Automação Relatórios Rede Fixa
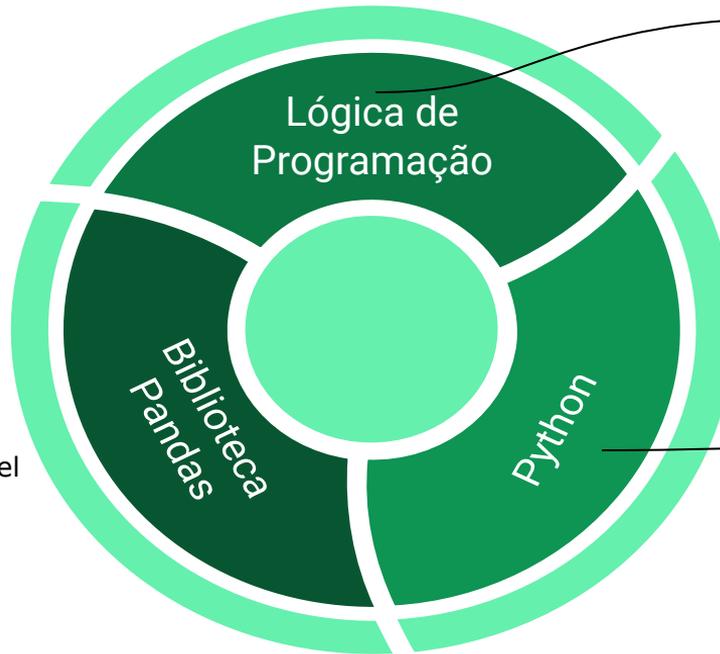
Fernando Henrique da Cruz
Andrio Oliveira

Automação Relatórios Rede Fixa

Tomada de decisões

Dados brutos

Relatórios de apoio

Automação Relatórios Rede Fixa

Formação básica sugerida:

Lógica de Programação

- Arthur Filipe Sousa Gomes
- Bruno Sinhoroto
- Gabriel Ribeiro Bernardi
- Maxley Soares
- Fernando Henrique
- Álvaro Latado
- André Lannes Bernardes Argel
- Sérgio Henrique Corgozinho
- Alana Soares Reis

