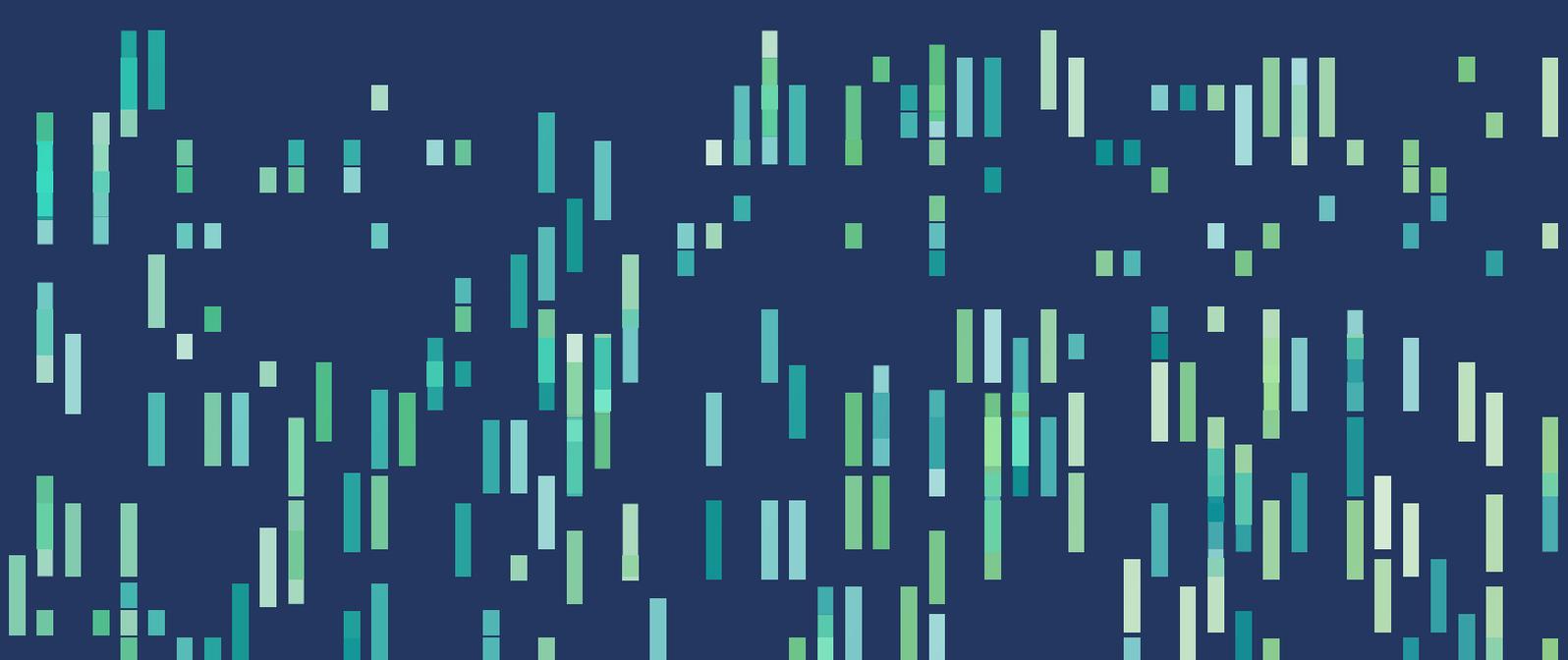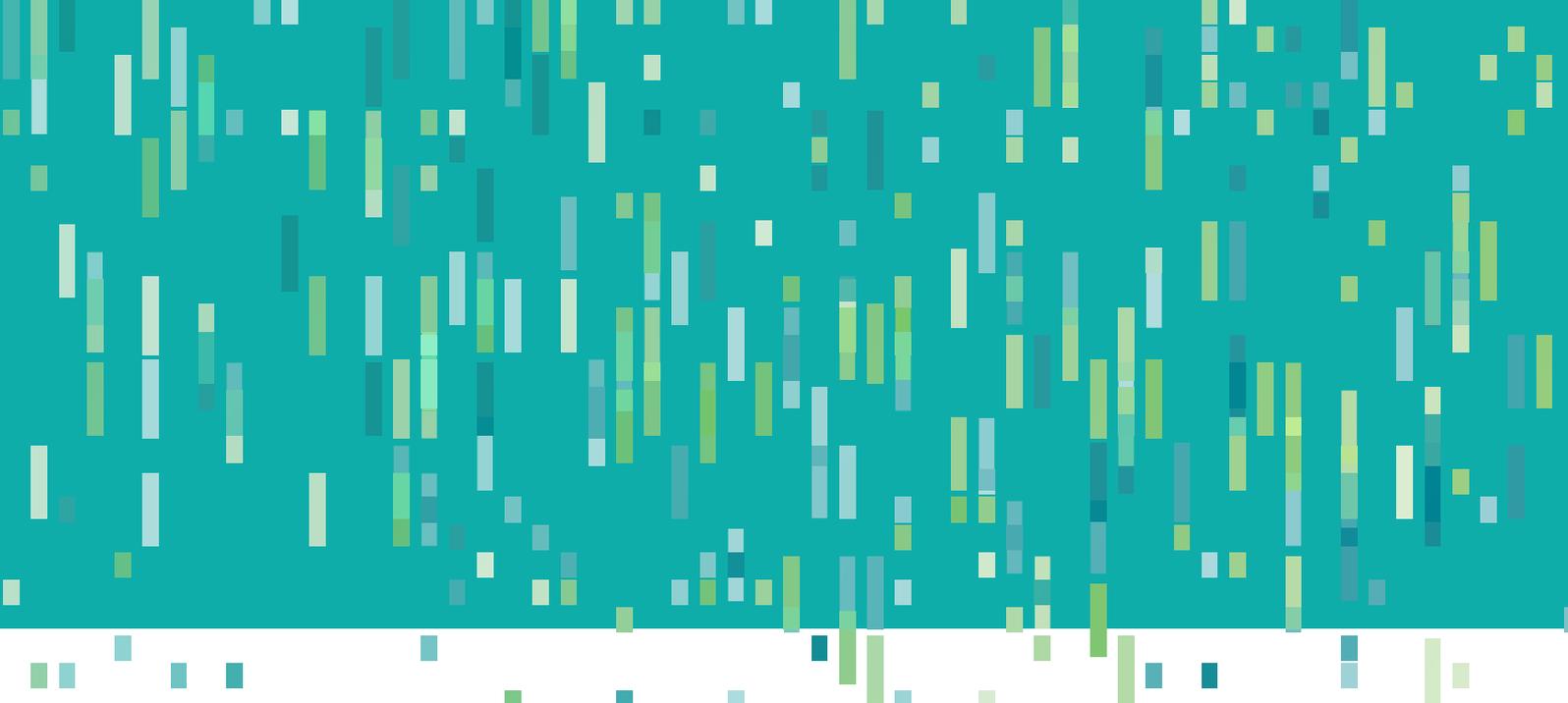# Neotys

