | | 2 | Staffclicks on “OK” button | * Task status will be changed to “Not Finished”. Staff can’t edit this request anymore * Staff who assigned task to Staff will receive notification about not finished request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staffclicks on “Not Finish” link in request detail page | Pop-up will display to confirm and note the reason. | | 2 | Staffclicks on “Cancel” button | Redirect to previous request detail page with nothing changed. |  |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staffclicks on “Complete” button in request detail page | * Task status is changed to “Completed” |   Exceptions: N/A.  Relationships: N/A.  Business Rules:   * System will push notification ends to staff who is assigned to process request in current shift. Notification is pushed 30 minutes before the current shift. * If Staff is assigned tasks but can’t finish it on time before he stops working, he must report his work status to Staff. If he not follow this rule, he’ll be punished. | | | |

*Table 29: Use case IMS011 - <Staff> Confirm task status*

##### <Customer> Overview Use Case

. Figure 17: <Customer> Customer Overview Use Case

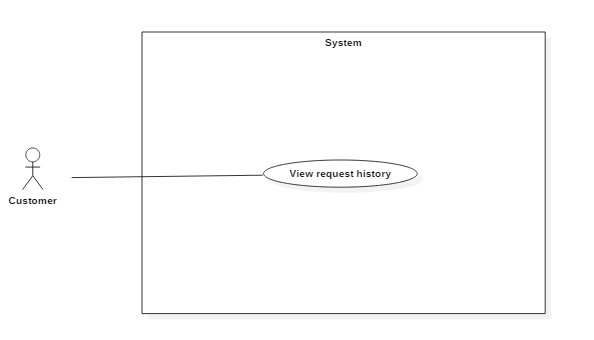
###### <Customer> View request detail

 Figure 18: <Customer> View request details

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS001 | | | |
| Use Case No. | IMS001 | **Use Case Version** | 2.0 |
| Use Case Name | View request detail | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Customer   Summary:   * This use case allows Customer to view request detail.   Goal:   * Customer can access to appropriate request detail.   Triggers:   * Customer clicks view notification or “Request” page in sidebar.   Precondition:   * Customer must login to the system with Customer role at right shift.   Post Conditions:   * Success: Customer can view request detail * Fail: Nothing will be created. Show message error with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks “Request” tab in sidebar | List of requests will be displayed. New request is placed on the first line of the table |   Alternative Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on notification in header | Navigate to appropriate request detail |   Exceptions: N/A  Relationships: Extend to Cancel request  Business Rules:   * Customer can only view his request. | | | |

Table 28: Use case IMS010 - <Customer> View request detail

###### <Customer> View Request History

 Figure 19: <Customer> View Request History

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | View Request History | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customers to view history of their requests.   Goal:   * Customer can view history of requests.   Triggers:   * Customer clicks on “Request History” in sidebar.   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: List of history of requests will be displayed. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Request History” in sidebar. | List of history of requests will be displayed |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules: N/A | | | |

Table 29: Use case IMS011 - <Customer> View Request History

###### <Customer> Create request “Add Server”



Figure 19: <Customer> Create request “Add Server”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Add Server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to add new server into data center.   Goal:   * Add information of new server quickly.   Triggers:   * Customer clicks on “Create Request” 🡪 “Add Server”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Add Server” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Add Server” | “Add Server” request detail will be displayed | | 2 | Input data in fields of Request Add Server Popup. Then customer clicks “Add” button on the pop-up | Server information will be displayed in the table “Servers” of “Add server” request detail. | | 3 | Customer clicks “Sent request” | Redirect to “Add Server” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Add Server” | “Add Server” request detail will be displayed | | 2 | Input data in fields of Request Add Server Popup. Then customer clicks “Add” button on the pop-up | Server information will be displayed in the table “Servers” of “Add server” request detail. | | 3 | Customer clicks “Edit” on a row of the table. | “Edit” pop-up displays for customer to edit. | | 4 | Customer clicks “OK” on “Edit” pop-up | Updated server information will be displayed in the table of “Add Server” request | | 5 | Customer clicks “Sent request” | Redirect to “Add Server” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |  |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Make request” on the panel and select “Add New Server” | System will display Request Add New Server Popup | | 2 | Input data in fields of Request Add Server Popup. Then customer clicks “Add” button on the pop-up | Server information will be displayed in the table “Servers” of “Add server” request detail. | | 3 | Customer clicks “Delete” on a row of the table. | Pop-up displays to confirm “Delete” action. | | 4 | Customer clicks “OK” on pop-up “Delete” | Return to previous view, the selected server in the table will be removed. | | 5 | Customer clicks “Sent request” | Redirect to “Add Server” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t input “Appointment Time” field | Show message “Appointment Time is required. Please select time to go to the center.” | | 2 | Customer don’t add Server | Show message “Please add at least a server.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. | | | |

Table 29: Use case IMS011 - <Customer> Create request “Add Server”

###### <Customer> Create request “Bring Server Away”

 Figure 19: <Customer> Create request “Bring Server Away”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to bring his server away.   Goal:   * Bring his server away from data center successfully.   Triggers:   * Customer clicks on “Create Request” 🡪 “Bring Server Away”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Bring Server Away” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Bring Server Away” | “Bring Server Away” request detail will be displayed.  All servers of customer are displayed in the table | | 2 | Customer select server he wants to bring away from data center and input “Appointment Time” |  | | 3 | Customer clicks “Sent request” | Redirect to “Bring Server Away” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Bring Server Away” | “Bring Server Away” request detail will be displayed.  All servers of customer are displayed in the table | | 2 | Customer selects his rented racks by clicking on drop down list | Servers placed in selected rack will be displayed in the table. | |  | Customer select server he wants to bring away from data center and input “Appointment Time” |  | | 3 | Customer clicks “Sent request” | Redirect to “Bring Server Away” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t set “Appointment Time” | Show message “Appointment Time is required. Please select time to go to the center.” | | 2 | Customer don’t select server | Show message “Please choose at least one server.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. | | | |

Table 29: Use case IMS011 - <Customer> Create request “Bring Server Away”