Biblioteca Pandas
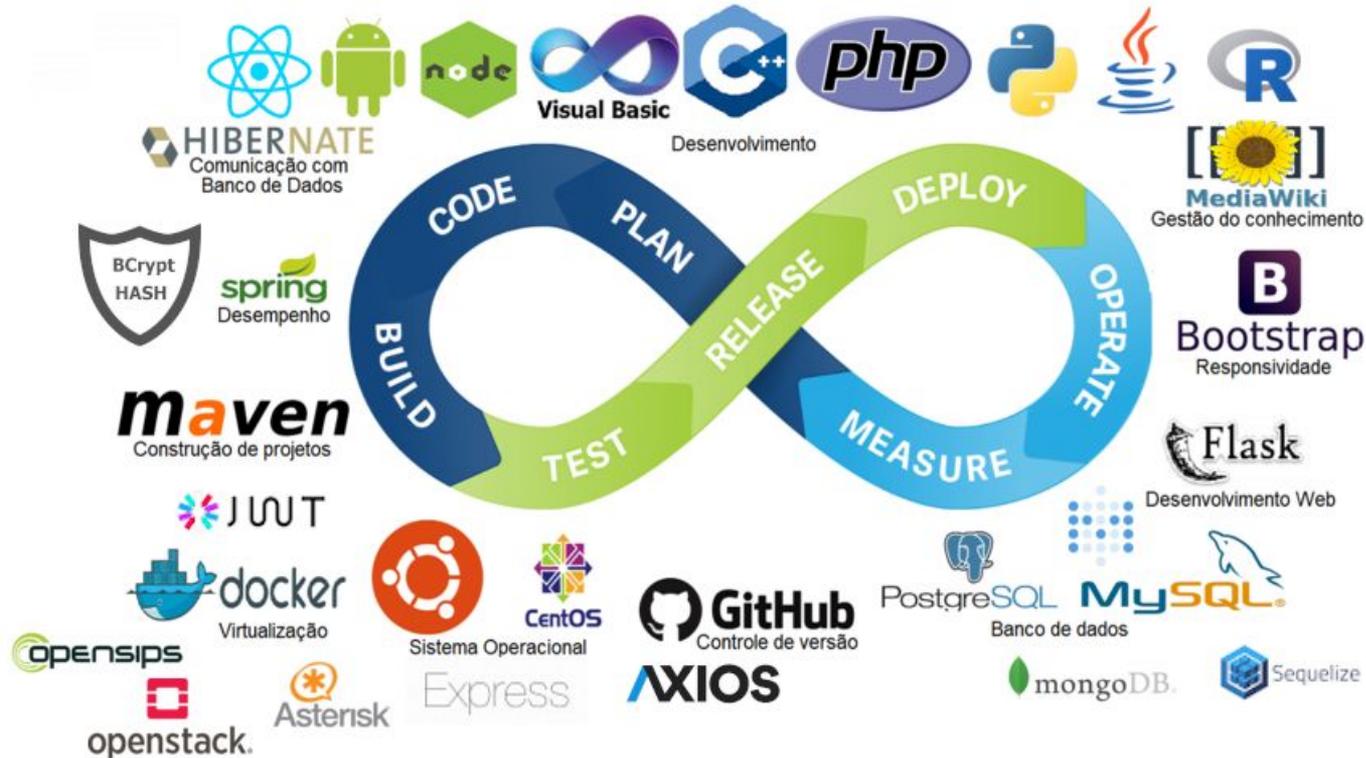
- Fernando Henrique
- Álvaro Latado
- André Lannes Bernardes Argel
- Sérgio Henrique Corgozinho
- Alana Soares Reis

Python

Integração Contínua

Automação Relatórios: como eram gerados

TXT
Associado pegava o .txt através dos equipamentos

CSV
Com o .txt, o .csv era gerado, na mão
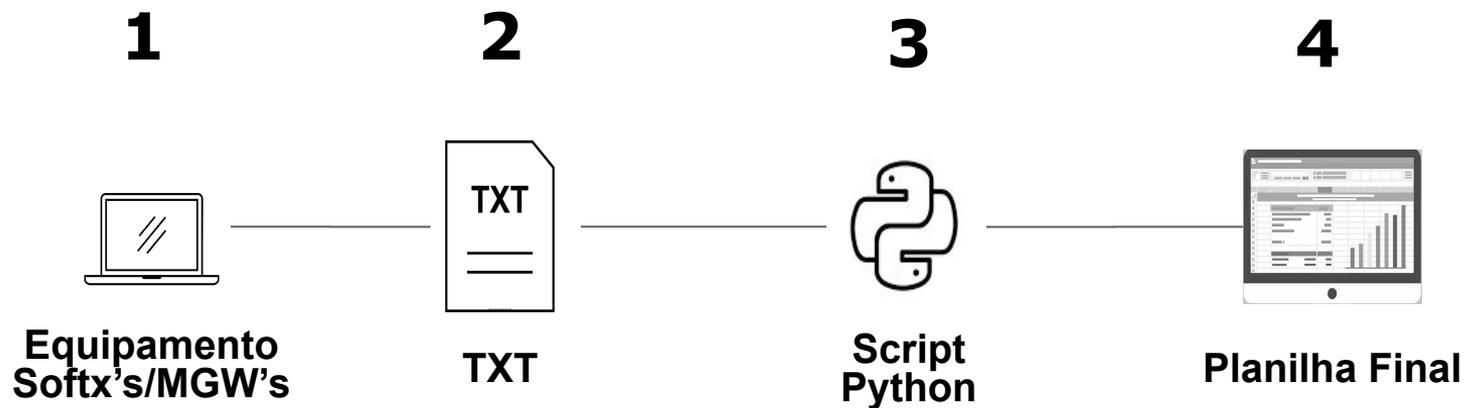
Tratativas
Com o .csv pronto, algumas tratativas eram feitas

