



Eddy Bruin  
**Loop**  
forward



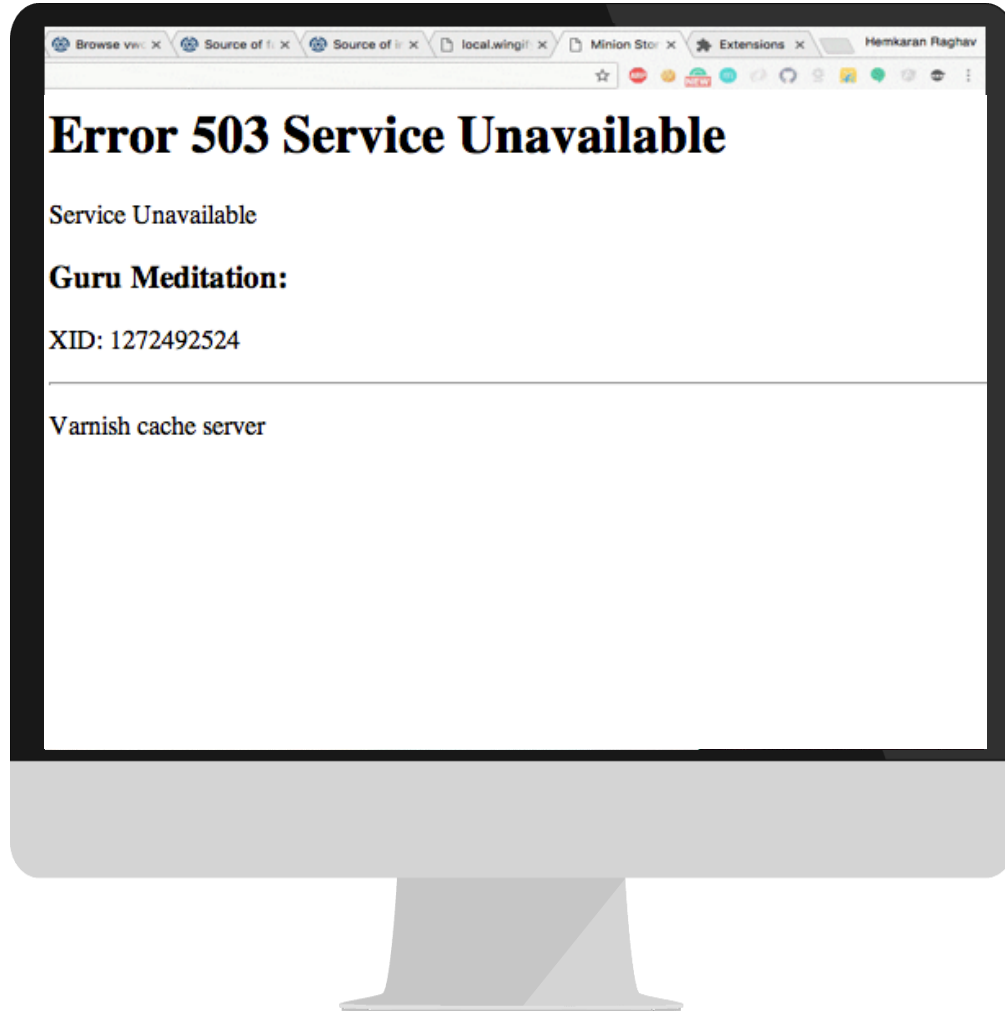
Pascal Dufour  
**AgiliX**  
CONSULTING

# Van glazen bol naar gezeemde ramen



Monitor je product en systeem

# Waarom zou je monitoren?



Rik

# Monitoring kan inzicht geven in...

Testbaarheid

Performance en  
robuustheid

Begeleiding product  
ontwikkeling

# Wat we nu kunnen

★ ⌚ Price

TNT Origin (bypass Akami) ▾ All Locations ▾

OLDEST (39m)

