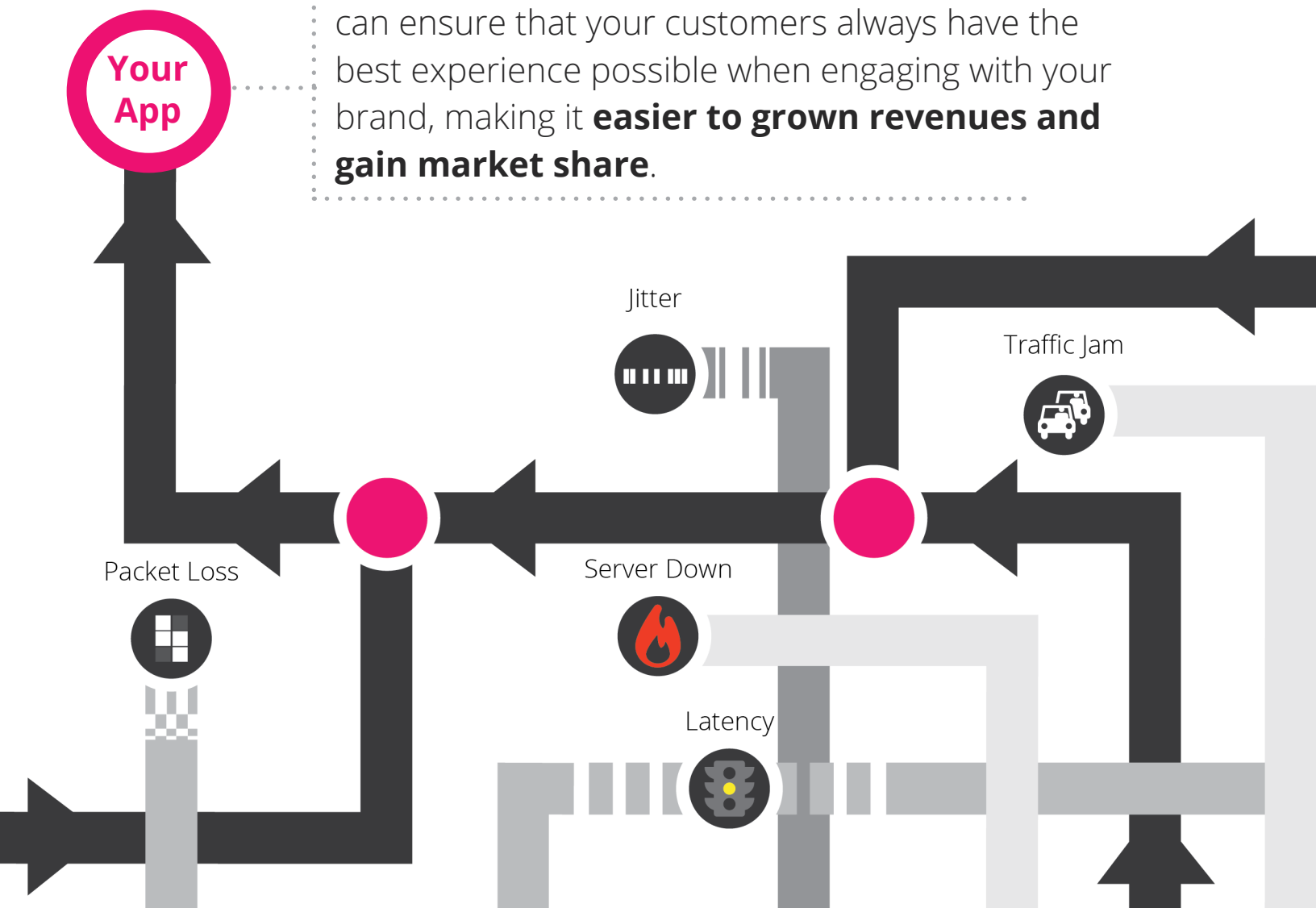




Drive Business Results with Next-Generation Internet Traffic Management

Latency, packet loss, jitter, and server outages aren't mere technical issues. Instead, they are common customer experience challenges that could be costing your **business millions of dollars in potential revenue and market share.**