Obs.: O Associado demorava em média um dia para gerar os relatórios completos

Automação Relatórios: processo de automação

1

**Equipamento
Softx's/MGW's**

2

TXT

TXT

3

**Script
Python**

4

Planilha Final

Obs.: O Associado demora em média 15 minutos para finalizar os relatórios

Automação Relatórios: processo de automação

Abrir | Salvar

```
17 +++    AGCF/*MEID:281 MENAME:SoftX3000_FAC*/        2020-03-09 09:59:48-03:00
18 O&M    #215
19 %%DSP LICENSERES:;%%
20 RETCODE = 0  Operation succeeded
21
22 License Usage Information
23 -------------------------
24 License ID    License Item                                                Type      Authorization-values  Real-values  Usage-percent(%)  Left-percent(%)
25
26 LAC1SBRM01    AGCF POTS Subscriber Basic Function(per sub)                Resource  1000000               0            0                 100
27 LAC1BRAM01    AGCF ISDN Subscriber Basic Function(per sub)                Resource  700000                0            0                 100
28 LAC1MGWM01    Managed Media Gateways(per MGW)                             Resource  400000                458          0                 100
29 LAC1V5TM01    Managed Narrowband Trunk(per trunk)                         Resource  500000                45925        9                 91
30 LSF3SSP004    Do-not-disturb service for the POTS subscribers             Resource  1000000               142          0                 100
31 LSF3SSP006    Wakeup service for the POTS subscribers                     Resource  1000000               0            0                 100
32 LSF3SSP008    Call forwarding unconditional for the POTS subscribers      Resource  1000000               1800         0                 100
33 LSF3SSP009    Call forwarding busy for the POTS subscribers               Resource  1000000               1628         0                 100
34 LSF3SSP010    Call forwarding no reply for the POTS subscribers           Resource  1000000               2086         0                 100
35 LSF3SSP011    Absence service for the POTS subscribers                    Resource  1000000               2            0                 100
36 LSF3SSP012    Call waiting for the POTS subscribers                       Resource  1000000               1437         0                 100
37 LSF3SSP013    Call back service for the POTS subscribers                  Resource  1000000               957          0                 100
38 LSF3SSP014    Three-party service for the POTS subscribers                Resource  1000000               75           0                 100
39 LSF3SSP015    Conference call service for the POTS subscribers            Resource  1000000               348          0                 100
40 LSF3SSP016    Co-group pickup service for the POTS subscribers            Resource  1000000               1388         0                 100
41 LSF3SSP017    Designated pickup service for the POTS subscribers          Resource  1000000               1372         0                 100
42 LSF3SSP018    Call transfer for the POTS subscribers                      Resource  1000000               1111         0                 100
43 LSF3SSP020    Calling line identification presentation for the POTS subscribers  Resource  1000000         15833        1                 99
44 LSF3SSP021    Calling line identification restriction for the POTS subscribers   Resource  1000000         22           0                 100
45 LSF3SSP032    Call hold service for the POTS subscribers                  Resource  1000000               2            0                 100
46 LSF3SSP041    Complete call on busy for the POTS subscribers              Resource  1000000               0            0                 100
47 LSF3SSP049    Password call for the POTS subscribers                      Resource  1000000               609          0                 100
48 LSF3SSP059    Cyclic line hunting for the POTS subscribers                Resource  1000000               0            0                 100
49 LSF3SSP073    Call forwarding busy to voice mailbox for the POTS subscribers     Resource  1000000         8356         0                 100
50 LSF3SSP074    Call forwarding no reply to voice mailbox for the POTS subscribers Resource  1000000         8359         0                 100
51 LSF3SSP077    Intra-Centrex designated pickup for the POTS subscribers    Resource  1000000               1146         0                 100
52 LSF3SSP089    Call forwarding unconditional to voice mailbox for the POTS subscribers Resource 1000000    28           0                 100
53 LSF3SSP109    Intra-group call forwarding for the POTS subscribers        Resource  1000000               0            0                 100
54 LSF3SSP111    Intra-group call transfer for the POTS subscribers          Resource  1000000               0            0                 100
55 LSF3SSP132    Query self number for subscriber for the POTS subscribers   Resource  1000000               47221        4                 96
56 LSF3SSM003    Outgoing call barring for the multimedia subscribers        Resource  500000                1199         0                 100
57 LSF3SSM008    Call forwarding unconditional for the multimedia subscribers Resource 500000                23581        4                 96
58 LSF3SSM009    Call forwarding busy for the multimedia subscribers         Resource  500000                1722         0                 100
59 LSF3SSM010    Call forwarding no reply for the multimedia subscribers     Resource  500000                1842         0                 100
60 LSF3SSM014    Three-party service for the multimedia subscribers          Resource  500000                101          0                 100
61 LSF3SSM018    Call transfer for the multimedia subscribers                Resource  500000                901          0                 100
62 LSF3SSM020    Calling line identification presentation for the multimedia subscribers Resource 500000     19174        3                 97
63 LSF3SSM074    Call forwarding no reply to voice mailbox for the multimedia subscribers Resource 500000    3103         0                 100
64 LSF3SSM089    Call forwarding unconditional to voice mailbox for the multimedia subscribers Resource 500000 12         0                 100
65 LSF3SSM124    Remote control supplementary service for the multimedia subscribers Resource 500000          3            0                 100
66 LSF3SSP001    Abbreviated dialing subscribers                             Resource  1000000               1272         0                 100
67 LSF3SSP002    Hotline service for the POTS subscribers                    Resource  1000000               771          0                 100
68 LSF3SSP003    Outgoing call barring for the POTS subscribers              Resource  1000000               3993         0                 100
69 LAC1BWLNUM01  White/Black List Subscribers                                Resource  1000000               23659        2                 98
70 LAC1N7DSP01   The number of SS7 source signaling points(per Signaling Point) Resource 128                 0            0                 100
```

