

END-TO-END MONITORING WITH ALYVIX

APM On Open Source Basis: Do Users Really Suffer That Much?



Würth Phoenix: Alyvix' Sponsor



- IT and Consulting Company of the Würth-Group
- Headquarter in Italy, European-wide presence, more than 100 employees
- International experience in Business Software and IT Management
- Core competencies in trading processes, wholesale distribution, logistics and System Monitoring
- ITIL certified, Nagios Solution Provider, OTRS Service Partner, Microsoft Gold Certified Partner



Würth Phoenix: Facts And Figures



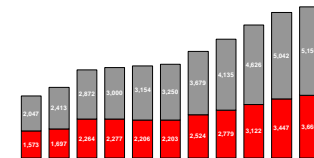
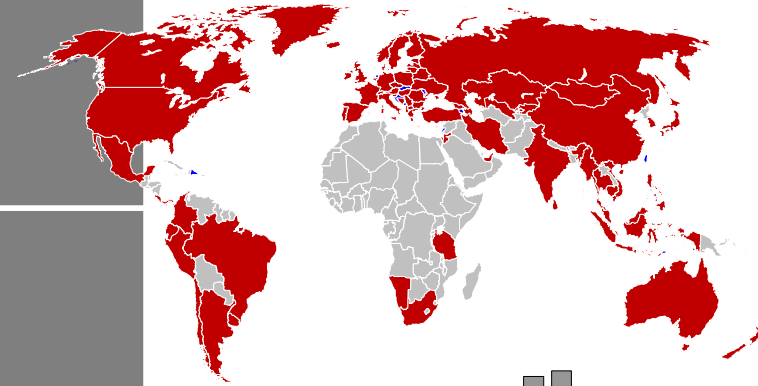
Over 300 NetEye customers worldwide

More than 500.000 service checks with NetEye



4 offices in 3 countries with the HQ in Italy

25.000 monitored hosts



Our **mission** is to create the right balance between technology and services for our customers to support their IT operations and deliver in that way a better business result

Alan Pipitone: Alyvix' Founder



- In 2012 Alan Pipitone created a company with the primary purpose of providing consultancy applied to the world of robotics and automation
- By combining the experiences gained in the world of automation with the experiences gained in the information technology area, intelligent monitoring systems have been created
- Alan Pipitone started to produce custom software to simulate human behavior necessary to monitor specific applications or to interact with them
- In 2012 the Open Source project of Alyvix was born in collaboration with Diesel S.p.a. and Würth Phoenix S.r.l.

