



ALGOSHRED TECHNOLOGIES



RELIABILITY & RESILIENCE · KEEP THE LIGHT ON, WHATEVER THE WEATHER

When your app goes dark, who notices first?

We help you hear about trouble before your customers do, practise bad days on calm ones and keep a spare you have tested, so that when something breaks, you aim for a short interruption, not a long outage.

Worth knowing: Practice doesn't stop storms. It aims to make the dark shorter and the recovery calmer, and some problems still surprise everyone. It's built with your team, one service at a time, not handed over in a box.

Practise the storm before it comes.

Start with one bad night: email contact@algoshred.com with what your customers rely on most and who noticed first last time, and we'll suggest a first step.

Reliability & resilience engineering as a service

Vignesh T.V., CEO & CTO, Algoshred Technologies Pvt. Ltd.

contact@algoshred.com



The problem, and the idea.

It went down, and we found out from an angry customer.

Our biggest day was the day it fell over.

We had backups. Then we tried to bring one back.

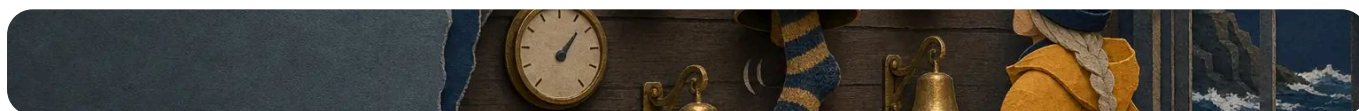
It isn't down, it's just so slow that people give up.

The alarms ring all night, and most of them are nothing.

When it broke, everyone panicked and nobody knew who does what.

Reliability and resilience engineering means making sure what your customers depend on keeps working and stays quick to respond, hearing about trouble before they do, and coming back calmly when something breaks, because you practised for it.

The story, decoded. In our story, Ingrid keeps the lighthouse and Bosun is her seal. The lighthouse is your app or website, and the ships are your customers. A storm is a rush of customers, a bad update or plain bad luck. The gauges, the one bell that matters and the buoy far out (a pretend customer trying your app all night) are your early warnings; the bell stuffed with a sock is an alarm nobody hears. The spare lamp and the oil in another shed are your backups. Tested on a calm day, the spare lamp spluttered: Bosun had hidden a fish in its oil can, a weak spot nobody knew about.



01 Aim to know before your customers do

A few gauges tied to what customers feel, a pretend customer trying your app all night, and one bell that rings only when someone needs to act. Too many bells, and nobody listens.

Experts call this: **monitoring, alerting, observability, synthetic checks**

Worth knowing Gauges show trouble early, but someone still has to look, and some storms come without warning.

02 Practise failure on a calm day

Switch one part off on purpose, small and planned, with a hand on the switch, and find the hidden weak spot before a storm does.

Experts call this: **chaos engineering, game days**

Worth knowing Practice switch-offs start small, on a calm day, with a way to stop. We agree what is off-limits before anything is switched off.

03 Plan for your busiest day

Enough room and hands for the busiest night, tried before it arrives. Too slow can be as bad as broken.

Experts call this: **performance and capacity, load testing**

Worth knowing Trying your busiest day ahead shows where things strain. Real crowds can still surprise you, so someone should be watching on the day.

04 A tested spare and a plan

A spare you have switched to on purpose, copies kept somewhere else, and a plan on the wall for who does what, so you can keep going another way while the main thing is fixed.

Experts call this: **backups, disaster recovery, business continuity, incident response**

Worth knowing A spare that has not been tested is a hope, not a plan. Keep copies somewhere else, and if a mistake gets copied into your backup too, you need an older, dated copy to go back to.



The same storm, ready or not.

PLAIN BAD LUCK • **NOTHING READY · A LONG DARK NIGHT** EVERYTHING READY · A SHORT BLINK

Who notices first?	A ship notices first: "Hello? Anyone there?"	The buoy blinks red and one bell rings. Ingrid hears first.
How long is it dark?	The spare splutters, and out flops a fish. A long dark night.	A short blink, and the tested spare takes over.
Who does what?	Everyone runs to the lamp. The radio goes quiet. Bosun hides in the foghorn.	Ingrid: lamp. Bosun: foghorn. The radio: someone named on the plan, talking to the ships. The ships get home.
Next morning	The logbook asks: who hid the fish?	The logbook asks: what do we fix?

A rush of customers For you: your busiest sales day arrives all at once
Nothing ready: Every ship calls at once on one radio. Replies come too late, and ships turn away.
Everything ready: The busy night was tried on a quiet week. More radios and hands; the queue forms, then clears.

