ZIF™

AIOps Platform for **Service Reliability Engineering (SRE)**

ZIF

AIOps Platform for SRE – ZIF™

The Zero Incident Framework™ (ZIF™) is a robust AIOps solution that enables proactive detection and remediation of IT incidents, thus enabling SRE teams to move from a reactive to proactive approach towards incidents impacting applications and infrastructure. ZIF™ is a DevOps friendly platform and is available both as an On-premises and SaaS solution.

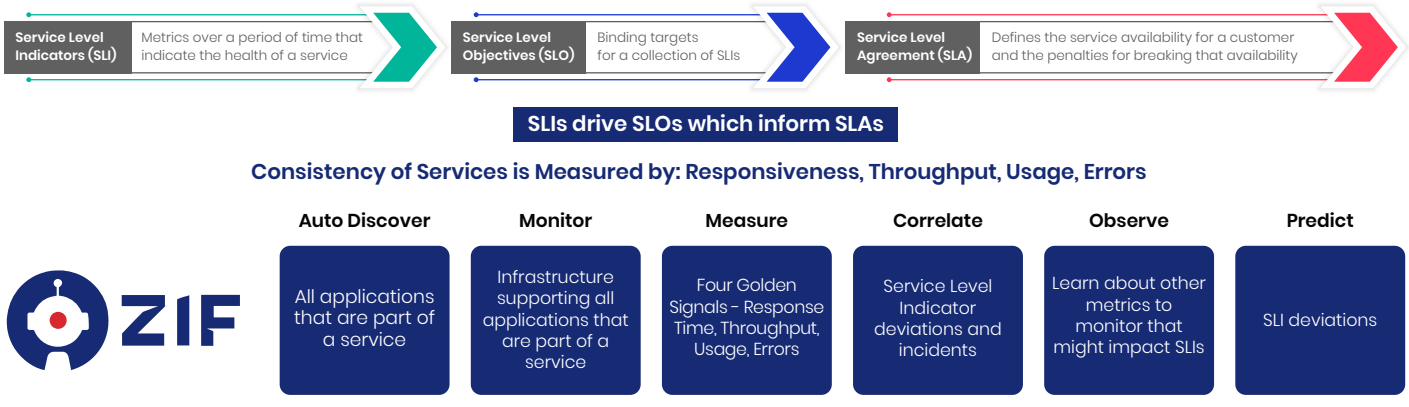
What is Service Reliability Engineering (SRE)?

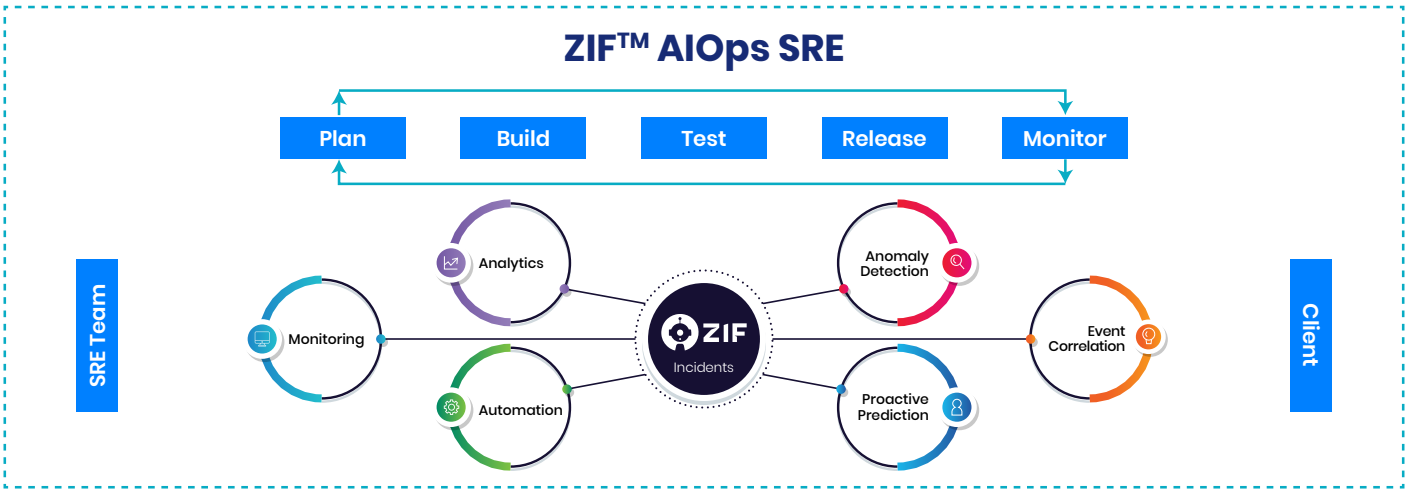
Service Reliability Engineering (SRE) is the process of automating IT infrastructure functions including system management and application monitoring using software tools. SRE is used by businesses to guarantee that their software applications are reliable even when they receive frequent releases from development teams.