###### <Customer> Create request “Assign IP Address”

 Figure 19: <Customer> Create request “Assign IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to add assign IP address.   Goal:   * Rent IP address for his server successfully.   Triggers:   * Customer clicks on “Create Request” 🡪 “Assign IP Address”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Assign IP Address” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Assign IP Address” | “Assign IP Address” request detail will be displayed. | | 2 | Customer select server that he wants to assign IP by drop down list |  | | 3 | Customer select number of IP he wants to rent |  | | 3 | Customer clicks “Sent request” | Redirect to “Assign IP Address” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t select “Server” | Show message “Please select your server.” | | 2 | Customer don’t select “Number of IP Address” | Show message “Please select number of IP Address you want to rent.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. * Customer can rent 10 IP Addresses for each request “Assign IP Address” * Basically, new IP Address will be in the same range with Default IP Address | | | |

Table 29: Use case IMS011 - <Customer> Create request “Assign IP Address”

###### <Customer> Create request “Change IP Address”

 Figure 19: <Customer> Create request “Change IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to change IP address.   Goal:   * Change his rented IP address successfully.   Triggers:   * Customer clicks on “Create Request” 🡪 “Change IP Address”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Change IP Address” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Change IP Address” | “Change IP Address” request detail will be displayed. | | 2 | Customer select server that he wants to change IP by drop down list | IP addresses of selected server will be displayed in a table. Default IP Address is highlighted. | | 3 | Customer select IP Address he wants to change |  | | 3 | Customer clicks “Sent request” | Redirect to “Change IP Address” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t select “Server” | Show message “Please select your server.” | | 2 | Customer don’t select IP Address | Show message “Please select at least one IP Address.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. * Basically, new IP Address will be in the same range with Default IP Address | | | |

Table 29: Use case IMS011 - <Customer> Create request “Change IP Address”

###### <Customer> Create request “Return IP Address”

 Figure 19: <Customer> Create request “Return IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to return IP address   Goal:   * Return IP address to data center successfully.   Triggers:   * Customer clicks on “Create Request” 🡪 “Return IP Address”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Return IP Address” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Return IP Address” | “Return IP Address” request detail will be displayed. | | 2 | Customer select server that he wants to return IP by drop down list | IP addresses of selected server will be displayed in a table. Default IP Address is highlighted. | | 3 | Customer select IP Address he wants to return |  | | 3 | Customer clicks “Sent request” | Redirect to “Return IP Address” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t select “Server” | Show message “Please select your server.” | | 2 | Customer don’t select “IP Address” | Show message “Please select at least one IP Address.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. * Basically, new IP Address will be in the same range with Default IP Address | | | |

*Table 29: Use case IMS011 - <Customer> Create request “Return IP Address”*

###### <Customer> Create request “Rent Rack”

 Figure 19: <Customer> Create request “Rent Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to rent rack.   Goal:   * Rent rack of data center successfully.   Triggers:   * Customer clicks on “Create Request” 🡪 “Rent Rack”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Rent Rack” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Rent Rack” | “Rent Rack” request detail will be displayed. | | 2 | Customer selects number of racks he wants to rent |  | | 3 | Customer clicks “Sent request” | Redirect to “Rent Rack” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t select “Number of Rack” | Show message “Please select number of rack.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. * Maximum number of rack that customer can rent per request is 10. | | | |

Table 29: Use case IMS011 - <Customer> Create request “Rent Rack”

###### <Customer> Create request “Return Rack”

 Figure 19: <Customer> Create request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Create request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 23/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to return rack.   Goal:   * Return rack to data center successfully.   Triggers:   * Customer clicks on “Create Request” 🡪 “Return Rack”   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Customer send request “Return Rack” successfully. * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Create Request” 🡪 “Return Rack” | “Return Rack” request detail will be displayed. All rented rack of this customer will be displayed. | | 2 | Customer selects rack he wants to return |  | | 3 | Customer clicks “Sent request” | Redirect to “Return Rack” request detail page. Request status is “Pending”  Request is sent and system will send notification to current Shift Head. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Cause | System Response | | 1 | Customer don’t select “Rack” | Show message “Please select at least one rack.” |   Relationships: N/A.  Business Rules:   * Customer can add one or more new servers in one request. * All rack that customer’s using will be displayed. Rack that still has servers can’t selected. | | | |

Table 29: Use case IMS011 - <Customer> Create request “Return Rack”

###### <Customer> Cancel request “Add Server”

 Figure 19: <Customer> Cancel request “Add server”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Add server” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request Add Server which was sent.   Goal:   * Cancel request “Add Server” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Add Server” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the new server information which customer sent will be deleted out of database.  The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Add Server” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | The new server information which customer sent will be deleted out of database.  The status of this request in database will be changed.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Add Server” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending”, “Waiting” and “Processing”. | | | |

*Table 29: Use case IMS011 - <Customer> Cancel request “Add Server”*

###### <Customer> Cancel request “Bring Server Away”

 Figure 19: <Customer> Cancel request “Bring Server Away”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Bring Server Away” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request “Bring Server Away” which was sent.   Goal:   * Cancel request “Bring Server Away” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Bring Server Away” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the new server information which customer sent will be deleted out of database. The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Bring Server Away” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | The server information which customer sent will be rolled back, server status returns to “Running”.  The status of this request in database will be changed to “Cancel”.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Bring Server Away” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending”, “Waiting” and “Processing”. | | | |

*Table 29: Use case IMS011 - <Customer> Cancel request “Bring Server Away”*

###### <Customer> Cancel request “Assign IP Address”

 Figure 19: <Customer> Cancel request “Assign IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Assign IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request “Assign IP Address” which was sent.   Goal:   * Cancel request “Assign IP Address” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Assign IP Address” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the data of assign IP Address which customer sent will be deleted out of database.  The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Assign IP Address” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | The status of this request in database will be changed to “Cancelled”.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Assign IP Address” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending” and “Processing”. | | | |

*Table 29: Use case IMS011 - <Customer> Cancel request “Assign IP Address”*

###### <Customer> Cancel request “Change IP Address”

Figure 19: <Customer> Cancel request “Change IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Change IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request “Change IP Address” which was sent.   Goal:   * Cancel request “Change IP Address” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Change IP Address” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the data of change IP Address which customer sent will be deleted out of database.  The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Assign IP Address” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | Selected IP address status will be rolled back to “Used”.  The status of this request in database will be changed to “Cancelled”.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Change IP Address” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending” and “Processing”. | | | |