Migrating from LoadRunner

A Research Study

Summary

Enterprises that have relied on LoadRunner as their status quo performance testing tool for years are increasingly finding that it has not kept pace with the shift to Agile/ DevOps methodologies. With development cycles getting shorter and new applications, microservices, APIs and features being released faster and faster, these enterprises are turning to NeoLoad as the performance testing platform that meets their modern needs.

But there remain a few (mis)perceptions about how much time and effort is needed to migrate from LoadRunner to NeoLoad. Neotys interviewed ten enterprise customers who made the migration to find out exactly what the truth of the matter is. They told us that:

- There are no technical obstacles to migration.
- Re-creating scripts in NeoLoad once is no more effort than updating them in LoadRunner once.
- But instead of having to re-script the entire LoadRunner script manually each time code changes, updating scripts in NeoLoad is more automatic. Script maintenance is 60–75% faster than in LoadRunner.
- NeoLoad is easy to learn and easy to use — even "beginners" get up and running after only three days' training.
- NeoLoad modernizes performance testing so that scripts fit into an Agile/DevOps environment.
- They can use NeoLoad for both DevOps and traditional end-to-end testing.
- The change in tools afforded them a great opportunity to reassess their testing approach, simplify scripts and clean out about 80% of their scripts that had become "dead code."

After debunking common migration misperceptions, **this paper outlines a proven best-practices migration strategy based on over 10 years' experience in migrating enterprises from LoadRunner to NeoLoad.**

Neotys

We Surveyed Enterprises
Who Made the Switch

Every software vendor thinks and says that switching to its product is easy. But beyond the hype, what's the reality?

