Sentient VOC Monitoring System

Upload VOC Levels to Database

Version <2.0>

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 25/02/14 | 1.0 | Initial Work | Jeff Clark |
| 08/03/14 | 2.0 | Three tier modifications + Rainy day | Jeff Clark |
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Use Case: Upload VOC Levels to Database

# Upload VOC Levels to Database

## Brief Description

This use case gives the Mobile Client User a way to upload the VOC Levels to the database he/she just got from the Monitor.

## Requirements Trace

5.0

## Involved Actors

Mobile Client User

## Preconditions

* The Mobile Client User has received VOC Level data from a VOC Monitor.

## Post conditions

* The VOC Level data is uploaded to the database.

## Invariants

* None.

# Flow of Events

## Basic Flow

This use case starts when the Mobile Client User wants to upload recently received VOC Level data to the database.

1. The Mobile Client User selects Upload VOC Level Information from User Interface.
2. The User Interface passes the name of the VOC Level Information Directory to the File Upload Manager.
3. The File Upload Manager acquires a VOC Reading object from the Persistence Layer.
4. The File Upload Manager iterates through each file in the directory and parses the VOC Level Information for each file and stores into the VOC Reading object.
5. The File Upload Manager passes the VOC Reading object to the Persistence Layer.
6. The Persistence Layer inserts the VOC Level Information into the database.
7. The Mobile Client User receives an upload success message.

## Alternate Course – None

# Extension Points

None.

# Scenarios

## Happy Day

Assumptions: Mobile Client User – Sandy

VOC Level Information has been downloaded from a monitor

Steps:

1. The Mobile Client User selects Upload VOC Level Information from User Interface.
2. The User Interface passes the name of the VOC Level Information Directory to the File Upload Manager.
3. The File Upload Manager acquires a VOC Reading object from the Persistence Layer.
4. The File Upload Manager iterates through each file in the directory and parses the VOC Level Information for each file and stores into the VOC Reading object.
5. The File Upload Manager passes the VOC Reading object to the Persistence Layer.
6. The Persistence Layer inserts the VOC Level Information into the database.
7. The Mobile Client User receives an upload success message.

## Rainy Day 1 – Cannot connect to database

Assumptions: Mobile Client User – Sandy

VOC Level Information has been downloaded from a monitor

Steps:

1. The Mobile Client User selects Upload VOC Level Information from User Interface.
2. The User Interface passes the name of the VOC Level Information Directory to the File Upload Manager.
3. The File Upload Manager tries to acquire a VOC Reading object from the Persistence Layer, but cannot connect to the database.
4. The Mobile Client user receives an error message indication the inability to connect to the database.