A bad update For you: a change that looked fine goes out to everyone
Nothing ready: A new lens goes on every window at once, and the whole beam wobbles.
Everything ready: The new lens went on one window first. It wobbles, so the old one goes back on.

An illustration, not a measurement. In every storm, something still breaks.

Too many bells, and nobody listens The bells are the alerts your team gets. The buoy is a pretend customer trying your app all night.

WAKES SOMEONE

FOG pages are getting slow for customers
OIL LOW something is about to run out
LAMP OUT customers can't get in
A SHIP CAN'T SEE THE LIGHT a pretend customer couldn't get through

GOES IN THE LOGBOOK

GULLS a harmless blip
WET PAINT a routine change was made
KETTLE a routine job finished
POST the daily report arrived
TIDE the usual busy spell of the day

Switch one thing off, on purpose, on a calm day Start small. We agree what's off-limits, and keep a way to stop.

The main lamp

What the practice showed: The spare splutters, and out flops a fish. Bosun faints.

Fixed on the calm day: Can cleaned, spare tried again: it glows.

A busy night, on a quiet week

What the practice showed: Calls queue up, and replies come too late. Too slow can be as bad as broken.

Fixed on the calm day: More radios and hands, before the real busy night.

The oil shed floods

What the practice showed: Both cans were in the same shed.

Fixed on the calm day: Spare oil now lives in another shed, and it is checked.

A mistake, not a storm

What the practice showed: Bosun smudged paint on the main lens, and the spare copied it.

Fixed on the calm day: An older, dated spare kept apart, to go back to.

The keeper's day away

What the practice showed: Nobody knows where the lever key hangs. Bosun hides behind the lens.

Fixed on the calm day: The plan on the wall says who does what, and the key hangs beside it.

Worth knowing

Practice doesn't stop storms. It aims to make the dark shorter and the recovery calmer, and some problems still surprise everyone.

Worth knowing

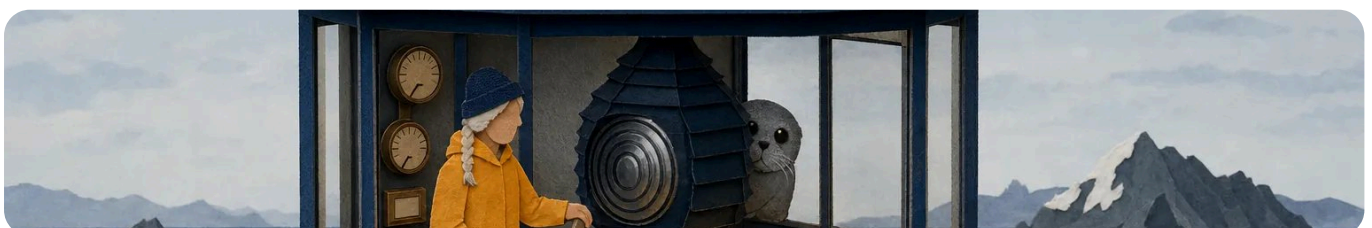
Practice switch-offs start small, on a calm day, with a way to stop. We agree what is off-limits before anything is switched off.

Worth knowing

A spare that has not been tested is a hope, not a plan. Keep copies somewhere else, and if a mistake gets copied into your backup too, you need an older, dated copy to go back to.

Worth knowing

Trying your busiest day ahead shows where things strain. Real crowds can still surprise you, so someone should be watching on the day.





What we help with.

Start with the one that worries you most, or bring the pieces together service by service.



A reliability check-up, and “reliable enough” agreed

We look at what your customers rely on most, your past outages, your alarms and backups, and who answers at night. Perfect isn't possible, and chasing it costs more than it's worth. We help you agree what reliable enough means for each part, with the people who own and use it.

A short list of the risks that matter most, and targets everyone has agreed.

Experts call this: reliability targets (SLOs), error budgets, site reliability engineering (SRE)

Switching things off on purpose, on a calm day

Small, planned experiments that switch one part off with agreed limits and a way to stop, plus team practice days that rehearse the people as well as the systems. Practice switch-offs start small, on a calm day, with a way to stop. We agree what is off-limits before anything is switched off.

So weak spots can be found and fixed on a calm day rather than in the storm.

Experts call this: chaos engineering, game days

Built to bounce back

Removing “only one of” weak spots, rolling changes out a little at a time with an off switch, polite limits on repeated requests, and a simpler working mode when a part struggles.

Aims to keep one failure from taking everything else down with it.

Experts call this: high availability, safe rollouts, graceful degradation, rate limits

Calm incident handling and no-blame reviews

Clear roles, written steps for known problems, message templates for customers, and a review habit that asks what to fix, not who to blame.

So people know their part when the bell rings, and the same thing is less likely to catch you out twice, because the fix is written down.