Texto sem formatação | Largura da tabulação: 4 | Lin 3, Col 21 | INS

Automação Relatórios: processo de automação

File   Edit   Selection   Find   View   Goto   Tools   Project   Preferences   Help

licensas.py   ×   tabelas.py   ×

```python
67
68          df = df.rename(columns=newColumns)
69
70          return df
71
72      def generateCompleteReport(fileBase, createdFile, countDays, name_csv):
73          created = createdFile
74          created = renameColumns(created, list(created.columns))
75
76          base = fileBase
77          base = renameColumns(base, list(base.columns))
78
79          completeReport = []
80
81          for index,row in created.iterrows():
82              rowBase = base.loc[base['license_id'] == row.license_id]
83              if(row.maximum_tuple_number == 0):
84                  usage = 0
85              else:
86                  usage = int(round(row.used_number/row.maximum_tuple_number, 2)*100)
87
88              # monthlyGrowth = int(round(((row.used_number - rowBase.used_number.values[0])/countDays)))
89              realGrowth = int(round(((row.used_number - rowBase.used_number.values[0])/countDays)*30))
90
91              available = round(row.maximum_tuple_number - row.used_number)
92              if realGrowth != 0:
93                  forecastNumber = round(available/realGrowth)
94              else:
95                  forecastNumber = 0
96
97              if forecastNumber == 0: forecast = 'Estavel'
98              elif forecastNumber >= 1 and forecastNumber <= 24: forecast = forecastNumber
99              elif forecastNumber > 24: forecast = 'Maior que 2 Anos'
100             elif forecastNumber < 0: forecast = 'Decrescimento'
101
102             newRow = [row.license_id, row.license_item, row.type, int(row.maximum_tuple_number), int(row.used_number), usage, realGrowth, forecast, available, forecastNumber]
103             completeReport.append(newRow)
104
105         report = pd.DataFrame(completeReport, columns=['ID', 'DESCRIPTION', 'TYPE', 'TOTAL', 'UTILIZADO', 'UTILIZADO %','CRESCIMENTO MENSAL','PREVISAO DE ESGOTAMENTO / MES', 'Avaiable', '
106
107         report.to_csv(name_csv, engine='openpyxl', index=False)
108
109         return report
110
111
112
113     def run(current_file_ULA, previous_file_ULA, name_csv_ULA, days_ULA, current_file_SPO, previous_file_SPO, name_csv_SPO, days_SPO, current_file_FAC, previous_file_FAC, name_csv_FAC, da
114         current_ULA = createCsv(current_file_ULA)
```