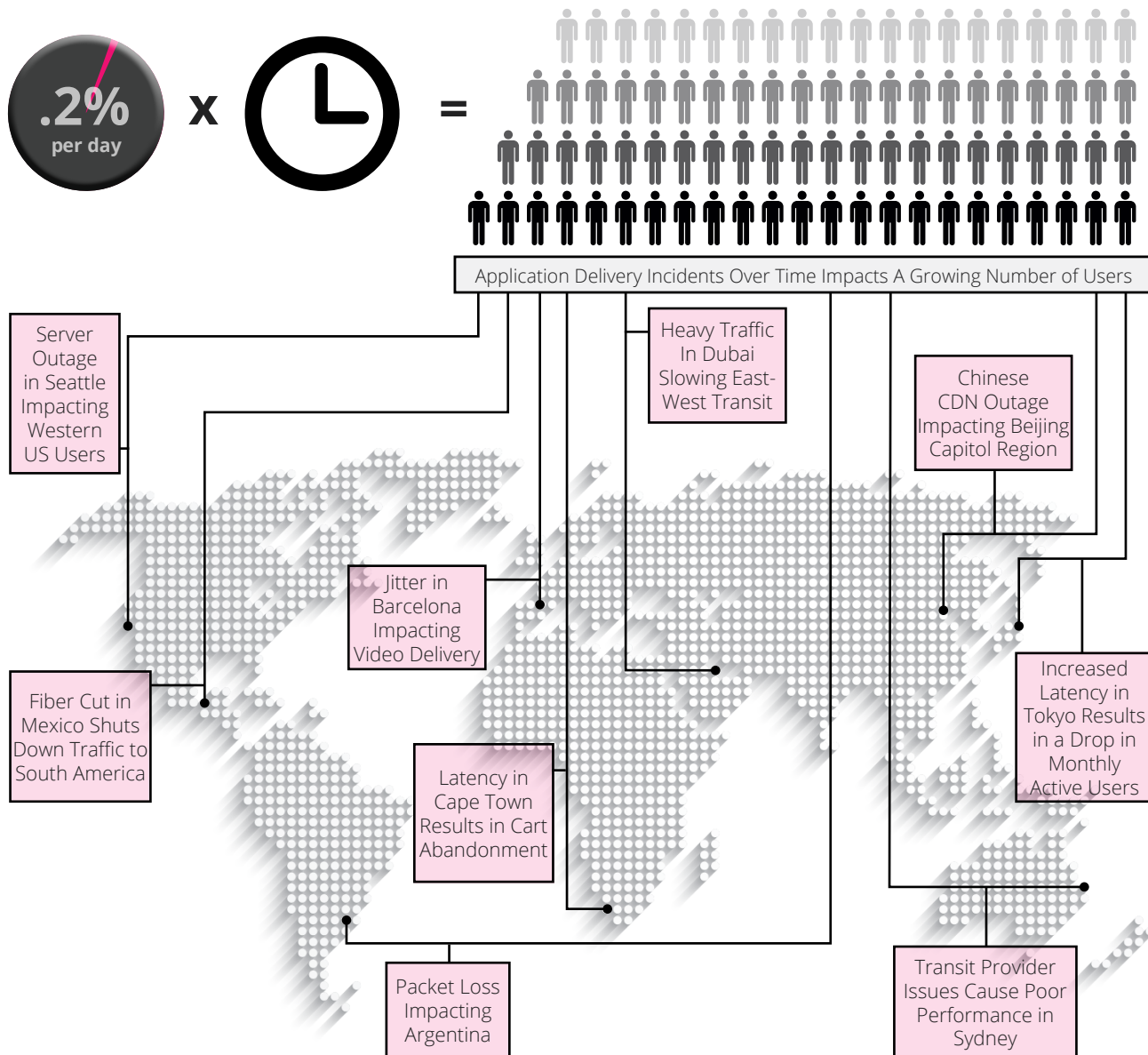
With Internet traffic management from NS1 you can ensure that your customers always have the best experience possible when engaging with your brand, making it **easier to grown revenues and gain market share.**



Think about it.