Experts call this: incident response, on-call, runbooks, blameless post-incident reviews

Gauges and bells that mean something

Readings tied to what customers feel, a pretend customer that tries your key pages around the clock, and alarms reworked so fewer ring and each one asks for action.

Trouble can show up before customers notice, and nights on alarm duty can get quieter.

Experts call this: observability, monitoring and alerting, synthetic checks

Ready for your busiest day

Trying the crowd before it arrives, finding the slow parts, and planning the room you need for sales, launches, results days and festival rushes. Trying your busiest day ahead shows where things strain. Real crowds can still surprise you, so someone should be watching on the day. If you'd like, we can watch alongside your team on the day.

Your busiest day becomes something you have tried before, and slow pages get the attention outages do.

Experts call this: performance engineering, load testing, capacity planning

Spares and backups you have tested

Choosing how ready each spare should be, protected copies kept apart from everyday systems, and supervised restore and switch-over practice. A spare that has not been tested is a hope, not a plan. Keep copies somewhere else, and if a mistake gets copied into your backup too, you need an older, dated copy to go back to.

“How long to come back” becomes something you have practised, not guessed.

Experts call this: disaster recovery, backup and restore testing, recovery time and data-loss limits (RTO/RPO)

The storm plan, people and suppliers included

Deciding what comes back first, a plan that covers people, suppliers and customer messages, storms walked through on paper, and the test records your compliance team asks for.

A plan that gives everyone their part on the bad day, and records of what you practised.

Experts call this: business continuity, business impact analysis, tabletop exercises, operational resilience

For your technical team: we work with what you already use, for example OpenTelemetry, Prometheus, Grafana, Datadog, PagerDuty, k6, JMeter, Chaos Mesh, LitmusChaos, AWS Fault Injection Service, Azure Chaos Studio, Velerio and your cloud's own backup tools.

Capabilities, from the first bell to the morning-after logbook.

From hearing about trouble early, to practising on calm days, to coming back calmly, to a plan everyone has walked through.

Notice

Hear about trouble before customers do.

- Reliability targets agreed with the business (SLOs, and an error budget: how much trouble is acceptable before new work pauses for fixes)
- Dashboards that follow a customer's path through your app (customer-journey dashboards), built on the four golden signals: how long people wait, how many are asking, how many are turned away, and how full you are
- Alarm clean-up, so each bell means act now
- Pretend-customer checks, and readings of how your key pages feel to real visitors (real-user monitoring)
- Being able to look inside and find out why something happened (observability)

Recover

Keep one break from becoming many, and come back calmly.

- Removing single points of failure (the “only one of” weak spots)
- Gradual rollouts with off switches
- Limits on repeated requests, and simpler working modes when a part struggles
- Protected, separate backups with regular restore tests
- Choosing how ready each spare should be, service by service: a spare in a box (backup and restore), the essentials kept ready but switched off (pilot light), a small spare already running (warm standby), or two lamps lit together (active-active)

WHERE IT BECOMES REAL · ILLUSTRATIVE EXAMPLES

Retail and e-commerce

For example, before a festival sale the checkout could be tried with a crowd that hasn't arrived yet, the slow step found, and the team agreed on what gets switched off first if the night gets rough.

Logistics

For example, when the tracking page struggles, it could show a simpler view instead of an error, while polite limits stop every app asking again and again at once.

Banking and payments

For example, a payments service could have a spare that is practised on a schedule, with records of each practice ready when a partner bank asks how recovery would work.

Education and ticketing

For example, results day or a ticket release could be tried on a quiet week, so the busiest hour is not the first time the system meets that crowd.

Healthcare

For example, a clinic's booking system could have one bell for “patients can't book”, and a written plan for taking appointments by phone while it is being fixed.

Teams adding AI helpers to night-time alarm duty

For example, an AI assistant could sort alarms and suggest next steps from clean readings and written steps, while a person still approves any change to the live system.

Practise

Find the weak spots on a calm day.

- Small, limited switch-off experiments (chaos engineering)
- Team practice days that rehearse people as well as systems (game days)
- Load, stress and long-running tests before your big days
- Storms walked through on paper with leaders (tabletop exercises)

Plan and people

A plan everyone has practised.

- Incident roles, written steps (runbooks) and customer messages
- No-blame reviews that end in a fix
- Continuity plans that cover people and suppliers
- Records for financial regulators' reviews (for example the EU's Digital Operational Resilience Act, DORA; the UK's Financial Conduct Authority and Prudential Regulation Authority, FCA and PRA; or India's Reserve Bank and securities regulator, RBI and SEBI), prepared with your compliance and legal teams (whether they meet a rule is their call, not ours)
- Training and handover, including what AI helpers may do on alarm duty (sort alarms and suggest next steps; a person approves any change to the live system)

Look first, agree what's reliable enough, then practise on calm days.