*Table 29: Use case IMS011 - <Customer> Cancel request “Change IP Address”*

###### <Customer> Cancel request “Return IP Address”

 Figure 19: <Customer> Cancel request “Return IP Address”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Return IP Address” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request “Return IP Address” which was sent.   Goal:   * Cancel request “Return IP Address” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Return IP Address” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the data of return IP Address which customer sent will be deleted out of database.  The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Assign IP Address” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | Selected IP address status will be rolled back to “Used”.  The status of this request in database will be changed to “Cancelled”.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Return IP Address” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending” and “Processing”. | | | |

*Table 29: Use case IMS011 - <Customer> Cancel request “Return IP Address”*

###### <Customer> Cancel request “Rent Rack”

 Figure 19: <Customer> Cancel request “Rent Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Rent Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request “Rent Rack” which was sent.   Goal:   * Cancel request “Rent Rack” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Rent Rack” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the data of request “Rent Rack” which customer sent will be deleted out of database.  The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Rent Rack” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | The status of this request in database will be changed to “Cancelled”.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Rent Rack” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending” and “Processing”. | | | |

Table 29: Use case IMS011 - <Customer> Cancel request “Rent Rack”

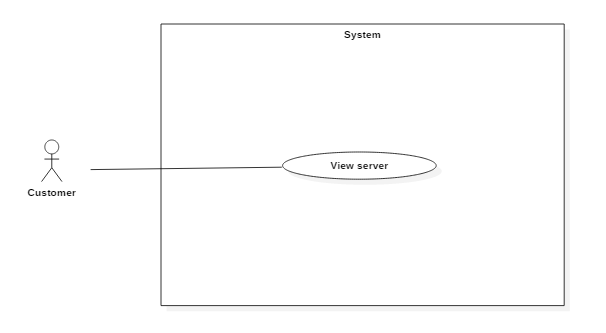
###### <Customer> Cancel request “Return Rack”

 Figure 19: <Customer> Cancel request “Return Rack”

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Cancel request “Return Rack” | | |
| Author | Lê Thị Thu Hà | | |
| Date | 24/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows customer to cancel request “Return Rack” which was sent.   Goal:   * Cancel request “Return Rack” which was sent.   Triggers:   * Customer clicks on “Cancel Request” button on “Return Rack” request detail.   Preconditions:   * Customer must login into the system with role Customer. * The request which want to cancel was sent to data center.   Post Conditions:   * Success: Shift Head will receive notification about cancel request.   At the same time, the data of request “Return Rack” which customer sent will be deleted out of database.  The status of this request in database will be changed.   * Fail: Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Return Rack” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “OK” button | Selected rack status will be rolled back to “Rented”  The status of this request in database will be changed to “Cancelled”.  Shift Head will receive notification about cancel request. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Cancel Request” button on “Return Rack” request detail. | System will display confirmation pop-up with text “Are you sure to CANCEL your request?” | | 2 | Customer clicks on “Cancel” button | Return to previous request detail |   Exceptions: N/A.  Relationships: Extended by View request detail.  Business Rules:   * Customer can cancel his request when its status is “Pending” and “Processing”. | | | |

Table 29: Use case IMS011 - <Customer> Cancel request “Return Rack”

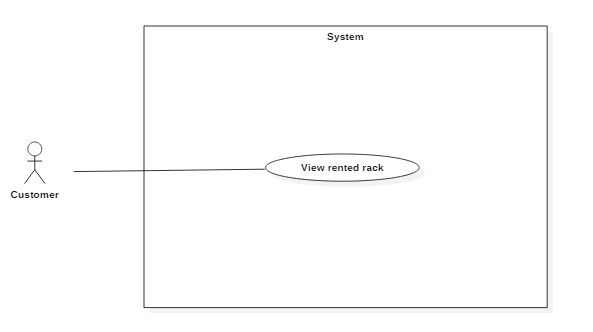
###### <Customer> View server

 Figure 19: <Customer> View server

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS007 | | | |
| Use Case No. | IMS007 | **Use Case Version** | 2.0 |
| Use Case Name | View server | | |
| Author | Huỳnh Lâm Hà Tiên | | |
| Date | 20/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows Customer to view list all server information of customers.   Goal:   * View server information.   Triggers:   * Customer clicks on “Server” tab in the sidebar.   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Server information will be showed. * Fail: Server information will not be showed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Server” tab in the sidebar. | Servers of customer will display. |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Identity of server in IMS system is default IP. | | | |