If your businesses lacks Internet traffic management capabilities, on any given day, a fraction of your customers have a less than optimal experience when engaged with your applications. That means **thousands or even millions of users that are left with a negative impression of your brand** in just a single day.

Because conditions that negatively impact Internet performance are always changing and impacting new users in different ways, over time a growing number of users suffer the ill effects of poor application performance. Depending on the type of business you are in, that can lead to **customer churn, loss of active users, cart abandonment, and overall dissatisfaction.**



With literally billions of combinations of factors that impact Internet performance -- and digital experience -- **the first decision you make when routing your users to your application is the most important decision you can make.** That's where NS1 comes in.

When Delivering a Flawless Customer Experience, The First Decision is the Most Important Decision

You get it. Trying to deliver applications across the Internet to a global audience is a tough, but mission critical challenge you need to solve in order to stay competitive. That's why NS1 has developed a platform that is purpose-built to enable businesses like yours to optimize the path to your online applications at the point of first contact with the customer.



A tale of two customer experiences.

When your customers use the Internet to connect with your business the vast majority of the time they are using a domain name to arrive at your website, mobile app, or other application. Essentially they ask a question to the Internet "where is www.example.com". As a business operator, you provide this answer to your customers based upon how you have set up your DNS records.

DNS

Unfortunately, for many businesses this is where things start going wrong. Fortunately, NS1 can help.



NS1.

The Internet returns an IP address and your customers go bounding across wifi, wires, and fiber until they arrive at your application end point. If all is well, your customers can go about transacting business with you. But, as you well know, the Internet is a complex place filled with potholes that degrade performance and hurt customer experience.

Legacy Approach

Traditional Internet traffic management solutions rely on decades-old technology that don't have robust monitoring capabilities or the ability to make intelligent decisions based on real time telemetry.

If you are using this approach your application can't detect service disruptions and will continue to serve a static answer -- even if that answer leads to a down server or a less than optimal path.



The NS1 Advantage

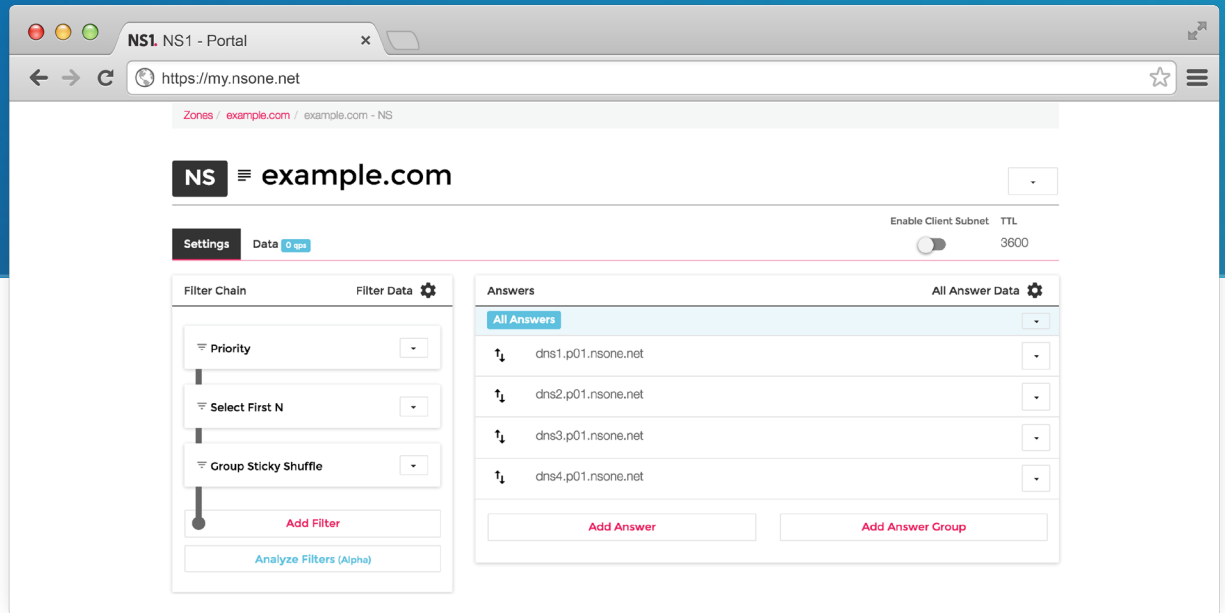
Driven by powerful Filter Chain™ technology, NS1 automatically leverages real time user, network, infrastructure, and application telemetry to send customers to the optimal endpoint, ensuring they have the best customer experience possible.