Line 1, Column 1   Tab Size: 4   Python

Automação Relatórios: processo de automação

Final_FAC.xlsx - LibreOffice Calc

Arquivo Editar Exibir Inserir Formatar Estilos Planilha Dados Ferramentas Janela Ajuda

Calibri | 11

S29

	A	B	C	D	E	F	G	H	I	J
1	ID	DESCRIPTION	TYPE	TOTAL	UTILIZADO	UTILIZADO %	CRESCIMENTO MENSAL	PREVISÃO DE ESGOTAMENTO / MES	Avaiable	forecastNumber
2	LAC1SBRM01	AGCF POTS Subscriber Basic Function(per sub)	Resource	1000000	0	0	0	Estavel	1000000	0
3	LAC1BRAM01	AGCF ISDN Subscriber Basic Function(per sub)	Resource	700000	0	0	0	Estavel	700000	0
4	LAC1MGWM01	Managed Media Gateways(per MGW)	Resource	400000	457	0	-1	Decrescimento	399543	-399543
5	LAC1V5TM01	Managed Narrowband Trunk(per trunk)	Resource	500000	45744	9	-226	Decrescimento	454256	-2010
6	LSF3SSP004	Do-not-disturb service for the POTS subscribers	Resource	1000000	128	0	-18	Decrescimento	999872	-55548
7	LSF3SSP006	Wakeup service for the POTS subscribers	Resource	1000000	0	0	0	Estavel	1000000	0
8	LSF3SSP008	Call forwarding unconditional for the POTS subscribers	Resource	1000000	2038	0	298	Maior que 2 Anos	997962	3349
9	LSF3SSP009	Call forwarding busy for the POTS subscribers	Resource	1000000	1813	0	231	Maior que 2 Anos	998187	4321
10	LSF3SSP010	Call forwarding no reply for the POTS subscribers	Resource	1000000	2277	0	239	Maior que 2 Anos	997723	4175
11	LSF3SSP011	Absence service for the POTS subscribers	Resource	1000000	2	0	0	Estavel	999998	0
12	LSF3SSP012	Call waiting for the POTS subscribers	Resource	1000000	1398	0	-49	Decrescimento	998602	-20380
13	LSF3SSP013	Call back service for the POTS subscribers	Resource	1000000	927	0	-38	Decrescimento	999073	-26291
14	LSF3SSP014	Three-party service for the POTS subscribers	Resource	1000000	74	0	-1	Decrescimento	999926	-999926
15	LSF3SSP015	Conference call service for the POTS subscribers	Resource	1000000	346	0	-2	Decrescimento	999654	-499827
16	LSF3SSP016	Co-group pickup service for the POTS subscribers	Resource	1000000	1356	0	-40	Decrescimento	998644	-24966
17	LSF3SSP017	Designated pickup service for the POTS subscribers	Resource	1000000	1340	0	-40	Decrescimento	998660	-24966
18	LSF3SSP018	Call transfer for the POTS subscribers	Resource	1000000	1106	0	-6	Decrescimento	998894	-166482
19	LSF3SSP020	Calling line identification presentation for the POTS subscribers	Resource	1000000	16185	2	440	Maior que 2 Anos	983815	2236
20	LSF3SSP021	Calling line identification restriction for the POTS subscribers	Resource	1000000	24	0	2	Maior que 2 Anos	999976	499988
21	LSF3SSP032	Call hold service for the POTS subscribers	Resource	1000000	1	0	-1	Decrescimento	999999	-999999
22	LSF3SSP041	Complete call on busy for the POTS subscribers	Resource	1000000	0	0	0	Estavel	1000000	0
23	LSF3SSP049	Password call for the POTS subscribers	Resource	1000000	575	0	-42	Decrescimento	999425	-23796
