Design quality report - pgSchema

Procedure length

Measured by logical lines of code.

Lines of code	Procs	%	Distribution
0- 9	127	57%	**********
10- 19	67	30%	******
20- 29	12	5%	*
30- 39	7	3%	*
40- 49	5	2%	
50- 59	1	0%	
70- 79	2	1%	
110- 119	1	0%	
130- 139	1	0%	max=133
Total	223	100%	

Average LOC	13.9	Median	8.0
StdDev	14.6		
5%-95% range	7-37	90% of procs fall in this range	

Complexity

Average values per procedure

Structural fan-out	0.9
Informational fan-in x fan-out	6.8
Informational complexity	140.0
Depth of looping	0.12

Cyclomatic complexity

Recommended cyclomatic complexity in a procedure is 1-10.

Complexity	Procs	%	
1 - 5	197	88%	******************
6 - 10	16	7%	*
11 - 15	5	2%	
16 - 20	2	1%	
26 - 30	1	0%	
31 - 35	1	0%	
41 - 45	1	0%	
Total	223	100%	

Average complexity	3.69	(cyclomatic complexity / number of procedures)
Decision density	0.26	(cyclomatic complexity / lines of code)

Total complexity	600	(total number of decisions + 1)

Depth of conditional nesting

Nested conditional statements per procedure. Recommended range: 0 to 5.

Average depth	1.3
Max depth	6

Depth >= 5 1 procedures (0%)

Understandability

Comments and whitespace

Distribution of logical lines

Comment lines	348	8%	
Whitespace lines	903	20%	
Code lines	4503	72%	commentless 72%, commented 0%
Total logical lines	4503	100%	

Commentedness

Meaningless comments	0	0%	
Meaningful comments	369	100%	per code line: 0.1
All comments	369	100%	

Lines with the line continuation character '_' are counted as one logical line.
Lines excluded by conditional compilation are not included in the logical line counts.
A meaningful comment contains text rather than just whitespace or punctuation.

Meaningful comments per procedure

(declarations) sections counted as procedures

Comments	Procedures	%	Distribution
0	67	29%	******
1-2	127	55%	**********
3-5	29	12%	**
6 or more	10	4%	*
Total	233	100%	
Average	1.7	comments	

Length of names

Name type	Characters	
Variables average LENV	7.0	(excl. event handler and implements params)
Constants average LENC	17.6	
Procedures average LENP	7.9	(excl. event handlers and implements procs)
Type/Enum average	12.7	(incl. enum constants and type fields)
All average LEN	8.1	
Median	7.0	
StdDev	4.5	
Range	1-26	

Length	% Distribution
1	2%

```
 2        3% *
 3        5% *
 4-6     39% ********
 7-9     19% ****
10-14    23% *****
15-19     8% **
20-       2%

Total names                          600
Unique names                         284
Name uniqueness ratio UNIQ           47%
```

Reuse

Structural fan-in = number of calling procedures.

Structural fan-in	Procs	%	Distribution
0-1 No reuse	193	86%	**********
2-4 Slight reuse	25	11%	**
5-9 Significant reuse	4	2%	
10- High reuse	0	0%	

Average: 0.9

Classes: 8

Problems

Dead code

	Problematic	Total	%
Dead procedures	211	225	94%
Removable code lines in procs	2965	3108	95%
Dead variables	9	377	2%
Dead constants	29	38	76%
Dead Types	0	1	0%
Dead Enums	0	1	0%

Dead code counts may include exposed code.

Problems with declarations

	Problematic	Total	%
Missing variable type	5	220	1%
Excess var/const scope	8	258	3%
No var/const scope	0	258	0%
Missing ByVal/ByRef	0	157	0%
Missing function type	2	33	6%
Excess procedure scope	0	225	0%
No procedure scope	0	225	0%

Problem statistics

```
Filter: <Default>
Problems reported                    107
Lines of code                       3252
```

Procedures	225
Problems / LOC	0.0
Problems / procedure	0.5