NS1 continuously monitors the Internet for service impacting issues and rapidly updates the edge network with optimized answers, ensuring the best customer experience possible.



Filter Chain™ Technology

NS1's patent-pending Filter Chain™ technology is what makes our technology fundamentally different. Filter Chains allow you to **easily configure complex, customized traffic shaping algorithms** perfectly suited to your application and network.



It's easy, it's automated, and you can be tuned to meet your precise business requirements.

NS1's Filter Chain technology enables automated, data-driven Internet traffic routing decisions that ensures your customers always take the optimal path to your online applications.

When NS1 receives a DNS query, we look up all potential answers to the query -- for example, all your web server IP addresses. We then pass those answers through a "chain" of filters, each of which performs a simple operation on the list of answers.

Filters make decisions based on metadata attached to each of the answers, like whether or not a server is up or down, server load, geography, and more. NS1 then responds with the optimally computed answer.

From this simple concept you can build incredibly powerful traffic management algorithms, tailored entirely to your application.

Combine Filter Chains with our turnkey data source integrations or APIs to fully integrate Internet traffic management with your DevOps ecosystem.

Turnkey integrations plug directly into the Filter Chain, APIs let you integrate virtually anything.

Built from the ground up with developers in mind, NS1 easily integrates into your DevOps ecosystem via our REST APIs or turnkey integrations with your deployment & configuration automation tools, monitoring & alerting platforms, and the rest of your stack.



catchpoint®



New Relic®



slack



Atlassian

HipChat

pingdom



RACKSPACE CLOUD
MONITORING



monitis
a TeamViewer Company

pagerduty



SEE MORE INTEGRATIONS

Use intelligent and dynamic filters to make traffic management decision based on real time telemetry.

Intelligent Filters

PULSAR Make decisions based in any type of user, network, infrastructure or application data

SHED_LOAD Shed traffic if load is too high, based on real-time metrics

GEOTARGET_LATLONG Sort answers by distance to requester using latitude and longitude

GEOTARGET_REGIONAL Sort answers by distance to requester by geographical region

GEOTARGET_COUNTRY Sort answers by distance to requester by country, US state, and/or Canadian province

GEOFENCE_REGIONAL Restrict to answers in same geographical region as requester

GEOFENCE_COUNTRY Restrict to answers in same country, US state, or Canadian province as requester

NETFENCE_ASN Restrict to answers where Autonomous System (AS) of requester IP matches AS list