Table 29: Use case IMS011 - <Customer> View server

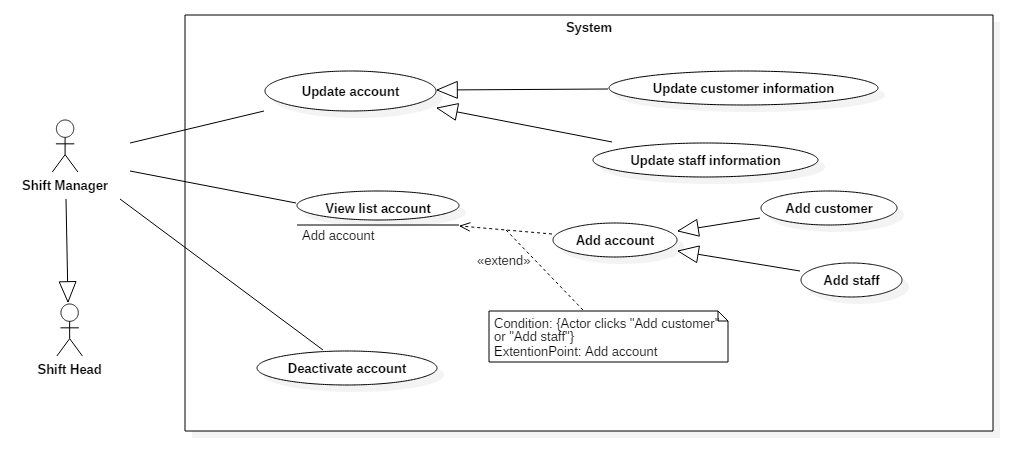
###### <Customer> View rented rack

 Figure 19: <Customer> View rented rack

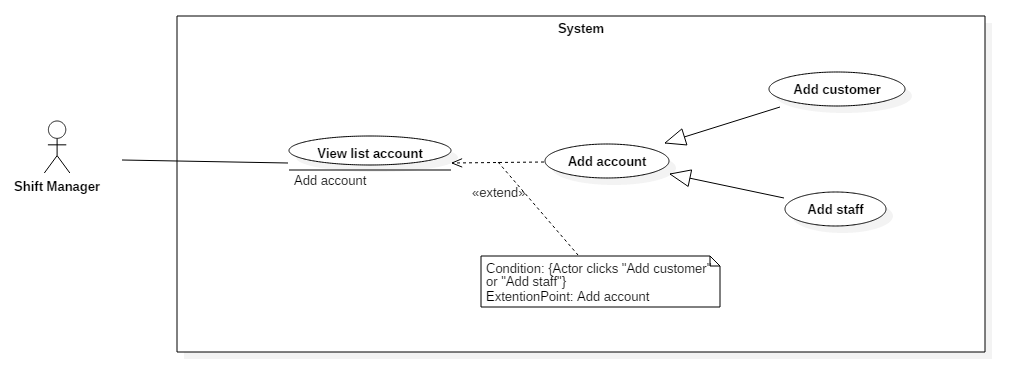
|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS007 | | | |
| Use Case No. | IMS007 | **Use Case Version** | 2.0 |
| Use Case Name | View rented rack | | |
| Author | Huỳnh Lâm Hà Tiên | | |
| Date | 20/01/2016 | **Priority** | medium |
| Actor:   * Customer.   Summary:   * This use case allows Customer to view list of his rented racks.   Goal:   * Customer can view his rented racks.   Triggers:   * Customer clicks on “Server” tab in the sidebar.   Preconditions:   * Customer must login into the system with role Customer.   Post Conditions:   * Success: Server information will be showed. * Fail: Server information will not be showed. Show error message with specified content.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Customer clicks on “Rack” tab in the sidebar. | Rack that customer has rented will display. |   Alternative Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules: | | | |

Table 29: Use case IMS011 - <Customer> View rented rack

##### <Shift Manager> Overview Use Case



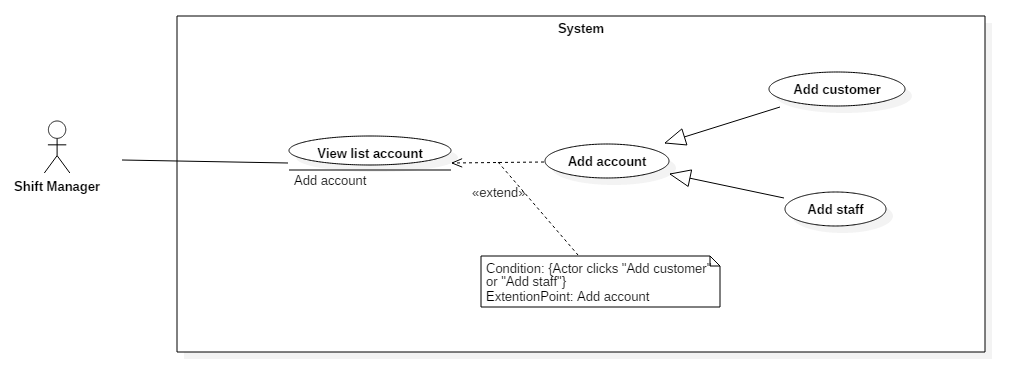
###### <Shift Manager> View list account

*Figure5: <Shift Manager> View list account*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS005 | | | |
| Use Case No. | IMS005 | **Use Case Version** | 2.0 |
| Use Case Name | View list account | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Manager.   Summary:   * This use case allows Shift Manager to view staff information.   Goal:   * View staff information.   Triggers:   * Shift Manager clicks on “Account” tab in sidebar   Preconditions:   * Shift Manager must login into the system with role Shift Manager.   Post Conditions:   * Success: Shift Manager can view all accounts * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks on “Account” tab in sidebar | Systems shows all accounts in the system |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: Extend to Add customer and Add staff  Business Rules: N/A. | | | |

Table5: Use case IMS005 - <Shift Manager> View list account

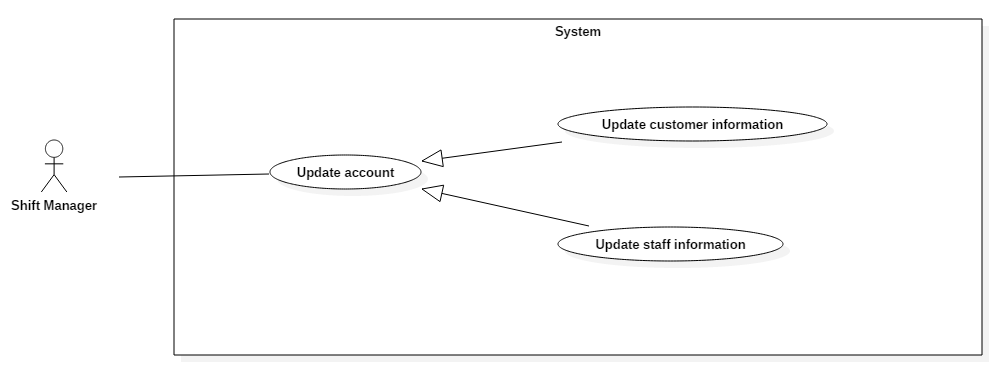
###### <Shift Manager> Add Customer

*Figure2: <Shift Manager> Add customer*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS002 | | | |
| Use Case No. | IMS002 | **Use Case Version** | 2.0 |
| Use Case Name | Add Customer | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Manager.   Summary:   * This use case allows Shift Manager to add customer information.   Goal:   * Customer information saved successfully to the system   Triggers   * Shift Manager clicks “Add customer” button in “Account” page.   Preconditions:   * Shift Manager must login into the system with role Shift Manager.   Post Conditions:   * Success: Add new customer information successfully. * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks “Add customer” button in “Account” page. | System shows pop-up to add new customer information | | 2 | Input customer information |  | | 3 | Click “OK” button | New customer information will be saved.  Redirect to previous “Account” page |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks “Add customer” button in “Account” page. | System shows pop-up to add new customer information | | 2 | Input customer information |  | | 3 | Click “Cancel” button | Redirect to previous “Account” page with nothing changed. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Shift Manager forgot to input required field (marked with ‘\*’) | System shows message “This field is required. Please input.” |   Relationships:   * Extend to View list account   Business Rules:   * An email address must be validated by this regular expression:   /^([a-z0-9\_\.-]+)@([\da-z\.-]+)\.([a-z\.]{2,6})$/   * Password must be encrypted before save to database. * Account information will be sent to customer via his email. | | | |

Table2: Use case IMS002 - <Shift Manager> Add customer.

