



Mitigate Production Risks With Sabio Performance Testing

Meeting Complex Challenges

Technology has evolved significantly over the last decade. Exponential growth in services, applications and integrations has been observed throughout the contact centre market. Ultimately, these are complex and diverse environments where each Contact Centre has a different and unique architecture and configuration.

More than ever before, vendor applications are integrated closely to other applications, 3rd party systems and underpinning technology such as virtual machines and a plethora of operating systems. These dependencies and interoperabilities create value, performance and efficiency for organisations running contact centre operations.

It is important to understand these dependencies and services, and the potential impact to critical service lines if they are unavailable.

The result is that, when one of these systems or integrations are not performant, the impact to service can often be disastrous and costly.

You can calculate the cost of lost revenue from contact centre downtime as follows:

$$\text{Lost Revenue} = (R/ABH) \times O \times H$$

R Annual Revenue

ABH Annual Business Operating Hours

O % Outage (i.e. 80% of the operation was down)

H Length of Outage in Hours

Did you know that contact centre outages cost organisations more in lost revenue than any other area of IT?

Even the slightest service degradation within a contact centre can cause a severe loss in revenue and reputational damage.

It is imperative for mission critical contact centres to leverage representative tests of production over load and above single/simple unit testing. Despite these problems and up to now, carrying out complete and representative tests of the production load has proven to be a significant effort in terms of time and cost investment, that they have become an insurmountable barrier for many organisations.

Organisations often approach technical change, product/application additions or configuration changes without complete confidence or knowledge of how it will impact the live operation.

Performance Testing

At Sabio, we have developed Performance Testing for complex Contact Centre environments. Based on our over-18-years' expertise, designing and supporting Contact Centre technologies, we have developed our own testing and analytics platform, supported by highly comprehensive methodologies which allow us to measure performance and assess the correct functioning of the systems' actual load, prior to launching.

Through our platform CallGen we are able to inject a volume and typology of authentic calls into the Contact Centre which act like live calls an operation would handle during normal service.

To carry out performance tests on dialler systems we have our CallHole platform, a call receiver which, depending on the configured capacity rules and filters, reply to calls like real customers, faxes and voice mails. Simulation of busy or unanswered calls can also be configured.

On the other hand, by using our agent simulator called AgentSim we are able to automatically manage hundreds of work stations simultaneously without operational assistance from the Client, performing the same actions as real agents do. Furthermore, our tools allow us to replicate customers' behaviour patterns, which include DTMF tones and natural language.

Our specialised performance testing consulting team are in control of gathering and analysing relevant data following previously-designed test plans. They also identify and correct any problems that may arise. With Performance Testing, we minimize incidents during production and, at the same time, speed up the execution of a complete quality plan that suits the specific call service organisation.

With the combined Sabio technology and our consulting experts, the output of our service provides true business confidence.

We will help you assess and advise on critical decisions around growth and configuration within the contact centre environment. With Sabio Performance Testing, you will be able to benchmark the "before" and "after" performance.

With a further portfolio of monitoring and assurance products, such as Monitoring as a Service (MaaS), Recording Assurance as a Service (RAaaS) and Voice Quality Monitoring as a Service (VQMaaS), Sabio can help you become a predictive organisation, not just a proactive or reactive one.



Performance testing

Deep insight and analysis of the performance and operation of your contact centre environment



Functional testing

Tests are automated for every path customers might follow when interacting with the Contact Centre. This ensures that end-customers' experience goes according to design.



Burst testing

Call peaks are applied to assess the performance of the elements in the Contact Centre which do not use resources during all the call duration (e.g. IVR or routing).



Capacity testing

It allows us to determine the maximum call capacity which the infrastructure can take.



Soak testing

Call traffic similar to that of production calls is applied for a specific lengthy period and without alterations of the platform availability. This allows us to assess the behaviour and performance of the Contact Centre under production conditions.

Application/Operational Testing

We analyse systems that process or interact with voice calls.



IVR



Carrier



PBX/ACD



CTI



Dialler



Recorder

Platform/Infrastructure Testing

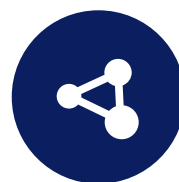
System analysis is not only aimed at specific Contact Centre technology, but it also includes generic infrastructures on which any software may reside.