MOST RECENT



✖ Failed — Just Now

📍 Ireland

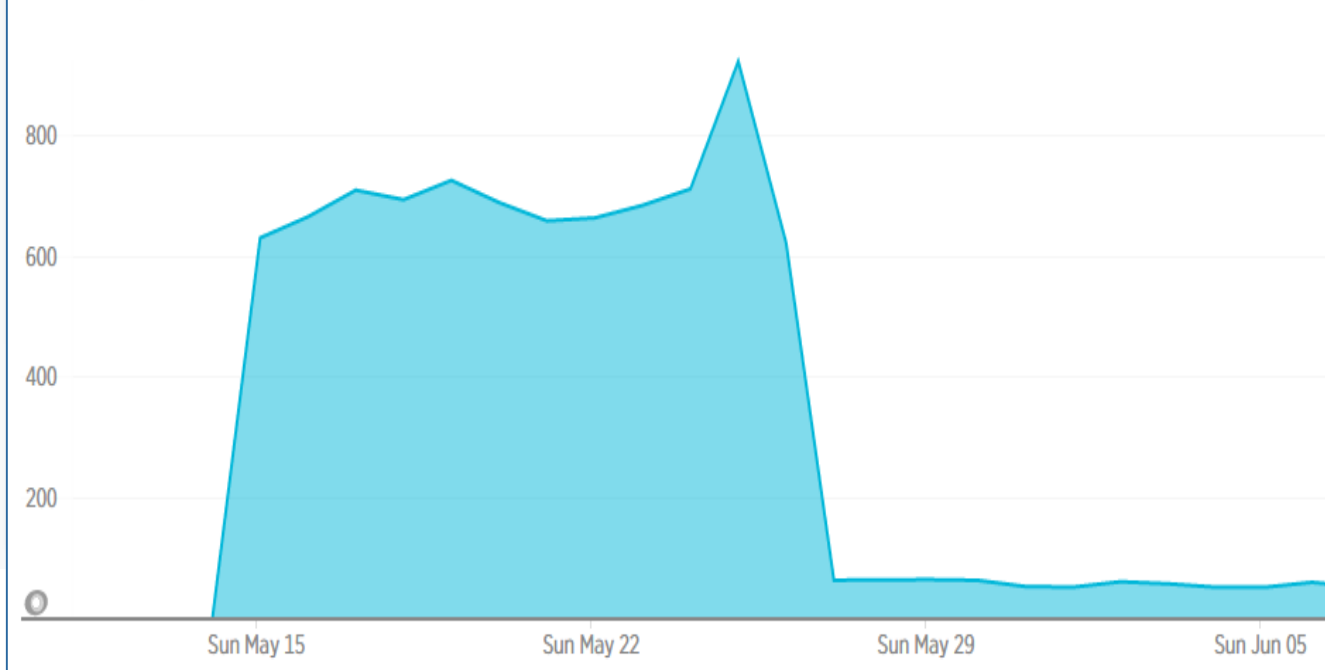
96.81%  
SUCCESS RATE  
+96.80%

2318.90ms  
AVG. RESPONSE TIME

30d 1d 1h

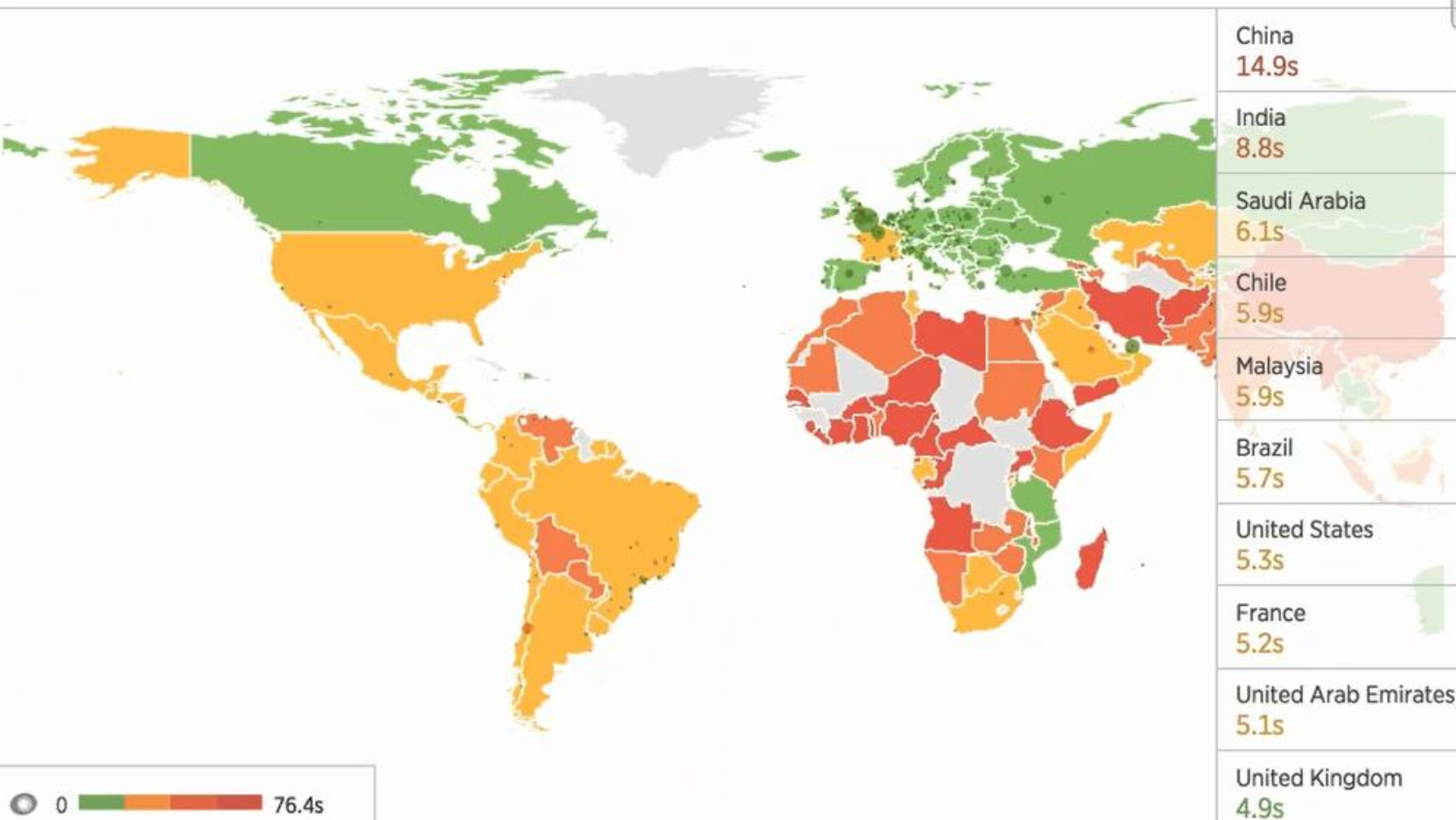
Drop after release new services

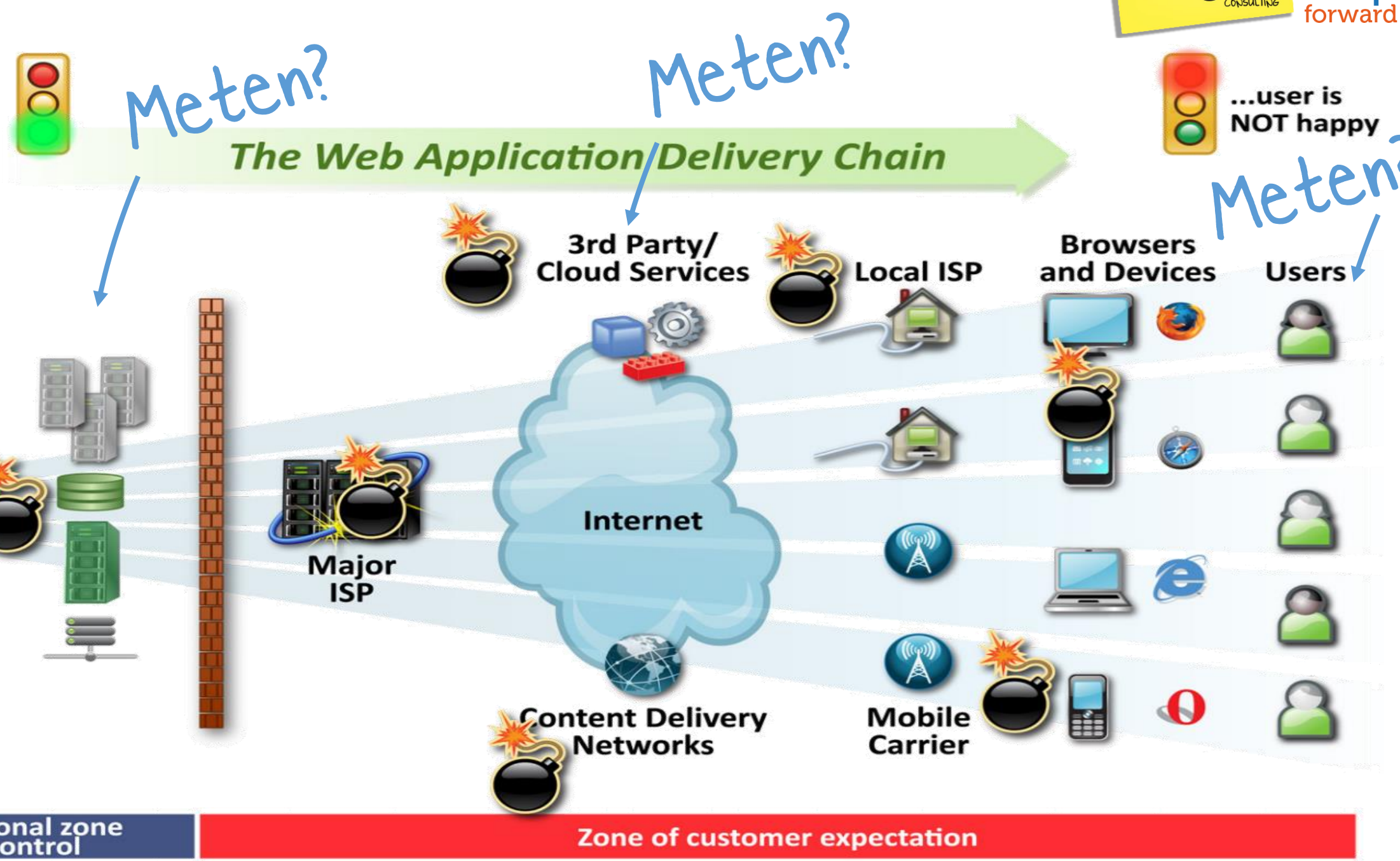
⚠ Since 10 May 02:00 CEST until 10 Jun 02:00 CEST