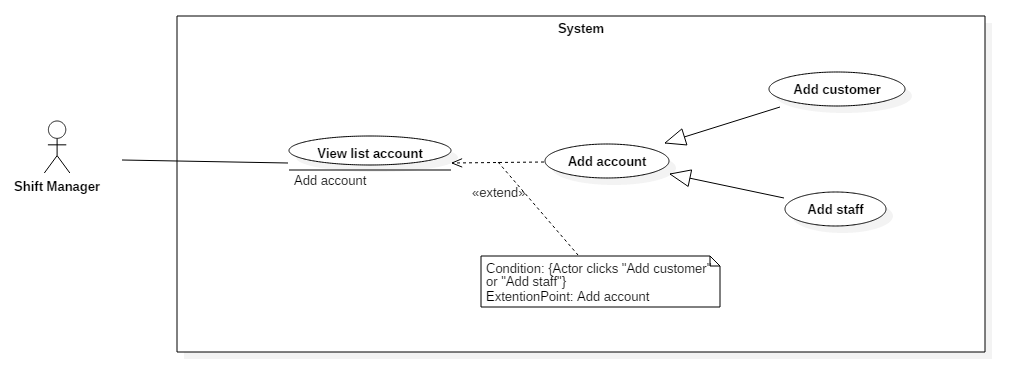
###### <Shift Manager> Update customer

*Figure3: <Shift Manager> Update customer*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS003 | | | |
| Use Case No. | IMS003 | **Use Case Version** | 2.0 |
| Use Case Name | Update customer | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Manager.   Summary:   * This use case allows Shift Manager to update customer information.   Goal:   * Update customer information.   Triggers:   * Shift Manager clicks on “Edit” link on a row of Account table in “Account” page   Preconditions:   * Shift Manager must login into the system with role Shift Manager.   Post Conditions:   * Success: Update customer information successfully. * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks on “Edit” link on a row of Account table in “Account” page | “Edit” pop-up displays | | 2 | Edit customer information |  | | 3 | Click “OK” | Customer information will be updated, then system redirects to previous “Account” page. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks on “Edit” link on a row of Account table in “Account” page | “Edit” pop-up displays | | 2 | Edit customer information |  | | 3 | Click “Cancel” | System redirects to previous “Account” page with nothing changed |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Edit with required fields are blanked | Show message “You have to input to required field.” |   Relationships: Extended by View list account  Business Rules:   * Only Shift Manager can edit customer information | | | |

Table3: Use case IMS003 - <Shift Manager> Update customer.

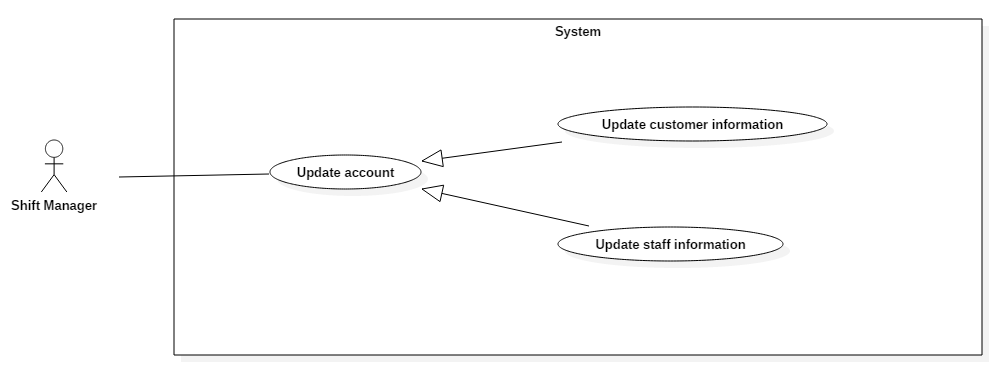
###### <Shift Manager> Add Staff

*Figure6: <Shift Manager> Add staff*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS002 | | | |
| Use Case No. | IMS002 | **Use Case Version** | 2.0 |
| Use Case Name | Add staff | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Manager.   Summary:   * This use case allows Shift Manager to add staff information.   Goal:   * Staff information saved successfully to the system   Triggers   * Shift Manager clicks “Add staff” button in “Account” page.   Preconditions:   * Shift Manager must login into the system with role Shift Manager.   Post Conditions:   * Success: Add new staff information successfully. * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks “Add staff” button in “Account” page. | System shows pop-up to add new staff information | | 2 | Input customer information |  | | 3 | Click “OK” button | New staff information will be saved.  Redirect to previous “Account” page |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks “Add staff” button in “Account” page. | System shows pop-up to add new customer information | | 2 | Input customer information |  | | 3 | Click “Cancel” button | Redirect to previous “Account” page with nothing changed. |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Shift Manager forgot to input required field (marked with ‘\*’) | System shows message “This field is required. Please input.” |   Relationships:   * Extend to View list account   Business Rules:   * An email address must be validated by this regular expression:   /^([a-z0-9\_\.-]+)@([\da-z\.-]+)\.([a-z\.]{2,6})$/   * Password must be encrypted before save to database. * A group has 3 members, a shift head (kind of staff, but higher authority), and two staff. If a group already has 3 active members, new staff can’t be added to this group. * Account information will be sent to staff via his email. | | | |

Table6: Use case IMS006 - <Shift Manager> Add staff.