Servers



Operating Systems



Network



Web Services



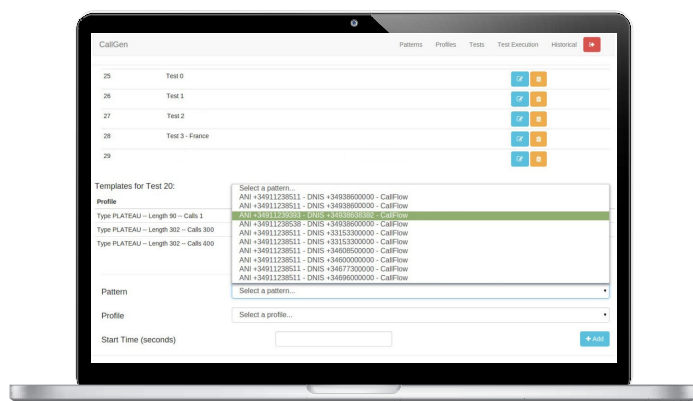
Databases



Storage Systems

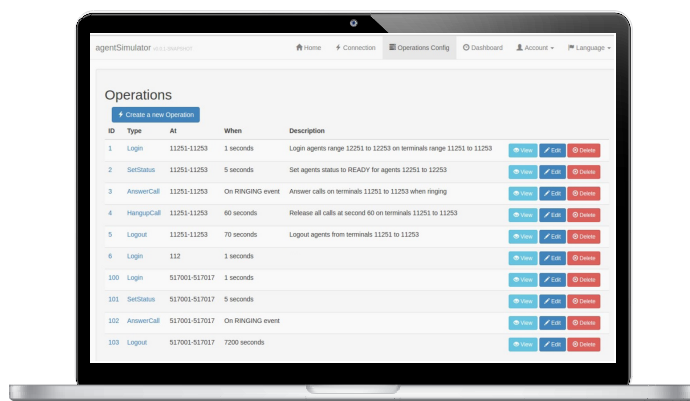
CallGen

CallGen can make as many simultaneous calls as necessary for the correct implementation of the performance tests. Furthermore, it is in the cloud, which allows it to reach any Contact Centre at any geographic location through the public telephone network (PSTN).



System Monitors

We use several monitors to analyse appropriate KPIs for each test scenario. As well as the underlying hardware platform analysis (physical or virtual) such as memory and CPU use, we also use specific testing for Contact Centre technology to measure the use of ACD resources, codecs, ports, licensing, trunks, audio quality, etc.



Performance Testing Reporting

Within the Performance Testing console, we configure the tests, but we also extract reports that we use to create the Performance Testing service deliverable for our projects.

Testing Services

We follow a series of work methods with different aims, depending on the project.



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Redundancy

The correct functioning of the platform is tested under a production load situation when backup elements are active.



Failover and recovery transition

Unavailability of some elements in the Contact Centre is forced while a volume of calls and agents similar to those of production is introduced. This helps to analyse service degradation during failures and to determine recovery times.



Capacity Testing

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Scalability Testing

Its purpose is to define the resources needed to support a higher level of call traffic than the current one.



Voice Quality Monitoring

With our VQM application embedded within Performance Testing, Sabio can validate the impact to voice quality throughout the testing lifecycle. With this added capability, we can help identify and predict critical issues with voice traffic within the network.

Performance Testing in Action

We validate our projects with a volume of real calls equal to those at production, thus minimizing the risks during going live.

Since we incorporate Performance Testing into our methodology, we minimize risks during going live, avoiding deterioration of the service, customer frustration and potential economic losses.

Redundancy tests are helping organisations to gain confidence in that the backup systems they have installed are working properly under high load conditions. This allows us to know with more precision the recovery time of a service when certain elements have become unavailable and there is no high availability. We test different active element combinations within a site or across several sites.

To ensure our Client's peace of mind, they will be assisted during the internal quality audits of their business or the external ones linked to banking and insurance to successfully get through them. We provide our clients with certifications to prove the status and potential of their Contact Centre to third parties.

About Sabio

Sabio is a leading customer experience managed service technology provider, with the proven international reach and ability to deliver transformational digital customer experience technology and managed service solutions to major organisations worldwide.

Partnering with world-class technology leaders, Sabio helps organisations to create seamless customer journeys, and works with over 250 enterprise customers worldwide, including The AA, AXA Assistance, BGL, Sainsbury's Argos, BNP Paribas, Carlson Wagonlit, Computacenter, DHL, HomeServe, Leeds City Council, Liverpool Victoria, Office Depot, Telefonica and Yorkshire Building Society to deliver excellent customer experiences.

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