# Wat we nu kunnen

Average page load time

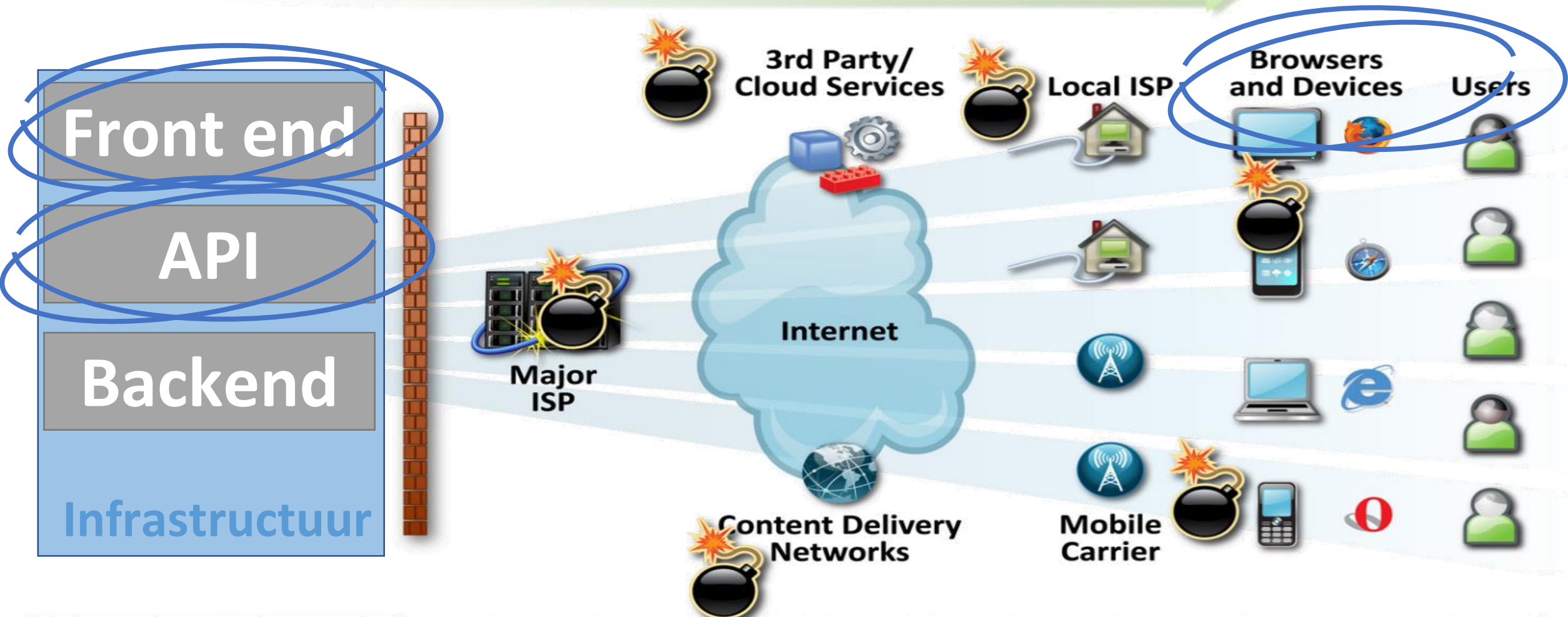




Systems management tools: "OK" 

 ...user is NOT happy

# The Web Application Delivery Chain



Traditional zone of control

Zone of customer expectation

# Vandaag monitoren we...

Gebruikers

Front end

API's





# Testobject: Scrumrows.org



SCRUM ROWS



## A Scrum Master checklist

If a signal appears:

once... it's an accident

twice... it's a coincidence

three times ... it's a pattern

## Relax



**Relax**

The top of the Product Backlog is ready for Sprint.

# Runscope.com

1. Maak een account aan
2. Zet een eerste dashboard op die <API> een 200 OK terug geeft
3. Zorg dat je die iedere minuut monitort
4. Zet dezelfde call op een test omgeving en de productie omgeving.
5. Geautoriseerde PUT call maken
6. Welke problemen zou je tegen aan kunnen lopen in monitoren?

**Testgegevens**

<https://shrib.com/#scrumrow>

# Vandaag monitoren we...

Gebruikers

Front end

API's

New Relic®  
**BROWSER**™

 Runscope

1. We vinden de site traag. Wat kunnen we hier aan doen?
- 2a. Vanuit welke locatie is onze website het traagst en wat zegt dit?
- 2b. Welke apdex score heeft de website en wat betekent dit?
- 2c. Welke browser presteert het langzaamst?

The screenshot shows the New Relic Browser monitoring interface. The browser address bar displays the URL <https://rpm.newrelic.com/accounts/1280472/browser>. The interface includes a navigation menu with options: APM, BROWSER (selected), SYNTHETICS, MOBILE, PLUGINS, INSIGHTS, INFRASTRUCTURE, and SERVERS. Below the navigation menu, there are tabs for Browser apps, Key transactions, and Alerts. A search bar is visible. The main content area displays a table with the following columns: Name, SPA response time (s), Pageload time (s), and Pageload th. The table contains one entry: Scrumrows.