Neotys wanted to hear straight from the horse's mouth from enterprise customers who had migrated from LoadRunner to NeoLoad. We interviewed ten large customers to find out about their switch from LoadRunner/Performance Center to NeoLoad.

We asked them about their previous performance testing environment, what their migration strategy looked like, how they executed that strategy, how long the migration process took, whether they faced particular challenges, and what their key takeaways and lessons learned were.

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Now Is a Golden Opportunity
to Modernize

All the organizations we surveyed brought up how switching to NeoLoad presented an excellent opportunity to reassess the way they had been approaching performance testing. This may in fact be the single biggest benefit of migration.

These enterprises told us that migrating to NeoLoad allowed them to take a step back, get off the LoadRunner hamster wheel, and rethink the way they had been doing things — especially their ability to embrace DevOps — and focus on what's most important. The change in tools was a catalyst to look for new ways to simplify test scripting, automate script maintenance, clean out old unused scripts, and bring more teams of different skill sets into performance testing.

Migrating from LoadRunner to NeoLoad is a perfect time to think about how to make the transition to DevOps, implement an automated, CI/CD-driven process, accelerate testing cycles, and ultimately release better software faster.

Neotys

Migration Is Not a Technical Challenge

Enterprises with firsthand experience of migrating from LoadRunner to NeoLoad agree: it is not a technical challenge, but a cultural one — overcoming an institutional resistance to change. Actually making the switch to NeoLoad is easy.

Some of this "fear of change" is simply human nature. People — especially IT teams — don't like change. Based on some common (mis)perceptions, they see a new way of doing things as simply a more difficult way to do what they're already doing.

Specifically, they think the migration project is too big, that it will take too much time and effort to migrate their hundreds, even thousands, of LoadRunner scripts over to NeoLoad. (Spoiler alert: About 80% of those scripts do not need to be migrated and should be discarded.) Performance engineers, particularly LoadRunner experts, are concerned about using the same tool for both DevOps and traditional enterprise testing. They dread learning a new tool — after all, it took them a while to develop the specialized skills needed to use LoadRunner.

But in reality, performance engineers have found that their concerns about migration were unfounded and that switching to NeoLoad actually makes their lives easier, allowing them to do their work better, faster, with less hassle and less toil (manual, repetitive operational chores).

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Switching to NeoLoad Actually Means Less Work

Perception
Switching from LoadRunner to NeoLoad is difficult and requires too much work.

Reality
Migrating scripts to NeoLoad **requires no more effort** than maintaining/updating the scripts in LoadRunner — and everything moving forward is significantly less work.

The enterprises we surveyed said that re-creating test scripts in NeoLoad was about the same amount of work as maintaining existing LoadRunner scripts. As LoadRunner scripts are not especially stable, teams spend a lot of time and effort updating scripts almost for every release. Designing tests in NeoLoad is far easier than in LoadRunner, so the initial effort of developing a script in NeoLoad *once* is the same as maintaining it in LoadRunner *once*. Yet LoadRunner script maintenance is certainly not one and done. Each time code changes, the entire LoadRunner script has to be manually re-scripted start to finish. Multiply the number of LoadRunner test script updates by the number of total test scripts and we'd be here all day. By moving to NeoLoad and upgrading your scripts, this work is in fact one and done. Imagine the immediate time savings.

And then the time savings and reduced effort compound over time. Every subsequent script update in NeoLoad is easier and faster than maintaining it in LoadRunner. The surveyed organizations said NeoLoad's mostly automatic script maintenance reduced the amount of time and effort it took to update scripts by 60–75%.

Enterprises also found the NeoLoad architecture simpler to deploy and easier to use. A couple of them were still in transition from Micro Focus to Neotys and shared test infrastructure: NeoLoad load generators can be installed on the same machines as LoadRunner load generators.

What used to take weeks in LoadRunner takes only days in NeoLoad; what took days now takes hours.

Neotys

Migrating Is Faster Than Not Migrating

Perception
Migration from LoadRunner is an overwhelming project that would take several months.

Reality
An enterprise migration to NeoLoad takes an average of only three months.

When performance engineers think about migrating to NeoLoad, their first thought is usually: How can we possibly move all the hundreds — or more likely, thousands — of LoadRunner scripts?