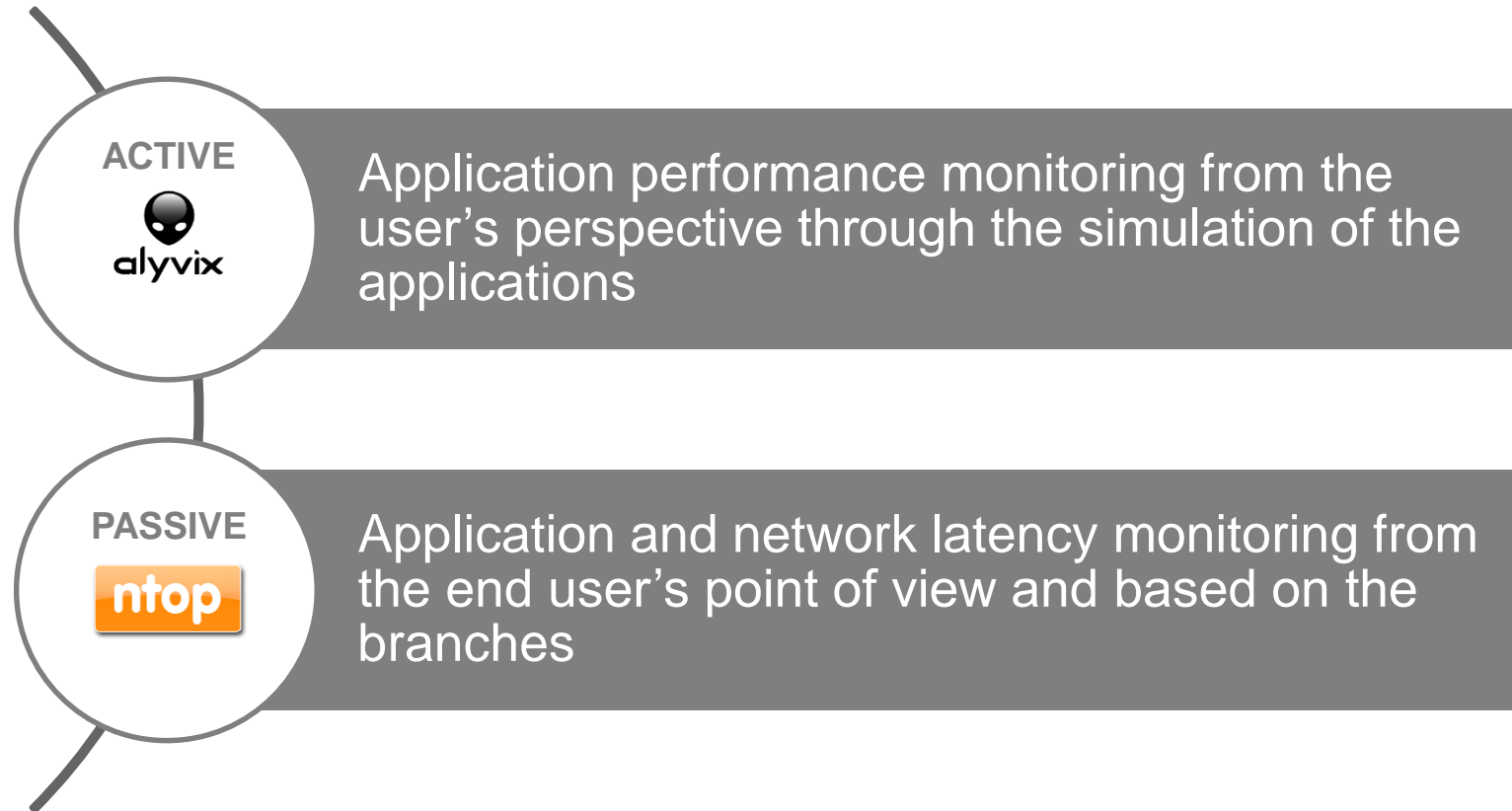
End User Experience Monitoring



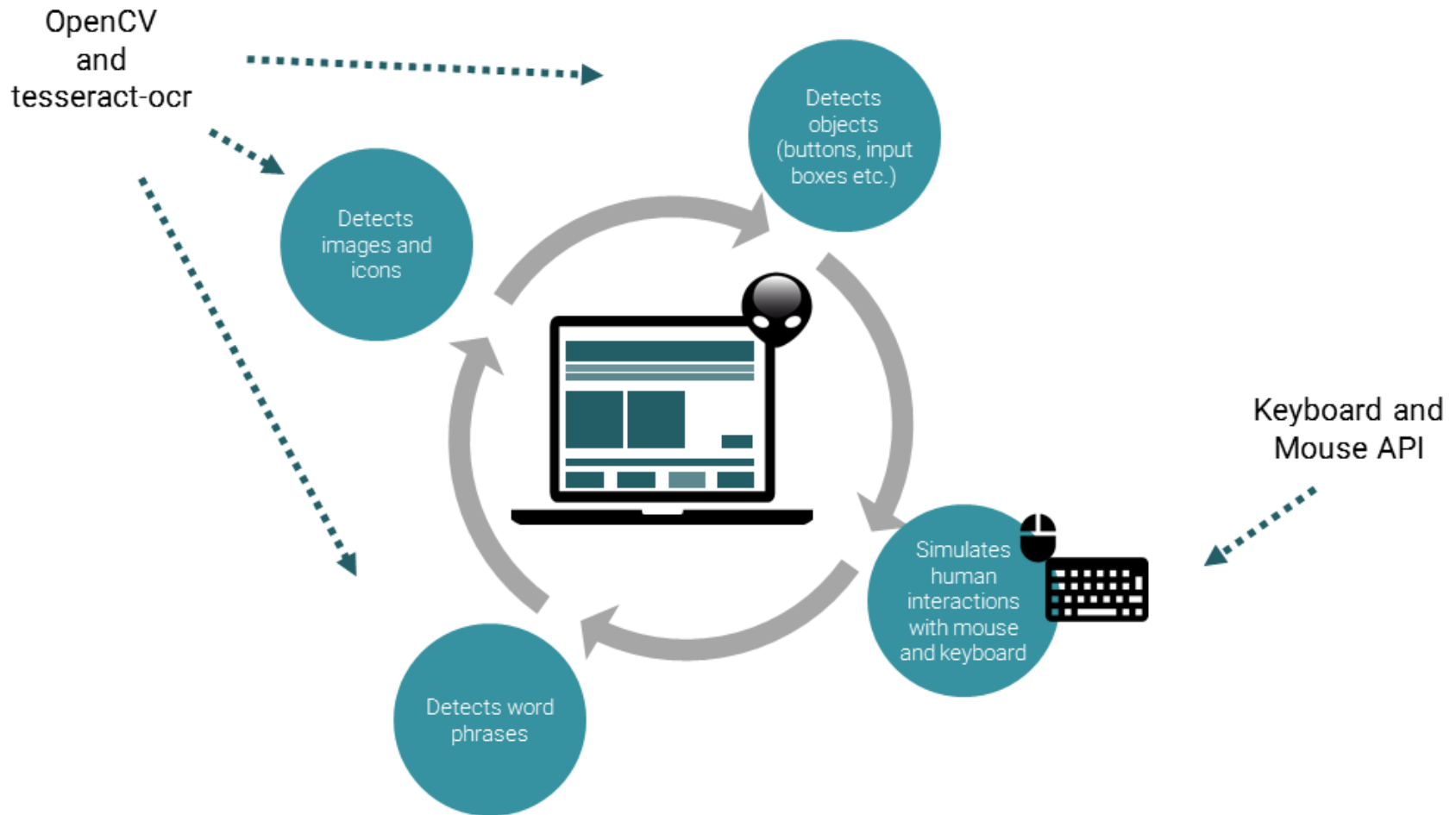
End User Experience Monitoring

- End User Monitoring (often referred to as End User Experience Monitoring) controls the performance of business-critical applications from the perspective of the end user.
- The concept of **end user monitoring** is based on the assumption that the quality control of a certain application has to be made from the **user's point of view** rather than through the monitoring of the single IT components. Single Databases, web servers and hosts can work properly, although users might encounter possible anomalies on the application.

