Deployment Guide

Challenge at TOPCODER

The link of the youtube video is : (https://www.youtube.com/watch?v=lfhy0-xNp-A)

Prerequisite packages.

1) **Python 2.7 or above**
2) **Easy_install or pip**
3) **Requests package(pip install requests) or download from https://pypi.python.org/pypi/requests/**
4) **Package zipfile.(https://docs.python.org/2/library/zipfile.html) pip install zipfile.**
5) package base64 (pip install base64)
6) package json
7) package ftplib (https://docs.python.org/2/library/ftplib.html)
8) package simple_salesforce
9) package crontab
10) package datetime
11) package Tkinter(Basic gui package for gui)

Installation of above modules in Ubuntu:

sudo apt-get install python-pip

sudo pip install requests

sudo pip install simple_salesforce

sudo pip install datetime

sudo pip install python-crontab

It is important that you install above packages as root.

This is a Deployment guide and contains all the details and minute information to links, which is very important for this utility to work.

I have made this application in Python 2.7. Apart from it, you can install pip or easy_install for easy install of packages in python. I have tested this on Linux(Ubuntu) and to my understanding it has been successful to achieve the objective of this challenge.

The link of the youtube video is : (https://www.youtube.com/watch?v=Ifhy0-xNp-A)

There are few points and assumptions which are very very important

a) Keep configuration file and main python script in same directory.
b) If you are using cron tab, remember to uncomment one line of os.chdir() in main method, and put your absolute path there. Put ABSOLUTE path, not relative path. Also, you need to put absolute path in schedule.py file as well.

Configuration file Description/Details

This configuration file has each line, which is storing account information. The format of configuration file should remain the same. The name of variables are self explanatory.

Salesforce instance

You check the instances in the URL after login into salesforce

Check this link for status of your instances
https://trust.salesforce.com/trust/status/

This is a salesforce sandbox instance. No idea what it stands for but usually an instance is what is there in the first part of the url you are using.

for eg:-
https://ap1.salesforce.com/003/o

Here, ap1 is the instance of Salesforce I am using..

check out this link to know about various instance available.
http://trust.salesforce.com/trust/status/

Salesforce Security token

Your Salesforce security token should have been emailed to you when you set up your Salesforce account or the last time you reset your password. If you are unable to find this email, you will need to reset the token. How to reset it will differ depending on whether or not your administrator has updated your Salesforce to the new layout released in Summer '13.

- If you are on the older setup:

    - Navigate to [Your Name] > Setup > Personal Information > Reset Security Token

- If you are on the newer setup:

    - Navigate to [Your Name] > My Settings > Personal > Reset My Security Token

- An email will be sent to you from support@salesforce.com with the subject of "salesforce.com security token confirmation"

https://help.salesforce.com/HTViewHelpDoc?id=user_security_token.htm&language=en_US

OOP Concepts and Other Coding Practises

Since the application is written in Python, I have specially tried to use OOP's concepts as much as possible. I have made only one python file for simplicity purpose only. I have made a class as well .Maximum effort has been done for code reusability.

For, Code Modularity, special attention has been given. For different features, separate functions has been called and therefore code is divided into many modules/methods/functions. Some variables scope is class and other variables have local scope.

Maximum efforts has been given, so that function name and variable names follow proper naming mechanism.

Comments has been included extensively to make you understand the code.

Additional Functionality or features that were not requested but beneficial

There are few features,which I have added, which I feel will be beneficial.

1) Video has been included with this submission. A short video showing all the information succinctly, is always an advantage for any user.

2) Cron tab is used to schedule this operation.

3) Configuration file has been added to help user enter his/her information at one place.

4) A supportive GUI has been developed, to update configuration file, which is optional.

5) Logger has been included, which will log error messages with time, with file as logger.txt.

How to Run this utility

1) To run simple utility without crontab
   a. Go to the directory where your code is. Remember, configuration.txt should be there as well.
   python ftpSalesforce.py

2) To run simple utility with crontab
   Intentionally I have changed the path because I don't want to disturb and breach user security by setting path for everything. You should set path when it is utmost required.
   a) Go to the directory where your code is. Remember, configuration.txt should be there as well. Open schedule.py and enter the absolute (complete) path of ftpSalesforce.py into cmd variable. Save this file.
   b) Open ftpSalesforce.py and go to main method in the end. Uncomment line os.chdir and insert absolute path of directory, where your ftpSalesforce.py is residing.
   c) Grant executable permissions to ftpSalesforce.py. Do
   Either chmod +x ftpSalesforce.py or chmod 777 ftpSalesforce.py
   to achieve this.
   d) python scheduler.py

3) To run simple utility with gui
   Go inside gui folder.
   python gui.py

   Note : to see your crontab

Type in terminal crontab –e to kill and crontab –l to display all