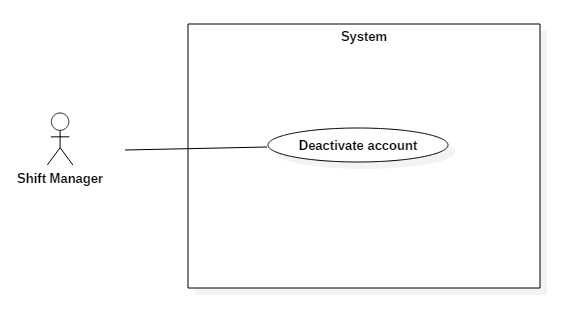
###### <Shift Manager> Update Staff

*Figure7: <Shift Manager> Update staff*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS003 | | | |
| Use Case No. | IMS003 | **Use Case Version** | 2.0 |
| Use Case Name | Update staff | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Manager.   Summary:   * This use case allows Shift Manager to update staff information.   Goal:   * Update staff information.   Triggers:   * Shift Manager clicks on “Edit” link on a row of Account table in “Account” page   Preconditions:   * Shift Manager must login into the system with role Shift Manager.   Post Conditions:   * Success: Update staff information successfully. * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks on “Edit” link on a row of Account table in “Account” page | “Edit” pop-up displays | | 2 | Edit staff information |  | | 3 | Click “OK” | Staff information will be updated, then system redirects to previous “Account” page. |   Alternatives Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks on “Edit” link on a row of Account table in “Account” page | “Edit” pop-up displays | | 2 | Edit staff information |  | | 3 | Click “Cancel” | System redirects to previous “Account” page with nothing changed |   Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Edit with required fields are blanked | Show message “You have to input to required field.” |   Relationships: Extended by View list account  Business Rules:   * Only Shift Manager can edit staff information * A group has 3 members, a shift head (kind of staff, but higher authority), and two staff. If a group already has 3 active members, new staff can’t be added to this group. | | | |

Table7: Use case IMS007 - <Shift Manager> Update staff.

###### <Shift Manager> Deactivate account

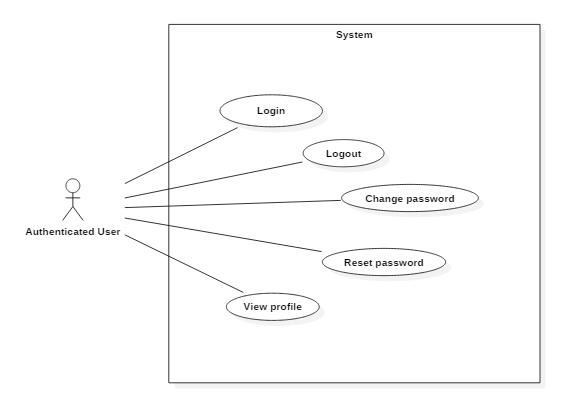


*Figure8: <Shift Manager> Deactivate account*

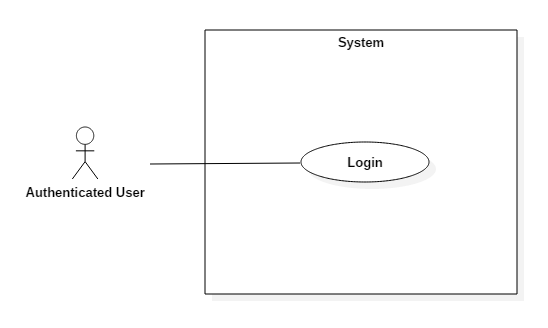
|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS008 | | | |
| Use Case No. | IMS008 | **Use Case Version** | 2.0 |
| Use Case Name | Deactivate account | | |
| Author |  | | |
| Date | 18/01/2016 | **Priority** | medium |
| Actor:   * Shift Manager.   Summary:   * This use case allows Shift Manager to change status of user to “Deactivate”   Goal:   * Deactivate account successfully.   Triggers:   * Shift Manager clicks on “Change Status” link in “Account detail” page   Preconditions:   * Shift Manager must login into the system with role Shift Manager.   Post Conditions:   * Success: Updated account will have status “Deactivate” * Fail: System shows error message.   Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Shift Manager clicks on “Change status” at each staff in Shift Manager Page. | The system will display the table of staff with column Status which can edit. | | 2 | Shift Manager clicks on “Save” button in Shift Manager Page. | The new status will be saved into database and the new status will be displayed on server table. |   Alternatives Scenario: N/A  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to database fail | Show message “Error, please try again!” |   Relationships: N/A.  Business Rules:   * Shift Manager can activate the account that had deactivated. But in the case that old customer wants to use data center’s service again, Shift Manager will not reuse the old account. He have to create new account. | | | |

