Using Windows Task Scheduler with Enterprise Guide

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An Overview

• Goal
  – Automate tabular report and send output by email.

• Steps
  – Create report (PROC Tabulate).
  – Use ODS to send email.
    • Configure mail server settings in EG.
  – Modify .vbs (Visual Basic Script).
  – Execute with Windows Task Scheduler.
Creating Report

• An example of a table created by EG. It tabulates fine revenue by offence type and location of the offence.

PROC TABULATE
DATA=WORK.OFFENCE
  FORMAT=DOLLAR24.2;
  VAR fine_amount;
  CLASS offence_type / ORDER=UNFORMATTED MISSING;
  CLASS location / ORDER=UNFORMATTED MISSING;
  TABLE /* ROW Statement */
    location
    all = 'Total',
  /* COLUMN Statement */
    offence_type *(fine_amount * Sum={LABEL=""} )
    all = 'Total' *(fine_amount * Sum={LABEL=""} ) ;;
  WHERE location IN ('city1','city2','city3');
  TITLE 'Fines Collected';
RUN;
### Fines Collected

<table>
<thead>
<tr>
<th>Location</th>
<th>Offence Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>offence1</td>
<td>offence2</td>
</tr>
<tr>
<td></td>
<td>fine amount</td>
<td>fine amount</td>
</tr>
<tr>
<td>city1</td>
<td>$68,470.00</td>
<td>$12,027.00</td>
</tr>
<tr>
<td>city2</td>
<td>$82,422.00</td>
<td>$18,122.00</td>
</tr>
<tr>
<td>city3</td>
<td>$16,799.00</td>
<td>$22,365.00</td>
</tr>
<tr>
<td>Total</td>
<td>$167,691.00</td>
<td>$52,514.00</td>
</tr>
</tbody>
</table>
Using ODS to Email Output

FILENAME output EMAIL
SUBJECT= “Fine Report”
FROM= “me@employer.ca”
TO= (“manager@employer.ca” “manager2@employer.ca”) 
CT= "text/html"; 

ODS HTML BODY=output STYLE=HtmlBlue;

   PROC TABULATE;
   ...
   RUN;

ODS HTML TEXT= '<div align="center">Footer Text</div>' ;
ODS HTML CLOSE;

• For more details see White Paper 039-29 authored by Jacques Pagé.
Obtaining Example Data

- **Sample 40781** from the SAS Knowledge Base provides an example to build from.

- Three files are provided:
  - AddCodeAndRunProject.vbs
  - SASCodeToRun.sas
  - TestCodeProject.egp
Modifying Example Files

• The provided .vbs file must be edited:
  – Paths to project, code, and log files must be specified (Ln 79-18).
  – .vbs must be edited to launch Enterprise Guide 5.1* (Ln 85).

* Enterprise Guide 5.1 is ran in our environment.
Beginning on Line 79:

```vbscript
prjName = "C:\SAS\EG\Samples\4.2\TestCodeProject.egp"

codeFile = "C:\SAS\EG\Samples\4.2\SASCodeToRun.sas"

logFile = "C:\SAS\EG\Samples\4.2\SASCodeLogFile.log"

codeServer = "SASApp"

'Set up the 4.2 project and open it.
Set app = CreateObject("SASEGOBJECTMODEL.Application.4.2")
```

Line 156 can be modified to provide an alert after the script has ran.
Modifying .sas and .egp Files

• Edit the provided files to include your syntax.
Modifying Mail Server Information

• Tools -> Options -> Administration
  – Additional configuration may be required.
Scheduling a Task

• Windows Task Scheduler can be used to automatically run jobs.

• Click “Create Basic Task” after opening Task Scheduler

• Able to specify the:
  – Scheduled time(s)
  – Action to be performed (start a program)

• The following example will run every Monday at 9:00 AM.
Create Basic Task Wizard

Create a Basic Task

Use this wizard to quickly schedule a common task. For more advanced options or settings such as multiple task actions or triggers, use the Create Task command in the Actions pane.

Name: Report

Description: Example
Create Basic Task Wizard

Weekly

Create a Basic Task
- Trigger: Start 05/10/2015 at 9:00 AM, Synchronize across time zones.
- Recur every: 1 week(s)
- Weeks on: Monday

Action
- Sunday, Tuesday, Wednesday, Thursday, Friday, Saturday

Finish

< Back   Next >   Cancel
Questions?
References

• Automated distribution of SAS® results (Paper 039-29)
  – By Jacques Pagé

• SAS Knowledge Base (Sample 40781)
  – Example Files