Name	SPA response time (s)	Pageload time (s)	Pageload th
Scrumrows			

# Vandaag monitoren we...

Gebruikers



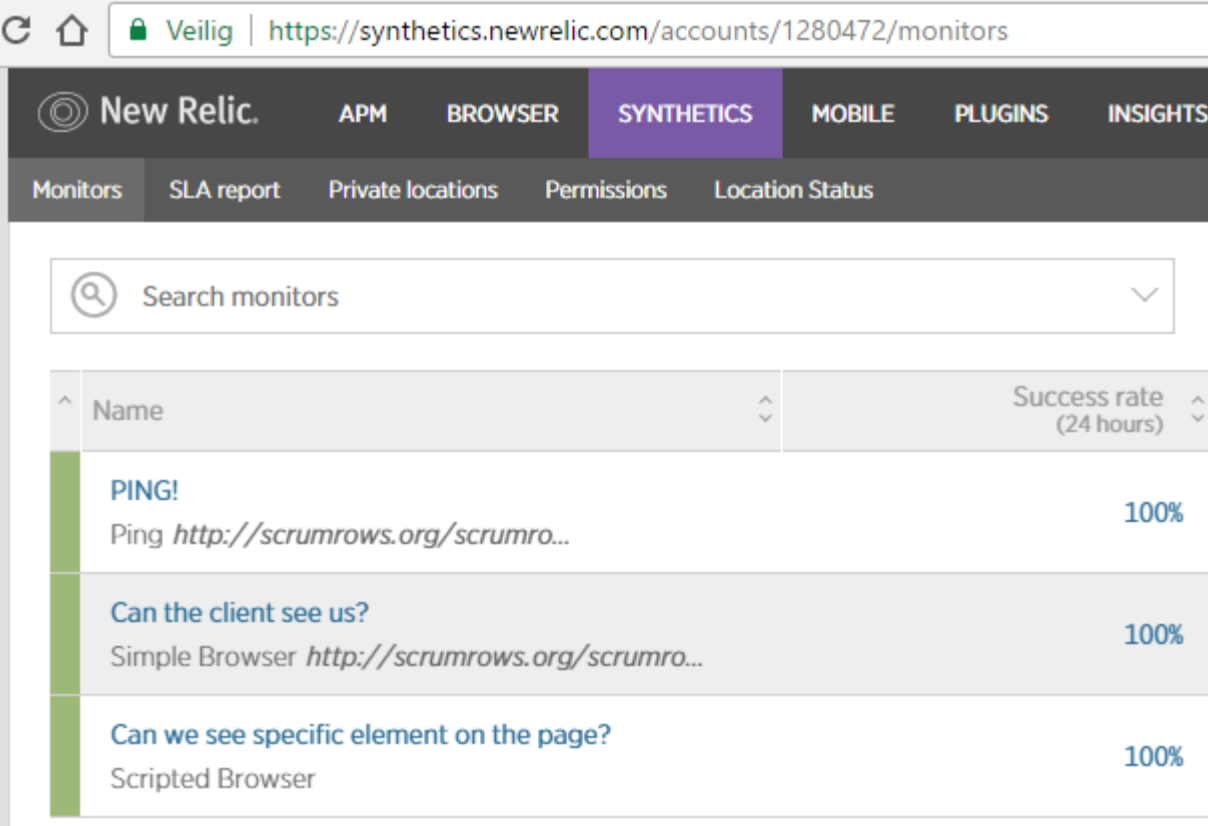
Front end



API's



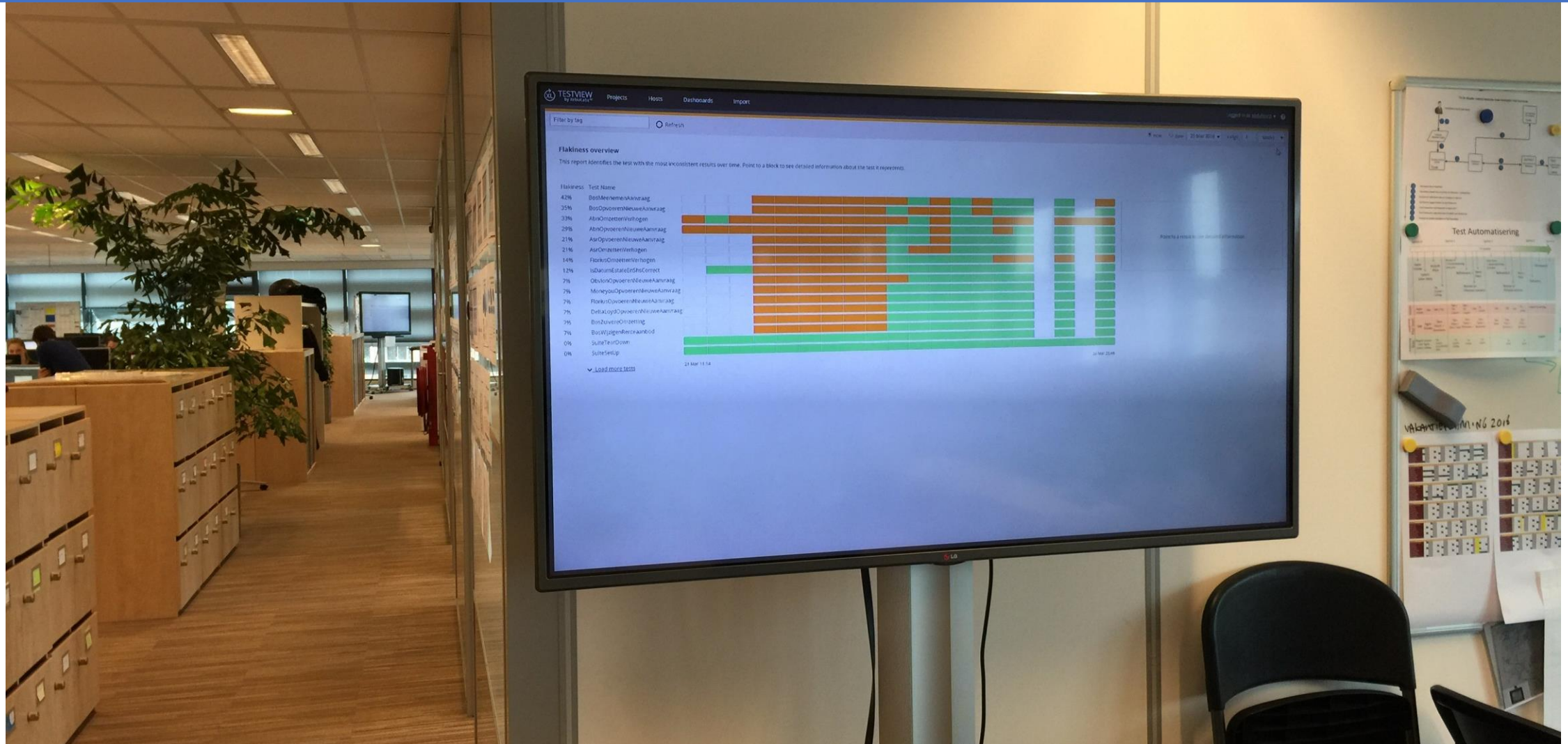
1. Zet een ping op naar een website naar keuze
2. Zet een 'simpel browser' check op naar dezelfde website
3. *(optioneel)* Zet een 'scripted browser' check op dezelfde website  
(webdriver kennis nodig)



The screenshot shows the New Relic Synthetics interface. The URL is <https://synthetics.newrelic.com/accounts/1280472/monitors>. The navigation bar includes New Relic, APM, BROWSER, SYNTHETICS (active), MOBILE, PLUGINS, and INSIGHTS. Below the navigation bar, there are tabs for Monitors, SLA report, Private locations, Permissions, and Location Status. A search bar labeled "Search monitors" is present. The main content area displays a table of monitors with the following data:

Name	Success rate (24 hours)
<b>PING!</b> Ping <a href="http://scrumrows.org/scrumro...">http://scrumrows.org/scrumro...</a>	100%
<b>Can the client see us?</b> Simple Browser <a href="http://scrumrows.org/scrumro...">http://scrumrows.org/scrumro...</a>	100%
<b>Can we see specific element on the page?</b> Scripted Browser	100%

# Monitoring op de monitor



insights.newrelic.com

**Maak een dashboard met relevante data voor je product.**

Denk o.a. aan:

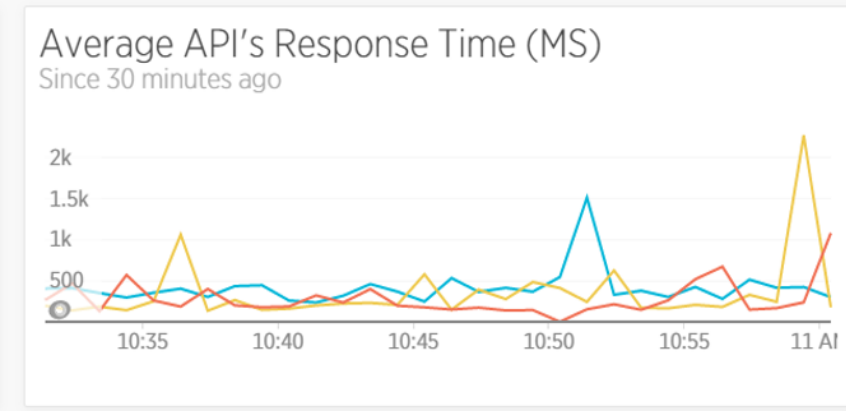
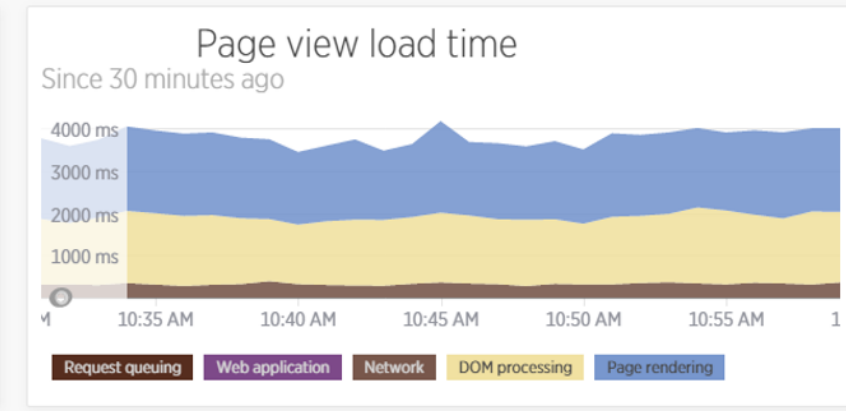
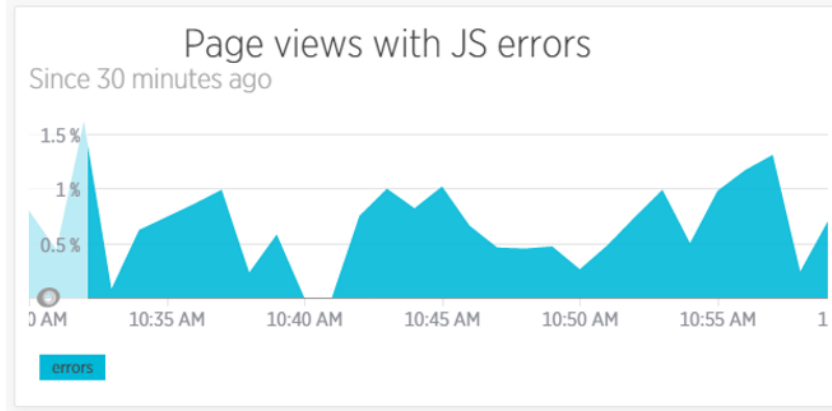
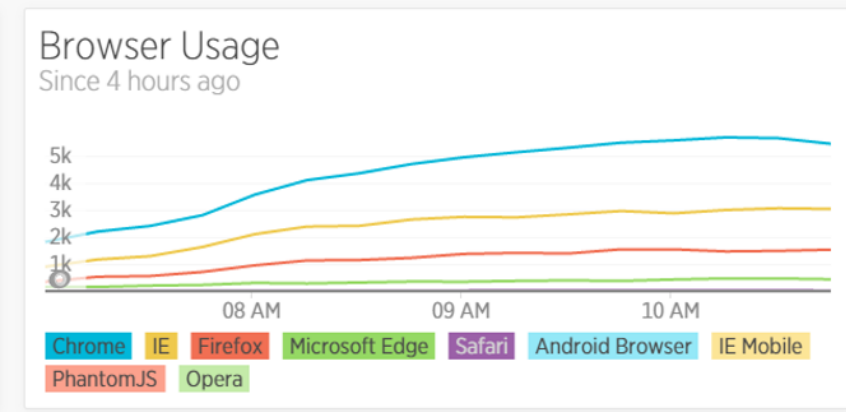
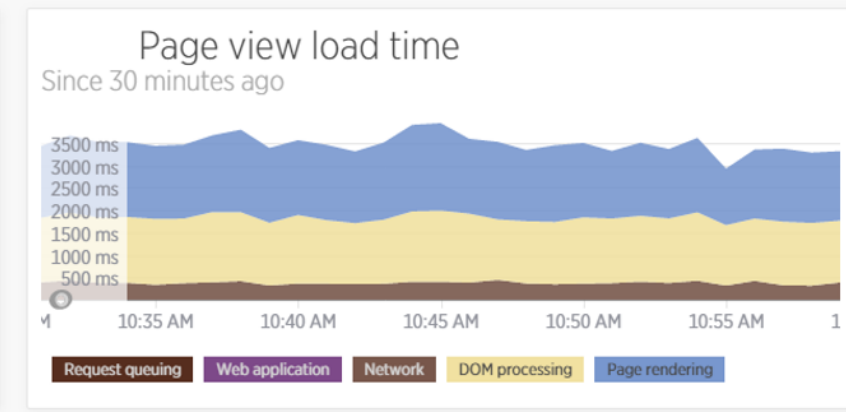
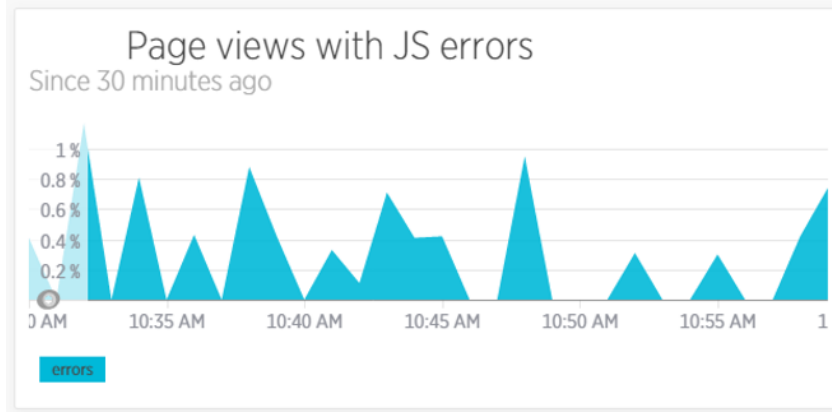
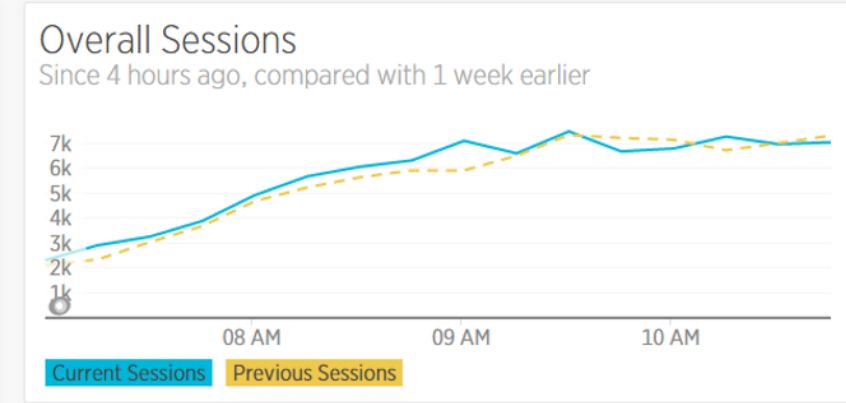
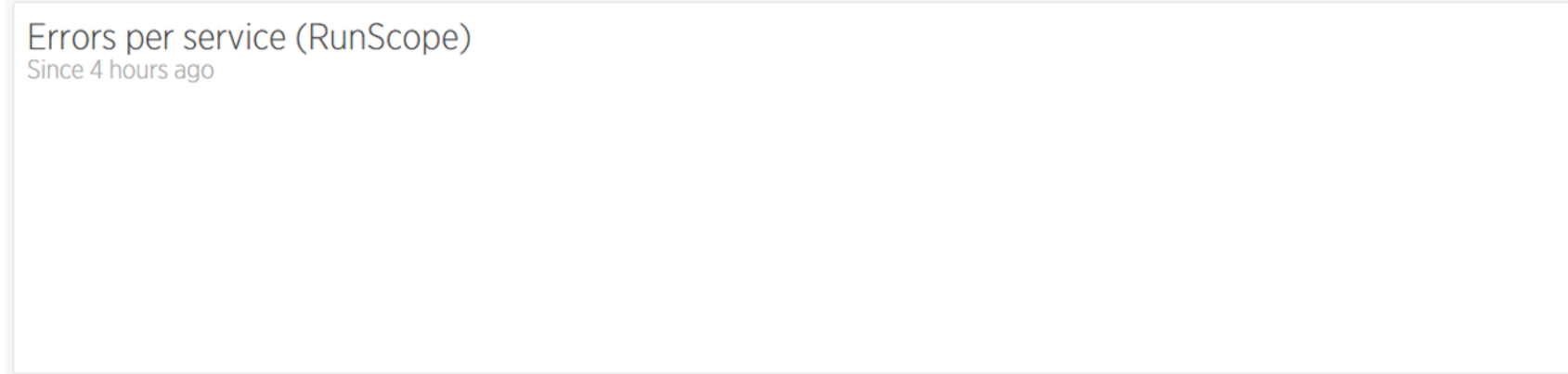
- Patronen herkennen
- Waar kun je wat optimaliseren?
- Welke klant is belangrijk voor mijn product?