What we found with our enterprise customers is that not everything needs to be migrated. In fact, about 80% of a typical enterprise's LoadRunner scenarios were produced for an obsolete version of the application and comprise "dead code." These scripts are no longer used — and will never be used again. So while it looks like there may be 1,000 LoadRunner scripts to convert, in reality 800 of them can be discarded, leaving only 200 active scripts.

Most scenarios (± 70%) can be migrated to NeoLoad in just a couple of weeks, and even more complex test scripts within a couple of months. The average duration of migration among the enterprises we surveyed was only three months.

MCKESSON

"We migrated 50% of testing from Performance Center to NeoLoad in 3 months."

Neotys

Enterprises Find NeoLoad the Best of Both Worlds

Perception
You can't use the same tool for traditional system-wide testing and DevOps testing.

Reality
NeoLoad was designed specifically for performance testing everything from component-level APIs and containerized microservices to the aggregation of multiple services to complex end-to-end enterprise-grade monolithic applications.

Every organization we spoke to said that it's not a matter of *if* they embrace DevOps, but *how*. They all need to make performance testing easier so decentralized teams of non-experts can integrate performance tests into automated CI/CD pipelines, yet still be able to meet their complex, end-to-end application testing needs.

That's exactly what NeoLoad is designed to do. Its drag-and-drop, point-and-click approach means that you can design even complex scenarios without needing to write a single line of code. Everything that used to be painfully manual is pretty much automated.

It's this different way of doing things that empowers DevOps teams to run performance tests themselves automatically every time they check in code, while enabling performance experts to run complex end-to-end tests on enterprise-grade applications.

Enterprises find that NeoLoad gives them the "best of both worlds" so they can scale performance testing from a handful of experts to an organization-wide approach.

Guardian

"**Moved from LoadRunner to NeoLoad for its superior Agile and DevOps support.**"

Neotys

NeoLoad Is Really Easy to Learn

Perception
It's hard to learn a new tool.

Reality
NeoLoad has a very short learning curve, and the migration process can get under way almost immediately.

Migration doesn't need to fall on the shoulders of experts alone. Enterprises found that the standard Neotys three-day on-site training is more than sufficient to begin migrating about 70% of cases — their simple web applications and APIs. Because NeoLoad is easy to learn and easy to use, even "beginners" without performance testing expertise are able to get up and running to participate in the migration project after their three-day onboarding.

For more complex scenarios — about 20% of cases — enterprises found that the Neotys Academy online, on-demand training supplemented the initial training. Typically these scenarios were migrated by engineers with previous performance testing expertise within a couple of months.

Very few situations (e.g., desktop Java apps) require deep expertise and need support from Neotys. Most often these challenging complex technologies have already been covered in the POC, but when they weren't, the enterprises we spoke to all emphasized how much more responsive the Neotys Customer Service Management and Support teams were compared with Micro Focus. Help was there when they needed it — immediately, not weeks down the road.

Neotys

Proven Practical Migration Strategy

Neotys has a decade's worth of experience helping scores of enterprises migrate from the Micro Focus suite of tools to the NeoLoad platform. Over the years we've gained a practical understanding about what works — and what doesn't.

Here are five key lessons learned to ensure a successful, painless migration to NeoLoad.

1. Inventory your applications

- First, take stock of your application landscape. Make a list of existing applications in production as well as new applications in development. This will give you an understanding of the scope of your migration project and is a prerequisite to classifying the level of effort (step #2) and prioritizing (step #3) your performance testing scenarios.

- Get as granular as identifying the various APIs used in your systems and applications. You want to have a holistic view of where your APIs are deployed and how they're being used. The exercise of taking inventory may actually reveal business-critical APIs that are not currently being tested for performance — but should be.

2. Take an iterative approach

Migration is not "one size fits all." The reality for today's enterprises is that performance testing covers a lot of ground — everything from microservices-based architectures to monolithic enterprise-grade applications, from API testing to complex end-to-end testing, by both centralized teams of performance engineering experts and distributed DevOps teams.