01 LOOK

Look for the weak spots, with you

We map what your customers rely on most and read the last few outages without blame. Together we find the “only one of” weak spots: one server, one supplier, one person who knows.

02 RELIABLE ENOUGH

Agree what's reliable enough

We agree targets for each part with the people who own it: how long it may be down, and how much recent work you could afford to lose. Perfect is not the goal: the payments desk and the staff newsletter deserve different answers.

03 EARLY WARNINGS

Add gauges and one bell that matters

We watch what customers feel, add a pretend customer that tries your key pages, and rework the alarms so each one means act now. The rest goes in the logbook.

04 CALM DAYS

Practise on calm days

On a calm day we switch one part off on purpose, try the busiest day before it arrives, restore a backup and walk a storm through on paper. Each surprise gets written down and fixed.

05 KEEP PRACTISING

Your team keeps the plan and the habit

Your team owns the plan, the written steps and the practice calendar, and we train them to run it. We can share the watch for a while, or come back for regular practice days, if you prefer. It's built with your team, one service at a time, not handed over in a box.

Ways to start

Walk through one bad night. A no-blame look at one real outage, and what would have helped.

One storm on paper. A walk-through on paper (a tabletop exercise) for one service you worry about.

Test your spare. A supervised restore or switch-over practice on one service, in a safe window.

What you get

- A map of what customers rely on most, and its “only one of” weak spots
- Reliability targets agreed for each part
- Reworked alarms and customer-journey dashboards
- One calm-day switch-off, with what was found and fixed
- A tested restore of one backup
- A storm plan with roles and customer messages
- Hand-over sessions and a practice calendar for your team



Questions, myths and the next step.

What is reliability and resilience engineering, in plain words?

Making sure what your customers rely on keeps working, hearing about trouble before they do, and coming back calmly when something breaks, because you have practised for it.

Is this the same as DevOps, or as having an operations team?

It overlaps with both. DevOps is about builders and operators sharing the work of shipping and running software; reliability engineering zooms in on keeping what's shipped working. Site reliability engineering (SRE) treats that as an engineering job: agreed targets, useful alarms, practised recovery and fixing causes, so it depends on habits rather than heroes.

Can you stop it from ever going down?

No one honestly can. Perfect isn't possible, and chasing it costs more than it's worth. We help you agree what reliable enough means for each part, with the people who own and use it. Then we watch it, and practise recovery so bad days are shorter and calmer. Experts call these targets SLOs, and the room they leave for trouble an error budget.

Isn't switching things off on purpose risky?

Practice switch-offs start small, on a calm day, with a way to stop. We agree what is off-limits before anything is switched off. Often the first practice happens in a test copy or on paper. Finding a weak spot that way is gentler than finding it in the storm.

Do we need new monitoring tools, or a second data centre?

Not necessarily. We start with what matters most and the tools you already have. How ready a spare needs to be is a business choice, made service by service: the payments desk and the staff newsletter deserve different answers.

Can you help with what our regulator expects?

We can help you map your important services, plan and run the practice, and keep records of what was tested, working with your compliance and legal teams. Whether that meets a particular rule (for example the EU's DORA; the UK's financial regulators, the FCA and PRA; or India's central bank and market regulator, the RBI and SEBI) is their call, not ours.

How will we know it's working?

We agree a few plain signs with you at the start: who notices problems first (you or your customers), how long until someone is working on it, when each spare was last tried, and whether each review led to a fix. The numbers stay with you, and we make no promises about them.

What happens after the project ends? Do you answer the alarms at night for us (on-call)?

Your team keeps the targets, alarms, written steps, plan and practice calendar, and we train them to run it. If you prefer, we can share the watch for a while or come back for regular practice days; we agree the scope in writing first.

MYTHS, ANSWERED

"Good systems don't break."

Everything breaks sometimes. Good teams expect it, notice early and bounce back.

"We have backups, so we're fine."

A backup you have not tried bringing back is a hope, not a plan. In our story, the spare lamp spluttered: Bosun had hidden a fish in its oil can.

"Switching things off on purpose is reckless."

Practice switch-offs start small, on a calm day, with a way to stop. We agree what is off-limits before anything is switched off. Finding the weak spot on a calm day beats finding it in the storm.

"We should aim for perfect."

Perfect isn't possible, and chasing it costs more than it's worth. We help you agree what reliable enough means for each part, with the people who own and use it.

Where's the fish hiding in your business?

Start with one bad night: email contact@algoshred.com with what your customers rely on most and who noticed first last time, and we'll suggest a first step.

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WATCH THE FILM

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