"""

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@author: aj-nok

CSV: fm_alarms_18012019_085951.csv

"""

A.   Initial Analysis after pandas profiling

1.   DN

Value	Count	Frequency (%)	
PLMN-PLMN/NAFD-6	3191	41.1%	
PLMN-CBIS/CBIS-PCRFSPS1-NOR/COMPUTE-overcloud-ovscompute-23/SERVER-1	1242	16.0%	

2.   ALARM_NUMBER

Value	Count	Frequency (%)	
30900	3185	41.1%	
960004	1220	15.7%	
36059379	520	6.7%	
9451	429	5.5%	

3.   ALARM_TYPE

Value	Count	Frequency (%)	
1	3806	49.1%	
4	1694	21.8%	
5	1222	15.8%	
3	794	10.2%	
9	237	3.1%	
7	1	0.0%	
2	1	0.0%	

4.   ALARM_STATUS

Value	Count	Frequency (%)	
0	6969	89.9%	
1	786	10.1%	

5. ALARM_COUNT

Value	Count	Frequency (%)	
1	7341	94.7%	
2	88	1.1%	
4	46	0.6%	
96	26	0.3%	
64	22	0.3%	

6. CANCELLED_BY

Value	Count	Frequency (%)	
system	4357	56.2%	
jweis3	26	0.3%	
omc	15	0.2%	

7. ACKED_BY

Value	Count	Frequency (%)	
AUTOACK	3498	45.1%	
WITHCANCEL	2049	26.4%	
cleanup	1362	17.6%	
omc	82	1.1%	
jweis3	26	0.3%	
SYS_NE3SWS	1	0.0%	

8. SEVERITY

Value	Count	Frequency (%)	
4	3498	45.1%	
2	1514	19.5%	
1	1413	18.2%	
3	1330	17.2%	

9. PROBABLE_CAUSE

Value	Count	Frequency (%)	
0	4141	53.4%	
351	1254	16.2%	
302	1166	15.0%	
1009	657	8.5%	
701	190	2.5%	

B. Analysis after filtering with the most occurring DN values

1. ALARM_NUMBER

```
value    count
30900    3185
960004   1218
960021     22
9451        3
9450        3
9255        1
Name: ALARM_NUMBER, dtype: int64
```

2. ALARM_TYPE

Value	Count	Frequency (%)	
1	3210	72.4%	
5	1218	27.5%	
4	4	0.1%	

3. ALARM_STATUS

Value	Count	Frequency (%)	
0	4429	99.9%	
1	3	0.1%	

4.   ALARM_COUNT

Value	Count	Frequency (%)	
1	4426	99.9%	████████████████████
2	2	0.0%	▌
2864	2	0.0%	▌
5410	2	0.0%	▌

5.   CANCELLED_BY

Value	Count	Frequency (%)	
system	3211	72.5%	████████████████
(Missing)	1221	27.5%	█████

6.   ACKED_BY

Value	Count	Frequency (%)	
AUTOACK	3207	72.4%	█████████████████
cleanup	1220	27.5%	█████
WITHCANCEL	2	0.0%	▌
(Missing)	3	0.1%	▌

7.   SEVERITY

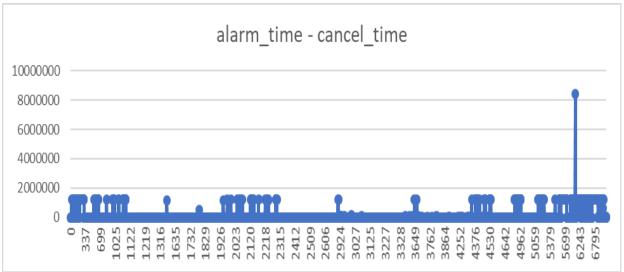| Value	Count	Frequency (%)	
4	3207	72.4%	█████████████████
1	1221	27.5%	█████
2	3	0.1%	▌
3	1	0.0%	▌

8.   PROBABLE_CAUSE

```
value    count
0        3214
351      1218
Name: PROBABLE_CAUSE, dtype: int64
```

For CANCELLED BY=AUTOACK there is no much difference between Alarm time and Cancel time

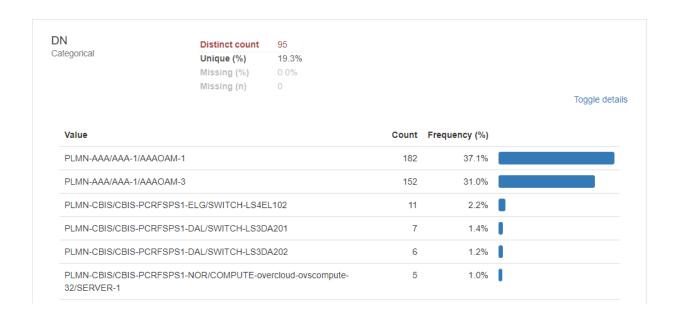Alarm_time - Cancel_time large values for:

ACKED_BY
Categorical

Distinct count	5
Unique (%)	1.0%
Missing (%)	2.6%
Missing (n)	13

Toggle details

Value	Count	Frequency (%)	
WITHCANCEL	423	86.2%	
jweis3	26	5.3%	
cleanup	19	3.9%	
omc	10	2.0%	
(Missing)	13	2.6%	

DN
Categorical

Distinct count	95
Unique (%)	19.3%
Missing (%)	0.0%
Missing (n)	0

Toggle details

Value	Count	Frequency (%)	
PLMN-AAA/AAA-1/AAAOAM-1	182	37.1%	
PLMN-AAA/AAA-1/AAAOAM-3	152	31.0%	
PLMN-CBIS/CBIS-PCRFSPS1-ELG/SWITCH-LS4EL102	11	2.2%	
PLMN-CBIS/CBIS-PCRFSPS1-DAL/SWITCH-LS3DA201	7	1.4%	
PLMN-CBIS/CBIS-PCRFSPS1-DAL/SWITCH-LS3DA202	6	1.2%	
PLMN-CBIS/CBIS-PCRFSPS1-NOR/COMPUTE-overcloud-ovscompute-32/SERVER-1	5	1.0%	

'PLMN-AAA/AAA-1/AAAOAM-1', 'PLMN-AAA/AAA-1/AAAOAM-3' have larger valus of diff_seconds. Mean Severity Is around 2.9