24	LSF3SSP059	Cyclic line hunting for the POTS subscribers	Resource	1000000	0	0	0	Estavel	1000000	0
25	LSF3SSP073	Call forwarding busy to voice mailbox for the POTS subscribers	Resource	1000000	8230	1	-158	Decrescimento	991770	-6277
26	LSF3SSP074	Call forwarding no reply to voice mailbox for the POTS subscribers	Resource	1000000	8233	1	-158	Decrescimento	991767	-6277
27	LSF3SSP077	Intra-Centrex designated pickup for the POTS subscribers	Resource	1000000	1125	0	-26	Decrescimento	998875	-38418
28	LSF3SSP089	Call forwarding unconditional to voice mailbox for the POTS subscribers	Resource	1000000	28	0	0	Estavel	999972	0
29	LSF3SSP109	Intra-group call forwarding for the POTS subscribers	Resource	1000000	0	0	0	Estavel	1000000	0
30	LSF3SSP111	Intra-group call transfer for the POTS subscribers	Resource	1000000	0	0	0	Estavel	1000000	0
31	LSF3SSP132	Query self number for the POTS subscribers	Resource	1000000	44826	4	-2994	Decrescimento	955174	-319
32	LSF3SSM003	Outgoing call barring for the multimedia subscribers	Resource	500000	1194	0	-6	Decrescimento	498806	-83134
33	LSF3SSM008	Call forwarding unconditional for the multimedia subscribers	Resource	500000	23955	5	468	Maior que 2 Anos	476045	1017
34	LSF3SSM009	Call forwarding busy for the multimedia subscribers	Resource	500000	2116	0	493	Maior que 2 Anos	497884	1010
35	LSF3SSM010	Call forwarding no reply for the multimedia subscribers	Resource	500000	2287	0	556	Maior que 2 Anos	497713	895
36	LSF3SSM014	Three-party service for the multimedia subscribers	Resource	500000	102	0	1	Maior que 2 Anos	499898	499898
37	LSF3SSM018	Call transfer for the multimedia subscribers	Resource	500000	918	0	21	Maior que 2 Anos	499082	23766
38	LSF3SSM020	Calling line identification presentation for the multimedia subscribers	Resource	500000	19819	4	806	Maior que 2 Anos	480181	596
39	LSF3SSM074	Call forwarding no reply to voice mailbox for the multimedia subscribers	Resource	500000	3106	1	4	Maior que 2 Anos	496894	124224
40	LSF3SSM089	Call forwarding unconditional to voice mailbox for the multimedia subscribers	Resource	500000	13	0	1	Maior que 2 Anos	499987	499987

Sheet1

Planilha 1 de 1 | PageStyle_Sheet1 | Português (Brasil) | Média: ; Soma: 0 | 100%

Automação Relatórios: principais benefícios

Os relatórios gerados são enviados para as áreas de negócio: Marketing e Planejamento e para as áreas de operação: COR e Tribo de entregas.

- As áreas de negócio usam o relatório para prospectar novas vendas e produtos

- A área de planejamento usa o relatório para planejar melhorias e ampliações de rede

- O COR e a Tribo de entregas utiliza para acompanhamento e consulta

Automação Relatórios: próximos passos

- Gerar o relatório com o maior número de formatação possível

- Automatizar a parte de entrar no equipamento e gerar o .txt

Algar
Gente servindo Gente