

ABL Digital Technologies

WHAT-IF SCENARIO PLANNER

A Practitioner's Guide

Baseline + scenarios · Sensitivity to inputs · Excel workbook · Worked example

Companion to the other tool explainers.

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1 · What This Tool Does

The What-If Scenario Planner answers one question: how sensitive is my staffing and cost plan to the assumptions I made? You set a baseline (volume, AHT, SLA, shrinkage, cost) and define up to five scenarios as deltas from baseline. The tool runs Erlang C on each and shows them side by side: required agents, roster FTE, monthly cost, cost delta, predicted SLA, and occupancy.

It is the lightest tool in the suite — by design. It composes the existing Erlang engine across multiple parameter sets so you can see the answer to questions like:

- What if volume comes in 10% higher than forecast?
- What if AHT drifts up after a process change?
- What if a senior PR campaign squeezes us into a 95% SLA target instead of 85%?
- Which lever — lower AHT, lower shrinkage, looser SLA — gives me the most cost relief?

For the deep Erlang C maths, see the Erlang Formulas Explainer. The What-If tool just runs that same maths repeatedly across the scenarios you define.

2 · The Inputs

2.1 Baseline Parameters

- Calls / Hour — the volume rate
- AHT (seconds) — average handle time
- SLA Target (%) and SLA Time (sec) — service level pair
- Shrinkage (%) — for roster FTE inflation
- Per-FTE Monthly Cost — fully loaded
- Currency Symbol — display only

2.2 Scenarios

Each scenario row has up to five deltas. Leave any blank or zero for "no change":

- Δ Volume (%) — multiplied onto baseline calls/hour
- Δ AHT (%) — multiplied onto baseline AHT

- SLA Override (%) — replaces baseline SLA target if non-blank
- Δ Shrinkage (pts) — added in percentage points to baseline shrinkage
- Δ FTE Cost (%) — multiplied onto baseline per-FTE cost

Up to 5 scenarios. Default scenarios: Volume +10%, Volume -10%, AHT +15%, Tighter SLA 95%.
Customise as needed.

3 - The Maths

For each scenario:

Scenario calls = Baseline calls \times (1 + Δ Volume)

Scenario AHT = Baseline AHT \times (1 + Δ AHT)

Scenario SLA = Override if set, else Baseline SLA

Scenario shrink = max(0, Baseline shrinkage + Δ Shrinkage points)

Scenario cost = Baseline per-FTE \times (1 + Δ Cost)

Required agents = pure Erlang C against scenario
calls/AHT/SLA/SLA-time

Roster FTE = ■ Required \div (1 - shrinkage) ■

Monthly cost = Roster \times per-FTE cost

Predicted SLA = Erlang C SLA at Required staffing

Occupancy = A \div Required

4 - Outputs

Comparison table with one row per scenario (baseline first):

- Scenario name
- Volume and AHT
- Required agents and Roster FTE
- Monthly cost and Δ Cost vs Baseline (with %)
- Predicted SLA and Occupancy

Cost delta is colour-coded — red for increases, green for decreases. The chart below the table shows monthly cost as bars, baseline in grey, scenarios in gold.

5 - The Excel Workbook

- Summary — all scenarios with full numerics
- Assumptions — the methodology of each delta type

6 - A Worked Example

Baseline: 500 calls/hour, 290 sec AHT, 85%/20s SLA, 25% shrinkage, ■55,000/FTE/month.

Erlang C on baseline \approx 49 required agents, Roster \approx 66 FTE, Cost \approx ■36.3 lakh/month.

Scenario 1: Volume +10%

Calls = 550, AHT = 290, SLA = 85%

Required jumps to \sim 54, Roster \sim 72, Cost \sim ■39.6 lakh — a +9% cost increase for a +10% volume increase.

Scenario 2: AHT +15%

Calls = 500, AHT = 333, SLA = 85%

Required jumps to \sim 56, Roster \sim 75, Cost \sim ■41.3 lakh — a +14% cost increase. AHT drift costs more than equivalent volume growth.

Scenario 3: Tighter SLA 95% in 20s

Calls = 500, AHT = 290, SLA = 95%

Required jumps to \sim 58, Roster \sim 78, Cost \sim ■42.9 lakh — a +18% cost increase. Tighter SLA is the most expensive lever.

7 - Tips

What to look for

Run the same delta against multiple inputs and see which moves cost most. That tells you where to focus operationally. AHT drift usually carries more cost than equivalent volume growth because it compounds with shrinkage.

How many scenarios

Three to five is enough. Beyond that the comparison table gets noisy. If you need to explore a continuous sensitivity, run the same scenario shape repeatedly with different magnitudes — e.g., Volume +5%, +10%, +15%, +20% — and look at the cost curve.

Why a scenario showed lower cost than baseline

Lower AHT, lower shrinkage, or wider SLA all reduce cost. The chart will show these as negative deltas in green.