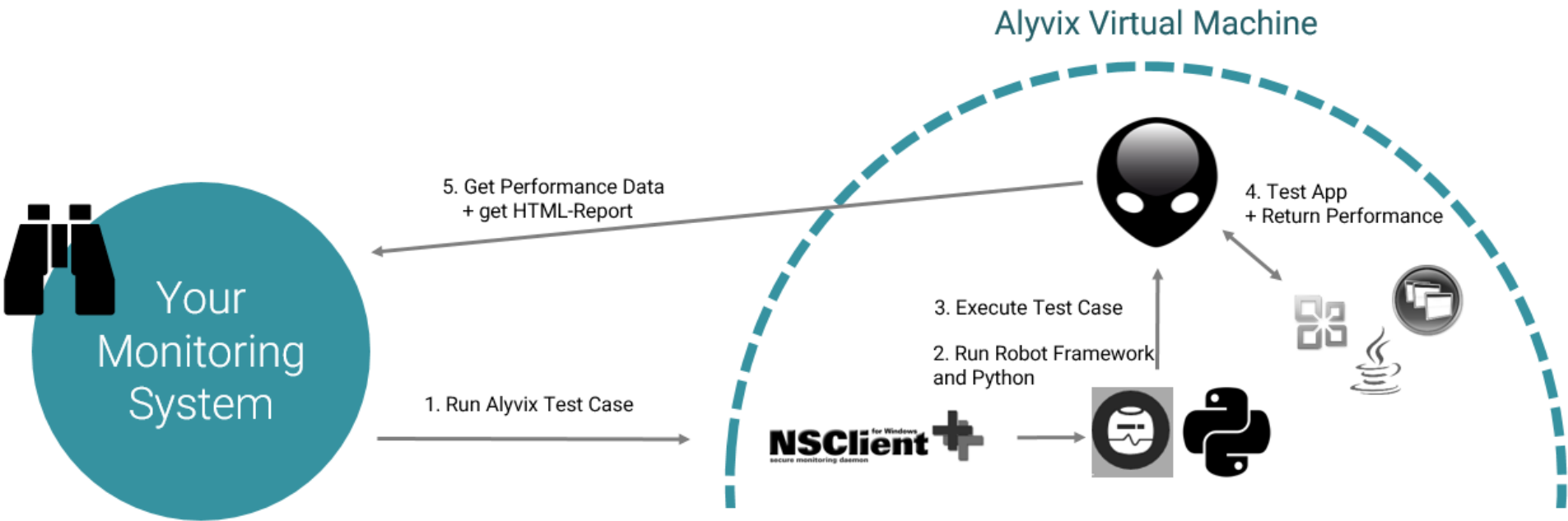
Active Vs. Passive Approach



Alyvix: How It Works



Alyxix: Integration To Monitoring Systems



New Release: Alyvix 2

A NEW RELEASE OF
alyvix IS OUT NOW !!






- Released on 18th September 2015
- Integration of Robot Framework
- Integration of Anaconda
- Many new features ...

New Features: Simple Deployment

- Through the integration of Anaconda, the deployment of Alyvix 2 and all required components, can be done in 2 steps.

Download Anaconda

Anaconda is a completely free Python distribution (including for commercial use and redistribution). It includes over 195 of the most popular [Python packages](#) for science, math, engineering, data analysis.

CHOOSE YOUR INSTALLER:    I WANT PYTHON 3.4*

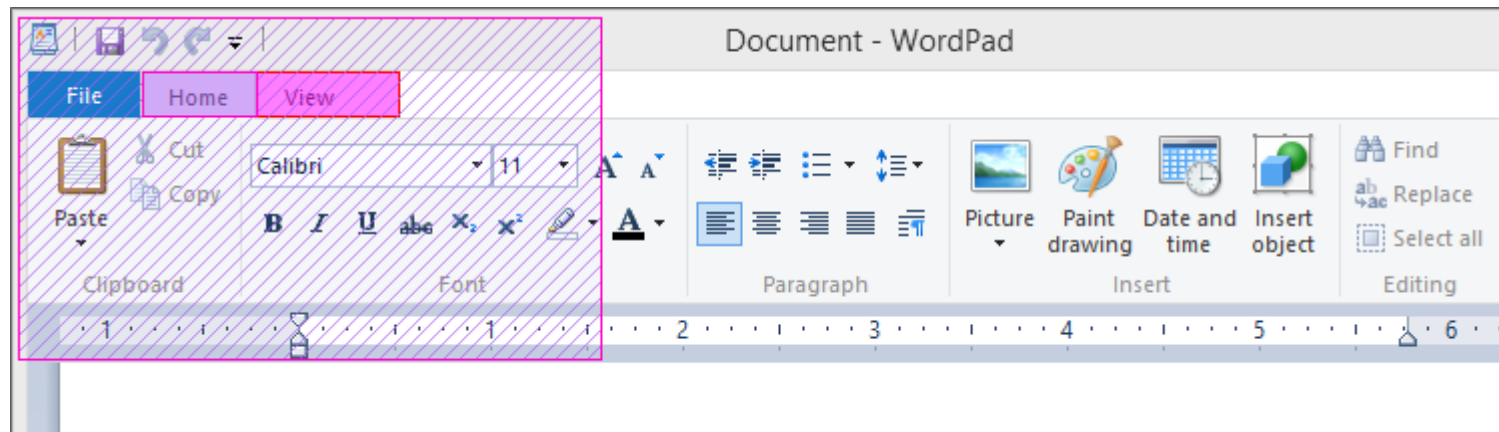
Windows 64-Bit
Python 2.7
Graphical Installer
Size: 334M

INSTALLATION
After downloading the installer, double click the .exe file and follow the instructions on the screen.