Table8: Use case IMS008 - <Shift Manager> Deactivate account

##### <Authenticated User> Overview Use Case



###### <Authenticated User> Login

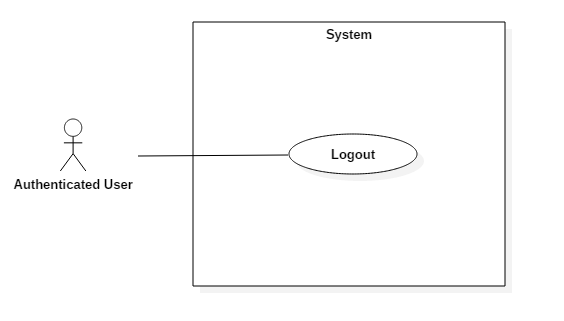


*Figure9: <Authenticated User > login*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS009 | | | |
| Use Case No. | IMS009 | **Use Case Version** | 2.0 |
| Use Case Name | Login | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Authenticated user.   Summary:   * This use case allows authenticated user to login.   Goal:   * Authenticated user can login to the system.   Triggers:   * Authenticated user clicks on “Login” button   Preconditions:   * Authenticated user must login into the system with role shift manager, shift head, staff or customer.   Post Conditions:   * Success: User logins successfully and redirected to home page   - Fail: System shows error message.  Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Authenticated user goes to login view. | System requires identity information from Authenticated user:   * Authenticated user code: free text input. * Password: free text input. | | 2 | Authenticated user inputs information. |  | | 3 | Authenticated user sends login command to system. | If authenticated user logins successfully, he will login system his role.  If he logins fail, system shows error message “Invalid username or password”. |   Alternative Scenario: N/A  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Authenticated user not inputs to “Username” field | System shows error message “Username is required.” | | 2 | Authenticated user not inputs to “Password” field | System shows error message “Password is required.” | | 3 | Authenticated user inputs wrong username | System shows error “Username or Password is incorrect. Please try again!” | | 4 | Authenticated user inputs wrong password | System shows error “Username or Password is incorrect. Please try again!” | | 5 | Account is deactivated | System shows error message “Your account is deactivated. Please contact to the administrator for more detail.” |   Relationships: N/A.  Business Rules:   * Only active account can be able to login into the system * Password field displayed “\*”. * Encrypt password before being send to server. * After authenticated user login to system successfully, he will been redirected to specified view based on their role on the system: shift manager/shift head/staff or customer. * If role is “Shift Manager”, ”Shift Head” or ”Staff”, the system will display to dashboard view. * If role is “Staff”, the system will display to Staff Dashboard view | | | |

Table9: Use case IMS009 - <Authenticated User> Login.

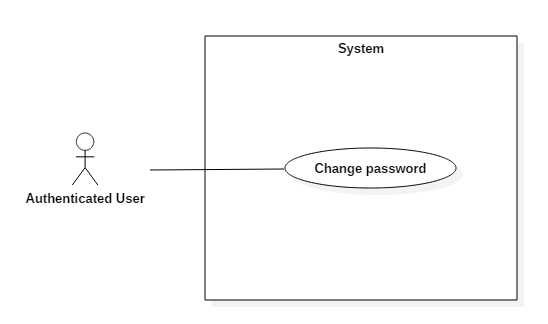
###### <Authenticated User> Logout

*Figure10: < Authenticated User > Logout*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS010 | | | |
| Use Case No. | IMS010 | **Use Case Version** | 2.0 |
| Use Case Name | Logout | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Authenticated user.   Summary:   * This use case allows authenticated user to logout.   Goal:   * Logout.   Triggers:   * Authenticated user clicks on “Logout” button on the top of the website.   Preconditions:   * Authenticated user must login into the system with authenticated role.   Post Conditions:   * Success: User logout successfully and cannot access to the website until he login again.   - Fail: N/A.  Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Authenticated user sends logout command. | Authenticated user exits from system. |   Alternative Scenario: N/A  Exceptions: N/A  Relationships: N/A.  Business Rules: N/A | | | |
|  | | | |

Table10: Use case IMS010 - < Authenticated User> Logout.

###### <Authenticated User> Change Password

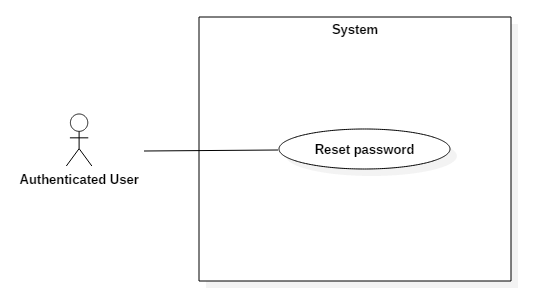


*Figure11: < Authenticated User > Change password*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS011 | | | |
| Use Case No. | IMS011 | **Use Case Version** | 2.0 |
| Use Case Name | Change Password | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Authenticated user.   Summary:   * This use case allows authenticated user to change password.   Goal:   * Change password successfully.   Triggers:   * Authenticated user clicks on “Change Password” link on “View Profile” page.   Preconditions:   * Authenticated user must login into the system with authenticated role.   Post Conditions:  - Success: All data will be saving successfully and show success message “Success! You’ve changed your password.”  - Fail: System shows error message.  Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Authenticated user clicks on “Change Password” link on “View Profile” page | Navigate to “Change Password” view | | 2 | Authenticated user inputs old password, new password and confirm again the new password |  | | 3 | Authenticated user sends login command to system. | If authenticated user logins successfully, current page will be redirected to previous “View Profile” page.  If he logins fail, system shows error message. |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | If authenticated user not inputs to “Password” field | System shows error “Password is required.” | | 2 | If authenticated user not inputs to “New Password” field | System shows error “New Password is required.” | | 3 | If authenticated user not inputs to “Confirm Password” field | System shows error “Confirm Password is required.” | | 4 | If authenticated user inputs wrong value to “Password” field | System shows error “Your password is wrong. Please try again!” | | 5 | If value of “New Password” and “Confirm Password” are different | System shows error “Confirmation is incorrect. Please try again!” |   Relationships: N/A.  Business Rules:   * “Password”, “New Password” and “Confirm Password” field displayed “\*”. * Encrypt password before being send to server. | | | |
|  | | | |

Table11: Use case IMS011 - < Authenticated User> Change password.

###### <Authenticated User> Reset password

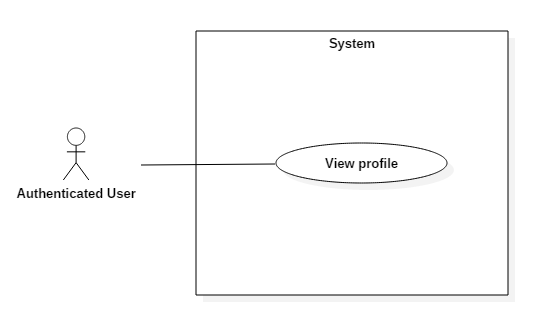


*Figure14: < Authenticated User > Reset password*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS014 | | | |
| Use Case No. | IMS014 | **Use Case Version** | 2.0 |
| Use Case Name | Reset password | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Authenticated user.   Summary:   * This use case allows authenticated user reset his password.   Goal:   * Reset password successfully and receive new password via email.   Triggers:   * Authenticated user clicks on “Reset password” link on login page.   Preconditions:   * User forgets his password.   Post Conditions:   * Success: System shows success message, and then customer can get new random password via his email.   - Fail: System shows error message.  Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Authenticated user clicks on “Reset password” link on login page | System shows success message “New password is sent to your email. Please check it.” |   Alternatives Scenario: N/A.  Exceptions: N/A.  Relationships: N/A.  Business Rules:   * Registered email of customer must be valid to be able to receive new password. If not, he has to contact directly to shift manager to update his email and get new password. * No one can reset password but the owner. New random password is only allocated via email. | | | |

Table14: Use case IMS014 - < Authenticated User> Reset password.