<https://docs.newrelic.com/docs/insights/nrql-new-relic-query-language/using-nrql/introduction-nrql>

**Google: NRQL newrelic**



🕒 **Default** 30m 60m 6h 1d 7d Custom ▾



# Tips & Tricky things

# Alternatieveven tools

Gebruikers

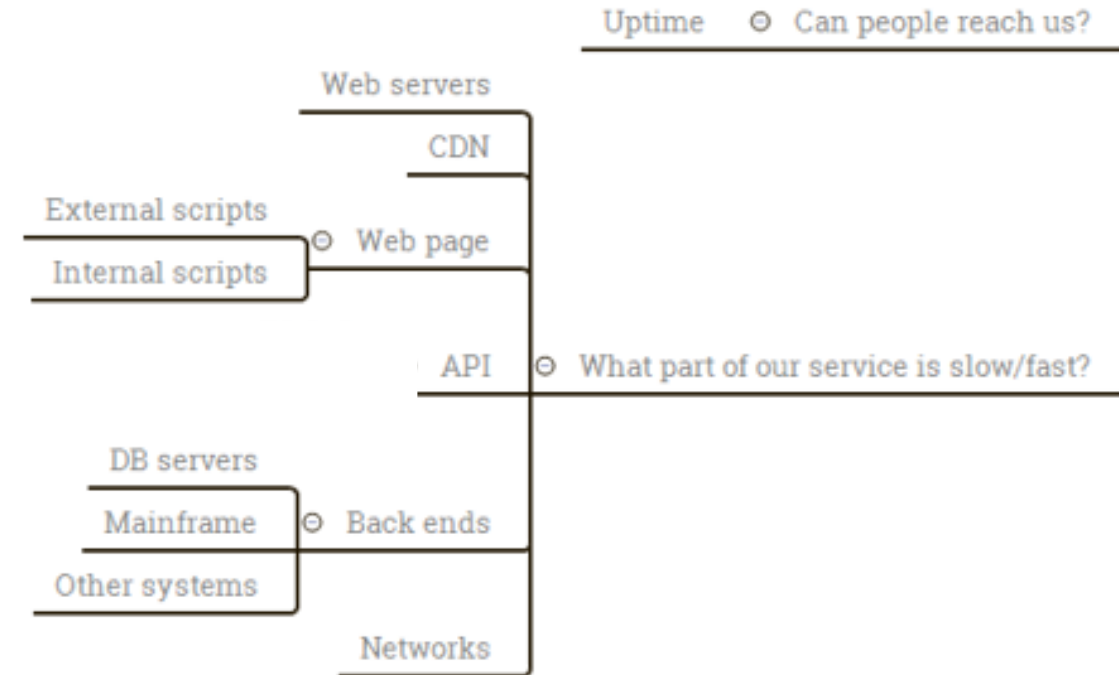
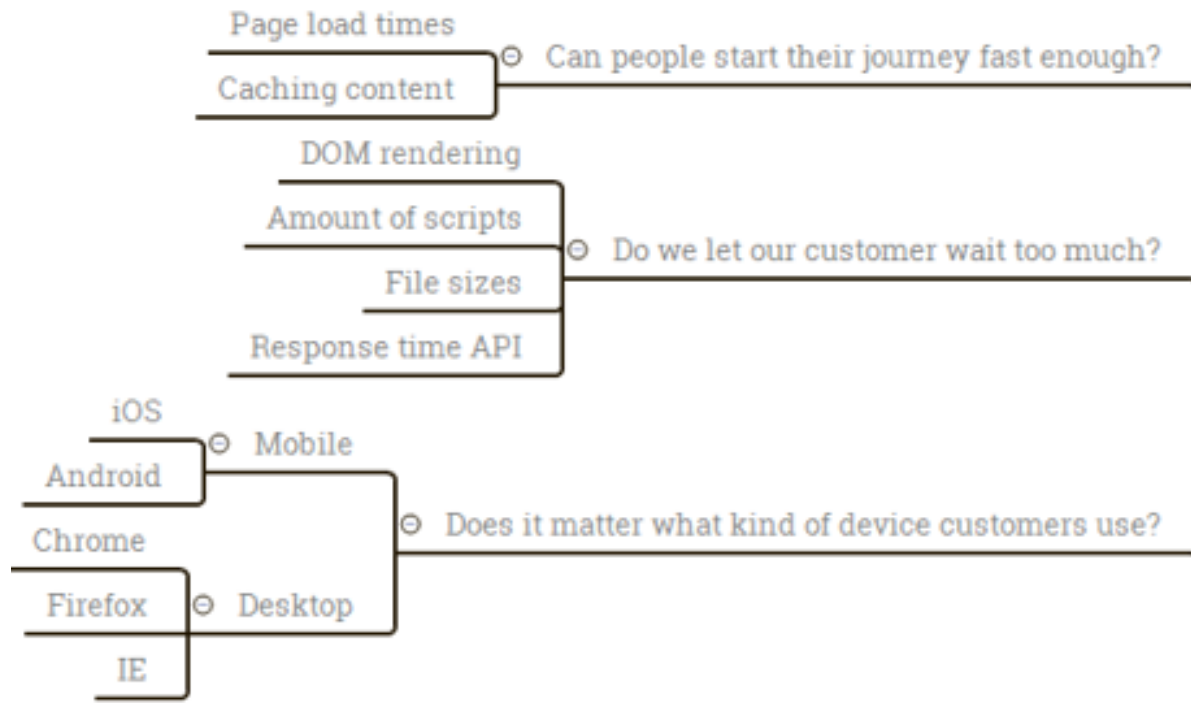