- Getting rid of digital dirt
- Removing the barriers between IT infrastructure systems and operations
- Intuitive visualization of application health and user experience from the digital delivery chain
- End-to-End visibility for IT teams
- MTTR reduction by using intelligent root cause analysis
- Zero-touch automation for a variety of services, such as the delivery of cloud-native applications, legacy applications, and workflows

ZIF™ AIOps Platform for Service Reliability Engineering (SRE)

Through the provision of AI-led predictions and auto-remediation, AIOps Platform ZIF™ enables businesses focused on digital transformation to handle IT incidents in a proactive manner. ZIF™ is a unified platform powered by AI-led capabilities for automatic environment discovery, monitoring to include observability, predictive and prescriptive analytics, and self-remediation, enabling results like:



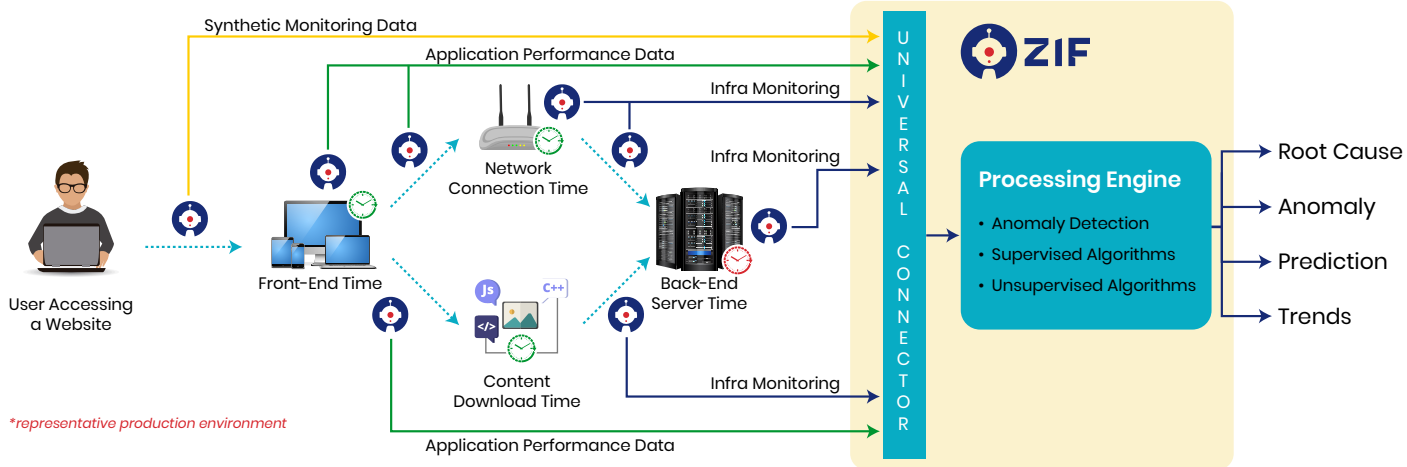


Key Tenets of Service Reliability in ZIF™

Key Tenets of SRE	Our Understanding of this Tenet	Relevant ZIF™ Component
Availability of Services	Should be available when needed. It does not care about availability or outages when it is not expected to be used.	APM component of ZIF-Monitor and Prediction component of ZIF A&P
Latency	The delay in providing resolution for an incident. Lesser latency needs lesser human intervention or more automation.	ZIF-Remediate and TechBot feature of ZIF-A&P
Performance	Consistent performance of the application whenever accessed by anyone at any time, even if there is increased load due to organic or inorganic growth or special events.	ZIF-Monitor (GIA and APM) and ZIF-A&P
Efficiency	Indicates optimum use of resources in a server for an application. It should neither be oversized to provide the best performance, nor undersized to cut costs.	ZIF-Monitor, ZIF-A&P, ZIF-Remediate
Change Management	How effectively we reduce the impact of rollouts of new versions. The recommendation is to automate the rollout and rollback - (i) do progressive rollouts (ii) detect issues early and rectify (iii) roll back seamlessly.	ZIF-Monitor (Change of State)
Monitoring	Monitoring should send only those alerts that need attention by a human. It should not send any or all alerts. Nirvana stage is when the system performs so well that the monitoring tool does not need to generate any alerts.	ZIF-Monitor, Correlation feature of ZIF-A&P
Emergency Response Time	How quickly we resolve the issue, either using playbooks, experts, or automation. Nirvana stage ensures that there would not be any need for anyone to work on emergency incidents.	Correlation feature of ZIF-A&P
Capacity Planning	Plan and add or remove resources as per the incoming load. A predictive module would greatly help in keeping this tenet under control.	ZIF-Monitor and Prediction component of ZIF-A&P