###### <Authenticated User> View profile



*Figure12: < Authenticated User > View profile*

|  |  |  |  |
| --- | --- | --- | --- |
| USE CASE – IMS012 | | | |
| Use Case No. | IMS012 | **Use Case Version** | 2.0 |
| Use Case Name | View Profile | | |
| Author | Lê Thị Thu Hà | | |
| Date | 18/01/2016 | **Priority** | Normal |
| Actor:   * Authenticated user.   Summary:   * This use case allows authenticated user to view his profile.   Goal:   * View personal information such as Phone, Email, Address and so on.   Triggers:   * Authenticated user clicks on “View Profile” button on scrolled-down panel on the top right of the website.   Preconditions:   * Authenticated user must login into the system with authenticated role.   Post Conditions:   * Success: User can enter to the “View Profile” page   - Fail: System shows error message.  Main Success Scenario:   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Authenticated user clicks on “View Profile” button | Navigate to “View Profile” page which contains:   * User name: label * Full name: label * Status: label * Phone: label * Email: label * Address: label * Identification: label * Edit Profile: button * Change Password: button |   Alternatives Scenario: N/A.  Exceptions:   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Connect to database fail | System shows message “Error happened. Try to connect again!” |   Relationships: N/A.  Business Rules:   * Each user can see his profile. * Shift manager is allowed to see and edit profile of all account in the system. * Shift head and staff can only see profile of customer. * No one can change password but the owner | | | |

Table12: Use case IMS012 - < Authenticated User> View profile.

## Software System Attribute

### Usability

#### Graphic User Interface

* Using language should be English.

#### Usability

* All users should need less than one training week to interact with website.

#### Installation

* Customer can deploy successfully and learn to configure, maintain the system within one day of training.
* The attached manual guide must be clear. User can read and do themselves without developer’s help.

### Reliability

* Information related to customer such as server’s upgraded information will be saved by each interaction

### Availability

* The website should be available 24 hours per day, 7 days per week.

### Security

* Only user who has account can access into System.
* Each role of user has a specific permission to interact with system.
* System always checks authorization before process user’s request.

### Maintainability

* Code is easy to maintain and upgrade.

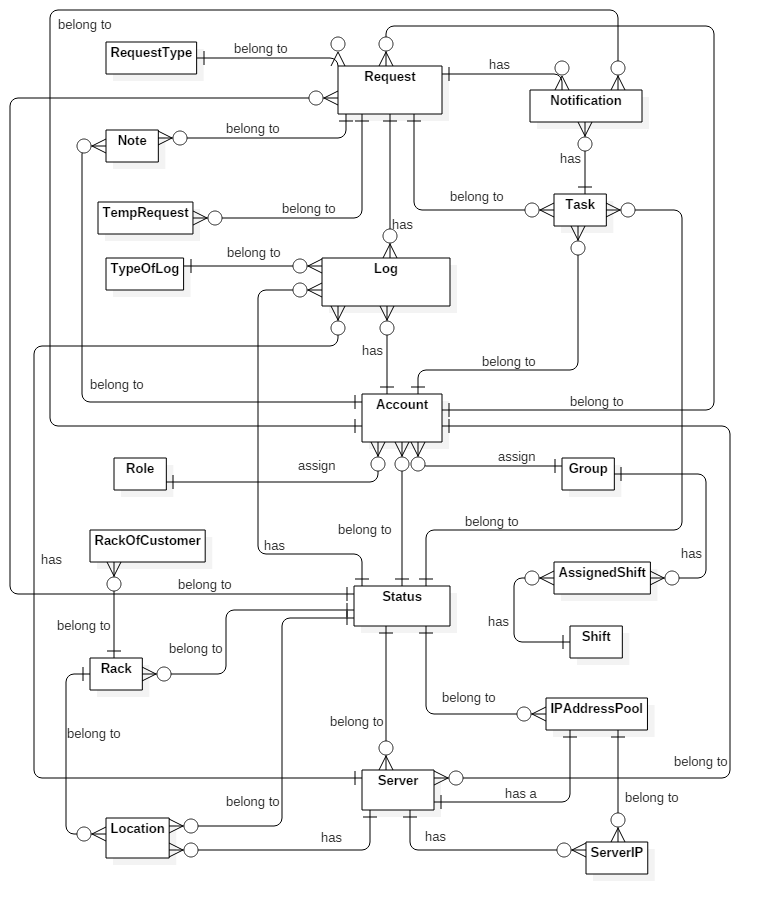
### Portability

* The system can be deployed into many type of servers those have IIS server.

### Performance

* Response time of almost functions should be less than 2s.

## Conceptual Diagram



**Figure 34: Conceptual Diagram**

Data dictionary:

|  |  |
| --- | --- |
| **Entity dictionary** | |
| **Entity Name** | **Description** |
| Server | Describe the customer’s server in data center. |
| Status | Describe all of statuses of objects in data center. |
| Location | Describe all location in data center. |
| Rack | Describe all racks which are putting in data center. |
| Log | Describe all logs about object’s changes in data center. |
| Role | Describe all roles in the system. |
| ServerIP | Describe all of current IP Addresses of server. |
| Request | Describe content of each request which was sent by customer. |
| Account | Describe all user’s accounts in the system. |
| Note | Describe all note which was wrote by previous shift for the next shift. |
| TempRequest | Describe temporary detail of all requests. |
| IPAddressPool | Describe all IP Addresses which data center is keeping. |
| RequestType | Describe all types of request. |
| TypeOfLog | Describe all types of log. |
| Group | Describe all shift group of data center. |
| AssignedShift | Describe which group is in which shift each day. |
| Shift | Describe started time and ended time of each shift group. |
| RackOfCustomer | Describe all racks which was rent by customer. |
| Notification | Describe all contents of each notification. |
| Task | Describe all contents of each task. |

Table 37: Data dictionary