Front end

API's



# Wat kun je nog meer monitoren?



# Wat kun je nog meer monitoren?

Business succes

Functionaliteit succes

Build process

Gebruikers

Infrastructure

Front end

API's

APM

Zoeken in rapporten en Help

AANPASSING

Rapporten

REALTIME

DOELGROEP

Overzicht

Actieve gebruikers

Lifetime value BÈTA

Cohortanalyse BÈTA

Gebruiksanalyse

Demografie

Interesses

Geo

Gedrag

Technologie

Mobiel

Aangepast

Benchmarking

BEHEERDER

















Primaire dimensie: Pagina Paginatitel Overige ▾

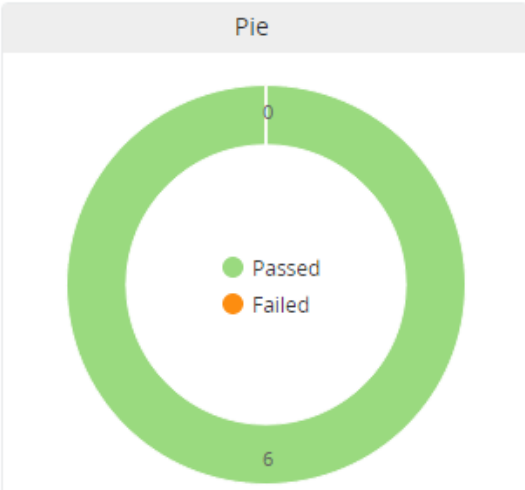
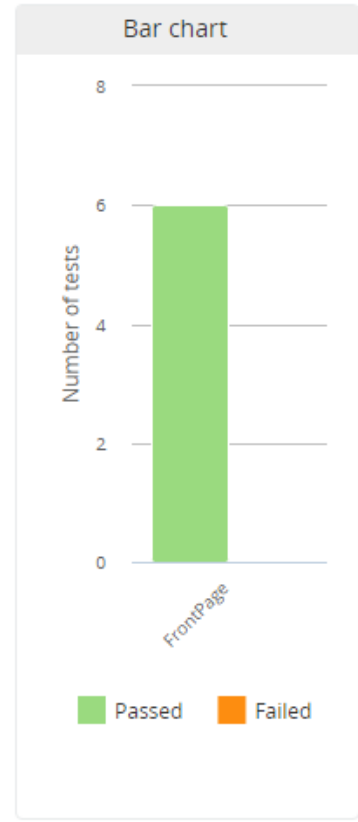
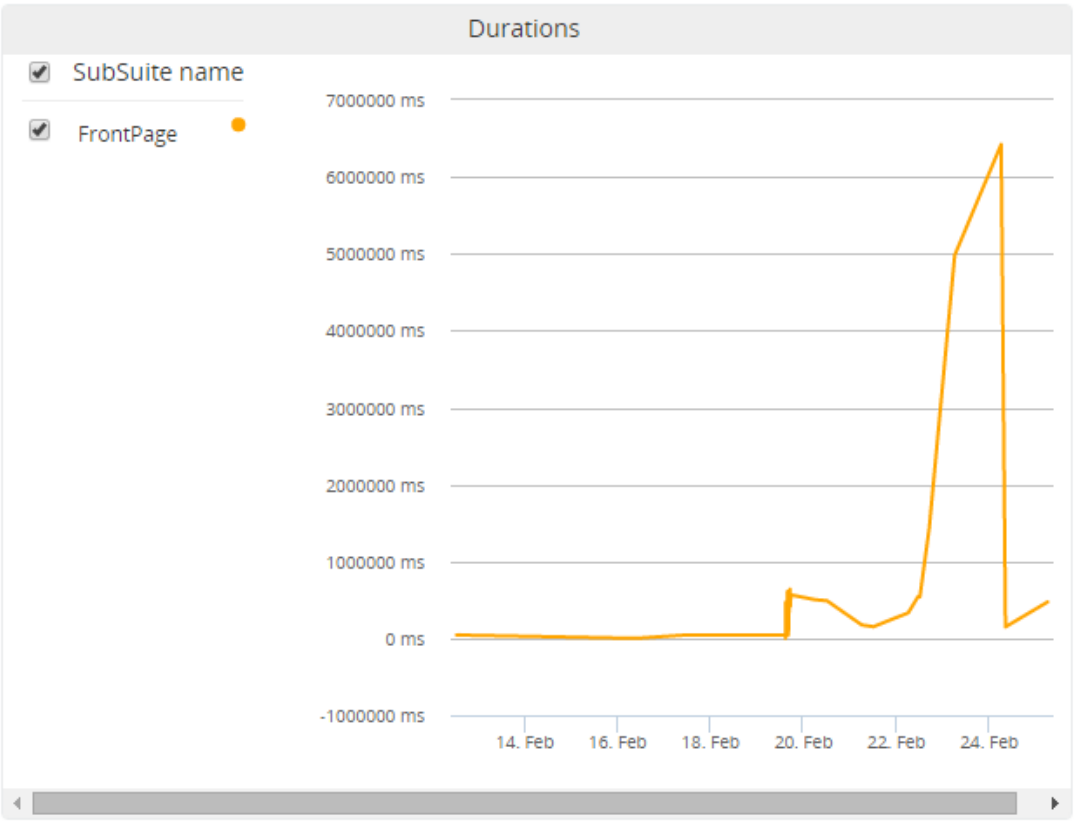
Rijen weergeven Secundaire dimensie ▾ Sorteertype: Standaard ▾  [Filter Icons]

<input type="checkbox"/>	Pagina ?	Paginaweergaven ?	Unieke paginaweergaves ?	Gem. tijd op pagina ?	Instappunten ?	Bouncepercentage ?	Uitstappercentage ?	Paginawaarde ?
		104 <small>% van totaal: 100,00% (104)</small>	97 <small>% van totaal: 100,00% (97)</small>	00:00:45 <small>Gem. voor dataweergave: 00:00:45 (0,00%)</small>	82 <small>% van totaal: 100,00% (82)</small>	91,46% <small>Gem. voor dataweergave: 91,46% (0,00%)</small>	78,85% <small>Gem. voor dataweergave: 78,85% (0,00%)</small>	US\$ 0,00 <small>% van totaal: 0,00% (US\$ 0,00)</small>
<input type="checkbox"/>	1. /	78 (75,00%)	76 (78,35%)	00:00:53	76 (92,68%)	92,11%	92,31%	US\$ 0,00 (0,00%)
<input type="checkbox"/>	2. /over.html	8 (7,69%)	5 (5,15%)	00:00:10	1 (1,22%)	100,00%	25,00%	US\$ 0,00 (0,00%)
<input type="checkbox"/>	3. /trainingen.html	8 (7,69%)	8 (8,25%)	00:00:31	3 (3,66%)	66,67%	50,00%	US\$ 0,00 (0,00%)
<input type="checkbox"/>	4. /consultancy.html	5 (4,81%)	4 (4,12%)	00:00:10	1 (1,22%)	100,00%	20,00%	US\$ 0,00 (0,00%)
<input type="checkbox"/>	5. /index.html	4 (3,85%)	3 (3,09%)	00:03:45	1 (1,22%)	100,00%	50,00%	US\$ 0,00 (0,00%)
<input type="checkbox"/>	6. /Professional-Agile-Tester.html	1 (0,96%)	1 (1,03%)	00:00:00	0 (0,00%)	0,00%	100,00%	US\$ 0,00 (0,00%)

# Testmonitor

<b>TE02</b>  Open	<b>TE03</b> 3d Opbouw	<b>TE04</b> 1 Open	<b>TE05</b>  Open	<b>TE06</b>  Open
<b>TE09</b>  Open	<b>TE10</b>  Opbouw	<b>TE11</b>  Open	<b>TE12</b>  Open	<b>TE13</b>  Open
<b>TE16</b> 2d Opbouw	<b>TE17</b>  Open	<b>TE18</b> 19d 1 rood sinds: 19d 1h 26m	<b>TE19</b>  Open	<b>TE20</b>  Open
<b>TE23</b>  Open	<b>TE24</b>  Open	<b>TE25</b>  Open	<b>TE26</b> 1 Open	

Dit scherm toont de status van taken in Jenkins.

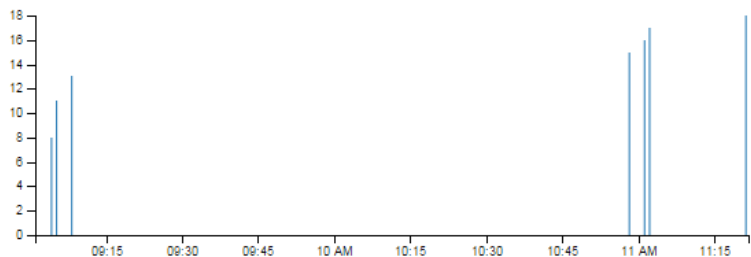


### Flakiness

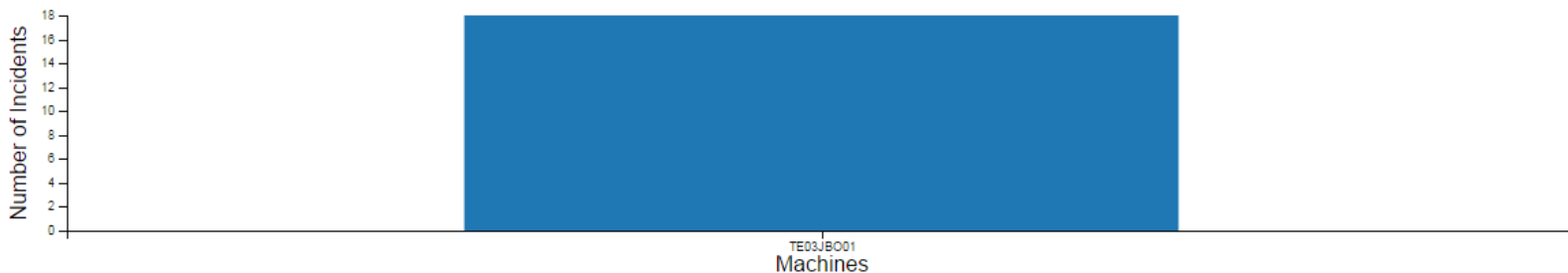
Flakiness	Test Name	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8	Run 9
55%	IsRappelbriefAangemaakt	Failed	Failed	Passed	Passed	Failed	Failed	Passed	Failed	Failed
0%	ToetsenNieuweAanvraagUitgevoerd	Passed	Passed	Passed	Passed	Passed	Passed	Failed	Passed	Passed
0%	SuiteTearDown	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
0%	SuiteSetUp	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
0%	OfferteOpHyarchis	Passed	Passed	Failed	Failed	Failed	Failed	Failed	Failed	Passed
0%	IsOfferteUitgebracht	Passed	Passed	Failed	Failed	Failed	Failed	Failed	Failed	Passed
0%	IsOffertelinhoudelijkAkkoord	Passed	Passed	Passed	Passed	Passed	Passed	Failed	Passed	Passed
0%	IsDatumEstateEnShsCorrect	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
0%	InUitloggenPipelineTest	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
0%	InUitLoggenShsPipelineTest	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed



Today [reset](#)



Machine [reset](#)



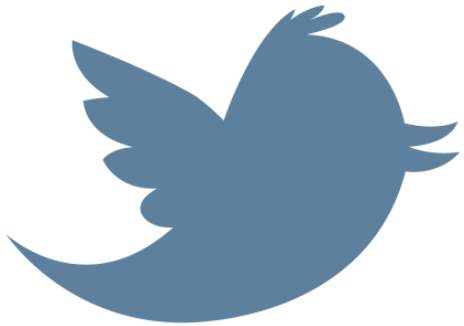
Showing 1-10 of 7. [Last](#) [Next](#)

Rootcause	Total (18)	Percentage
java.io.IOException: [webservice.sdesteeringmoduleservice] Error in webservice.sdesteeringmoduleservice : Error returned by interface: Something went wrong	6	33.3%
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'RS_SyncExternalCustomerNumber', nr. of errors present: 1	3	16.7%
com.aquima.interactions.portal.exception.UnknownApplicationException: Unknown application: null (version: null)	3	16.7%
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'NumberIssuanceService', nr. of errors present: 1	2	11.1%
java.io.IOException: webservice.numberissuance result status: Status: Failure, Description: Failure processing request. See log files., Severity: null, ErrorType: null, Result: Failure processing request. See log files.	2	11.1%
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'ApplicationStatusService', nr. of errors present: 1	1	5.6%

IncidentDate	Time	Machine	Reason
5/10/2017,	11:21:38 AM	TE03JBO01	Er is een fout opgetreden bij ophalen inregelingen brieven. Meld dit aan via uw contactper (incidentcode: 20170510112138TE03JBO01sorobot001)
5/10/2017,	11:02:20 AM	TE03JBO01	Er is een fout opgetreden bij aanvullen bezoekadres. Meld dit aan via uw contactpersoon (incidentcode: 20170510110220TE03JBO01sorobot001)
5/10/2017,	11:01:51 AM	TE03JBO01	Er is een fout opgetreden bij aanvullen bezoekadres. Meld dit aan via uw contactpersoon (incidentcode: 20170510110151TE03JBO01sorobot001)
5/10/2017,	10:58:22 AM	TE03JBO01	Error while handling request with startflow pe_StartMidOffice
5/10/2017,	10:58:22 AM	TE03JBO01	Er is een fout opgetreden bij linken aanvraagstatus. Meld dit aan via uw contactpersoon t (incidentcode: 20170510105822TE03JBO01sorobot001)
5/10/2017,	9:08:46 AM	TE03JBO01	Error in EstateManagement during executeFlow
5/10/2017,	9:08:45 AM	TE03JBO01	Er is een fout opgetreden bij ophalen leningnummer. Meld dit aan via uw contactpersoon t (incidentcode: 20170510090845TE03JBO01SO_MidOffice)
5/10/2017,	9:05:03 AM	TE03JBO01	Er is een fout opgetreden bij een onbekende service. Meld dit aan via uw contactpersoon (incidentcode: 20170510090503TE03JBO01STBRANDH)
5/10/2017,	9:05:01 AM	TE03JBO01	Error while handling request with startflow pe_StartReadOnlyPopup
5/10/2017,	9:05:00 AM	TE03JBO01	Er is een fout opgetreden bij ophalen referentiegegevens aanvragers. Meld dit aan via uw Servicedesk. (incidentcode: 20170510090500TE03JBO01STBRANDH)
5/10/2017,	9:04:53 AM	TE03JBO01	Er is een fout opgetreden bij een onbekende service. Meld dit aan via uw contactpersoon (incidentcode: 20170510090453TE03JBO01STBRANDH)
5/10/2017,	9:04:52 AM	TE03JBO01	Error while handling request with startflow pe_StartReadOnlyPopup

Rootcause	Location
java.io.IOException: [webservice.sdesteeringmoduleservice] Error in webservice.sdesteeringmoduleservice : Error returned by interface: Something went wrong	\\TE03JBO01\log\incidents\20170510112138TE03JBO01sorobot001.txt
java.io.IOException: [webservice.sdesteeringmoduleservice] Error in webservice.sdesteeringmoduleservice : Error returned by interface: Generic failure. See logs for details.	\\TE03JBO01\log\incidents\20170510110220TE03JBO01sorobot001.txt
java.io.IOException: [webservice.sdesteeringmoduleservice] Error in webservice.sdesteeringmoduleservice : Error returned by interface: Generic failure. See logs for details.	\\TE03JBO01\log\incidents\20170510110151TE03JBO01sorobot001.txt
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'ApplicationStatusService', nr. of errors present: 1	\\TE03JBO01\log\incidents\20170510105822TE03JBO01sorobot001.1.txt
java.io.IOException: [webservice.sdesteeringmoduleservice] Error in webservice.sdesteeringmoduleservice : Error returned by interface: Status: Failure, Description: null, Severity: null, ErrorType: null, Result: null	\\TE03JBO01\log\incidents\20170510105822TE03JBO01sorobot001.txt
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'NumberIssuanceService', nr. of errors present: 1	\\TE03JBO01\log\incidents\20170510090846TE03JBO01SO_MidOffice.txt
java.io.IOException: webservice.numberissuance result status: Status: Failure, Description: Failure processing request. See log files., Severity: null, ErrorType: null, Result: Failure processing request. See log files.	\\TE03JBO01\log\incidents\20170510090845TE03JBO01SO_MidOffice.txt
com.aquima.interactions.portal.exception.UnknownApplicationException: Unknown application: null (version: null)	\\TE03JBO01\log\incidents\20170510090503TE03JBO01STBRANDH.txt
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'RS_SyncExternalCustomerNumber', nr. of errors present: 1	\\TE03JBO01\log\incidents\20170510090501TE03JBO01STBRANDH.txt
java.io.IOException: [webservice.sdesteeringmoduleservice] Error in webservice.sdesteeringmoduleservice : Error returned by interface: Object reference not set to an instance of an object.	\\TE03JBO01\log\incidents\20170510090500TE03JBO01STBRANDH.txt
com.aquima.interactions.portal.exception.UnknownApplicationException: Unknown application: null (version: null)	\\TE03JBO01\log\incidents\20170510090453TE03JBO01STBRANDH.txt
Root Cause: - com.aquima.interactions.portal.exception.FlowBlockedException: Flow stopped after service 'RS_SyncExternalCustomerNumber', nr. of errors present: 1	\\TE03JBO01\log\incidents\20170510090452TE03JBO01STBRANDH.txt

Hey, we just met you  
And this is crazy  
So here's our twitter  
So tweet us maybe?!



#monitoring

@pascal\_dufour



@eddybruin



[eddy@loopforward.nl](mailto:eddy@loopforward.nl)  
[pascal@agilix.nl](mailto:pascal@agilix.nl)