The enterprises we talked to all categorized scenarios into different "buckets," or levels. The terminology differed, but the central idea was the same:

- **Simple** This is the majority of cases (± 70% of testing): simple web applications and APIs. These scripts can be migrated by non-experts with basic testing skills. Enterprises have found that "beginners" are up to speed and can begin using NeoLoad immediately following the standard three-day on-site training. Full migration of simple scenarios usually takes a couple of weeks.

- **Medium** For about 20% of scenarios, migration calls for a bit more expertise or service partner involvement — someone with more performance testing experience. Typically, these scenarios are migrated by performance experts who are familiar with LoadRunner (and who run these standard performance tests). Average duration of migration is three months.

- **Complex** There are usually only 1-2 applications (less than 5%) that are tricky — and most often these are the applications that were evaluated in the POC. But when teams find themselves dealing with some complex use cases or customized scripts (Java, JavaScript, C), they can leverage Neotys Support or Customer Service team, or one of the 1,600 trained NeoLoad certified professionals (the same partners who would help with LoadRunner all know NeoLoad).

Neotys

3. Migrate only the most critical apps first

Now, prioritize your applications. Which apps will need performance testing most immediately — i.e., which ones are next on the docket to be tested? The schedule and deadlines for the next couple of months define what's "most critical." Migrate these 3–4 applications first, then move over the rest one by one on the fly — as if you were maintaining scripts in LoadRunner.

Resist the urge to migrate everything at once. A couple of enterprises we spoke to initially wanted to migrate every LoadRunner script over to NeoLoad in one fell swoop. They found this a frustrating and ineffective approach.

- First of all, to migrate tons of scenarios, you need tons of applications available to validate the scripts. It's highly unlikely that you'll have all the apps to test all the scenarios you're migrating at the same time.

- Second, it's far more efficient to tackle what's urgent first, then migrate the rest of your scenarios on the fly once you've done it a couple of times in NeoLoad.

- Third, migration en masse precludes "beginners" from contributing to the migration project. A leading differentiator with NeoLoad is that it empowers non-experts to run performance tests autonomously.

- Third, as discussed immediately below, there's no need to migrate the entire library of existing LoadRunner scripts — it simply doesn't make sense.

4. Discard all the stale LoadRunner scripts

- You don't need to migrate everything. If you've ever lived in the same house for many years and then move, you'll know how much junk you have accumulated over time. Just as you wouldn't take all this old stuff to your new home, migration to NeoLoad is an opportunity to clean out the clutter of old LoadRunner scripts.

- Enterprises that have been using LoadRunner for a while find that there are a lot of scripts that are no longer in use. In fact, practical experience has shown that only about 20% of LoadRunner scripts actually need to be migrated. Everything else is no longer relevant or being tested, so can be scrapped without consequence.

5. Rewrite scripts in NeoLoad

The enterprises we interviewed told us that it's more efficient to re-create scripts in NeoLoad than to try to convert them from LoadRunner. They said that the time and effort it takes to write a script in NeoLoad is about the same as updating a LoadRunner script (and that subsequent maintenance of NeoLoad scripts is then 60–75% faster than LoadRunner).

This approach has two things going for it:

- It makes the migration go faster. Because NeoLoad is easy to learn and easy to use, more teams of non-experts can contribute to the overall migration effort. Organizations in our survey find that these "newbies" can start simple web application and API testing (which is about 70% of an enterprise's testing requirements) after only three days of on-site training — they don't need to know a thing about LoadRunner.

- It accelerated DevOps transformation. Migration is an opportunity to simplify and modernize performance testing. Changing tools is a great time to rethink the way you have been doing things and refocus on what's most important. NeoLoad simplifies the way scripts are written and makes them easily repeatable, which is foundational to a DevOps approach. You need modern test scripts for performance testing to work in a DevOps environment.

NeoLoad

Continuous performance testing software to automate API and application load testing.

Discover **Contact Us**

About Neotys

Founded in 2005, Neotys created its flagship product, NeoLoad. NeoLoad is a continuous performance testing platform for Enterprise organizations who wish to standardize their performance engineering approach. Since its inception, NeoLoad has helped over 2000 Enterprises throughout the world in retail, financial services, health care, insurance and more. COE and DevOps teams alike use NeoLoad to automate API and end-to-end performance testing in cloud and hybrid environments.

NeoLoad helps these teams collaborate to release fast at scale while ensuring quality controls for application speed and stability.

Learn more about Neotys and NeoLoad at www.neotys.com.