Enabling the Key Tenets of Service Reliability in ZIF™

Synthetic monitoring, Infra monitoring, and Application performance monitoring from ZIF™ generate telemetry data that is analyzed using machine learning algorithms to determine anomalies and to predict potential failures or performance degradations.



AIOps Platform ZIF™ - Empowering the SRE Team in their Daily Tasks

Data Ingestion and Transformation

The ZIF™ agents have built-in intelligence, and they collect various environmental health parameters. ZIF™ also has agentless monitoring capability. The **Universal Connector** in ZIF™ helps integrate various third-party tools with the platform. The data from various third-party tools is ingested, normalized, and transformed to make it consumable for the SRE teams and to empower them to make data-backed decisions.

Correlation and Noise Reduction

The alerts generated across various devices and applications are correlated into meaningful and actionable cases by ZIF™ using advanced machine learning algorithms. The algorithms self-learn and unlearn patterns to generate very accurate correlations.

Auto Discovery and Dependency Mapping

ZIF™ auto-discovers both physical devices and applications that are deployed in an enterprise and develops a topological map. ZIF™ can integrate with the enterprise CMDB platform and keep it up to date. Thus, ZIF™ platform provides the SRE team with access to the latest CMDB and enables them to have complete Observability of the IT operations.

Automation and Remediation

ZIF™ with its Automation module helps the SRE team in eliminating the toil. ZIF™ offers more than 250 pre-built ITPA bots that handle a variety of automated tasks. Additionally, ZIF™ includes a workflow creator that the SRE team can use to create their own bots and workflows.

Anomaly Detection and Root Cause Analysis

ZIF™ correlates all the alerts that come into the environment in real-time and groups them to build linkages and create patterns. This in turn will help speed up incident response time and identify root cause. This helps the SRE teams to determine which events are most likely to be the underlying cause, thus giving them an ideal place to begin troubleshooting and resolution.

Unified Proactive Monitoring

ZIF™ Monitoring can monitor and generate alerts based on threshold breaches. ZIF™ has a full-stack monitoring capability, that can monitor all the layers of the infrastructure and applications. The SRE and DevOps teams need not go across multiple environments to monitor their workload; instead, ZIF™ Monitoring provides a single pane dashboard and provides the ability to set rules and receive notifications through centralized control.

The ZIF™ platform enables the SRE team to be agile in responding to dynamic changes and also helps to achieve the targeted SLO and SLI. ZIF™ Monitoring facilitates the SRE team to accomplish the Availability, Request Latency, Traffic, Error Rate, and Saturation SLOs.

Intelligent Predictive Analytics

ZIF™ proactively predicts any potential failures or performance degradations a minimum of 2 hours before they occur. ZIF™ does this through unsupervised machine learning algorithms. Historical patterns, trends, and symptoms are learned by the algorithms to predict the next potential impact. Thus, the platform helps the SRE team to be proactive in their day-to-day operations. The predictions also help them to estimate their Error Budget accurately.

ZIF

ZIF™ (**Zero Incident Framework™**), is an award-winning AIOps platform for IT Operations. ZIF™ delivers business outcomes by leveraging unsupervised pattern-based machine learning algorithms. Infrastructure and application telemetry data are aggregated, correlated, and potential failures are predicted. To enable faster resolution and better user experience, ZIF™ deploys intelligent bots for proactive remediation. Developed by GAVS Technologies (www.gavstech.com), ZIF™ is available as an on-premises and SaaS solution.

Contact us now for personalized onboarding service!

To find out more about ZIF™, please visit **www.zif.ai** or write to **inquiry@zif.ai**