NETFENCE_PREFIX Restrict to answers where requester IP matches prefix list

Dynamic Filters

PRIORITY Failover according to prioritized answer tiers

SELECT_FIRST_N Return the first N answers

SELECT_FIRST_REGION Return all answers in the same region as the first answer

SHUFFLE Shuffle answers randomly

STICKY Respond with the same answer by requester IP

STICKY_REGION Make regions "sticky" by requester IP

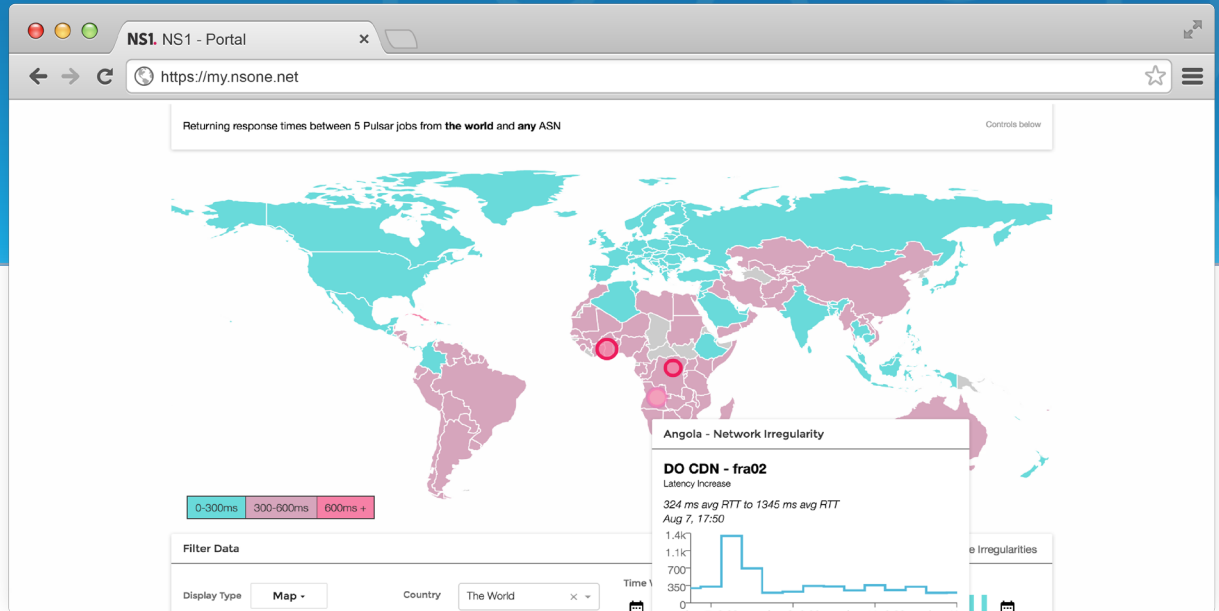
UP Remove answers that are "down"

WEIGHTED_SHUFFLE Shuffle answers randomly based on their weight

WEIGHTED_STICKY Shuffle answers uniquely per-requester with weighting

Pulsar, the Ultimate Internet Performance Engine

Send your users on **the best route every time** using real-time community data gathered from across the Internet coupled with your own application and infrastructure data.



Define what performance means to you, and let Pulsar do the rest.

Pulsar takes billions of measurements a day gathered from real users across the globe to build a robust community data set that computes real-time performance characteristics of major cloud providers and CDNs to gain unprecedented intelligence into global Internet performance.

In addition, Pulsar is designed to ingest data from virtually any source including your own user, network, application, and infrastructure telemetry.

By combining Pulsar community data with your own data sources, Pulsar builds the world's most precise routing tables and synchronizes this actionable data to our global DNS network for true real-time traffic steering.

Pulsar enables your business to tune traffic based on specific business requirements and application performance objectives far beyond the capabilities of anything on the market today.

Because Pulsar is native to the NS1 platform, you can easily put this intelligence into action by deploying the Pulsar filter -- available as an NS1 Filter Chain.

This groundbreaking technology can be utilized to reduce costs, improve performance, and solve some of the toughest Internet traffic management use cases in the world today.

Customer experience starts with DNS

Consumers demand a flawless customer experience every time they engage with your brand. No matter the size of your business or what industry you are in, customer experience has a direct impact on new customer acquisition, customer retention, and your bottom line results.

In an era where users are increasingly turning to digital channels to engage with businesses, your websites and applications aren't just a marketing vehicle but, rather, an essential part of your product offering.

DNS is the first decision point between you and your customers. The right decision delivers a high quality of experience whether that is fast page load, fast bulk download or a smooth multimedia streaming experience. The wrong decision leads to user abandonment and churn.

NS1's intelligent DNS and traffic management platform integrates real time user, network, application, and infrastructure telemetry to make sure that the first, critical decision is the *right one*.

In addition, our next-generation capabilities give your application development team the ability to send users on a route optimized for the performance metrics you care about most including latency, time to first byte, jitter, and packet loss.

Intelligent DNS and traffic management has emerged one of the fastest and easiest ways for application developers to make sure that every customer interaction is a flawless one. That is why **senior IT leaders are prioritizing intelligent DNS & traffic management** at the top of their project stack.



About NS1

NS1's intelligent DNS & traffic management platform, with its data driven architecture and unique Filter Chain routing engine, is purpose-built for the most demanding, mission-critical applications on the Internet. NS1's comprehensive platform technology leverages infrastructure, application, and network data to make intelligent routing decisions in real time, ensuring optimal application performance and reliability.