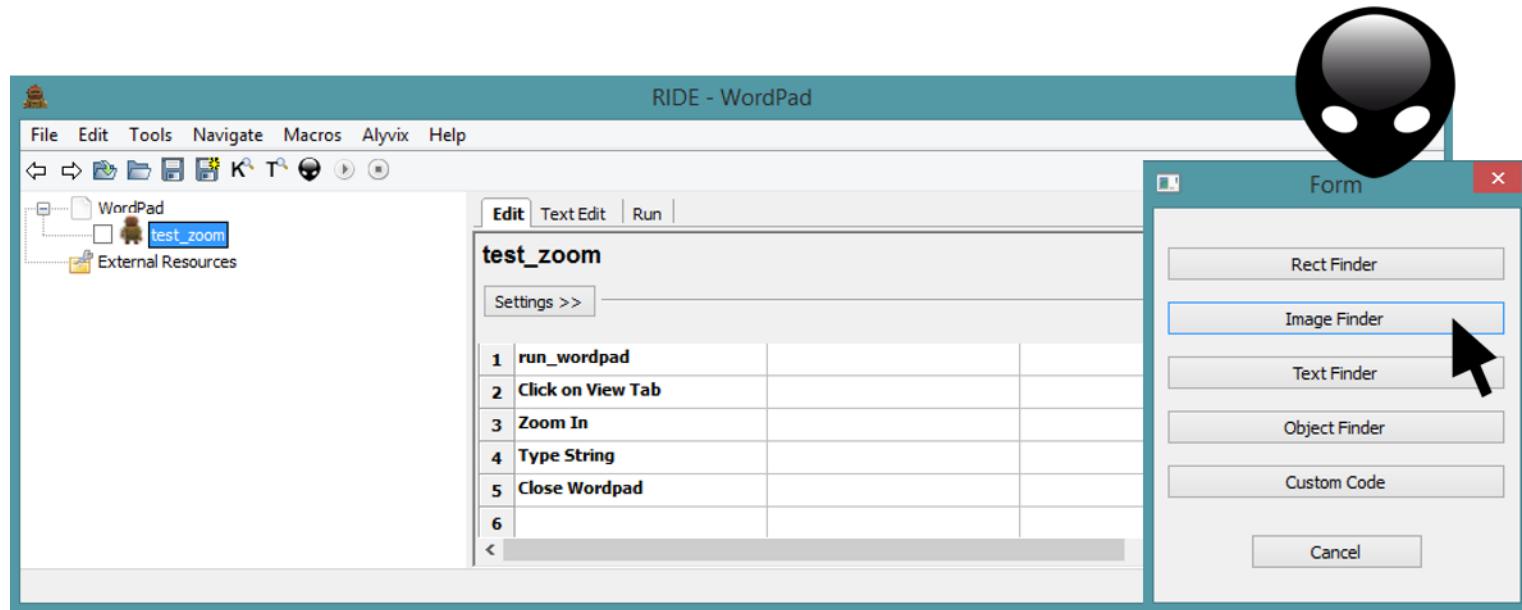
New Features: Enhanced Computer Vision

- To be sure, that it has recognizes the correct object, Alyvix 2 checks if other related objects are present in the same region.



New Features: Test Case Creation

- Thanks to the integration of Robot Framework, it is now possible to create test cases without any Python knowledge. The new RIDE-plugin allows to automatically create Python methods, which can be easily recalled by the usage of keywords.



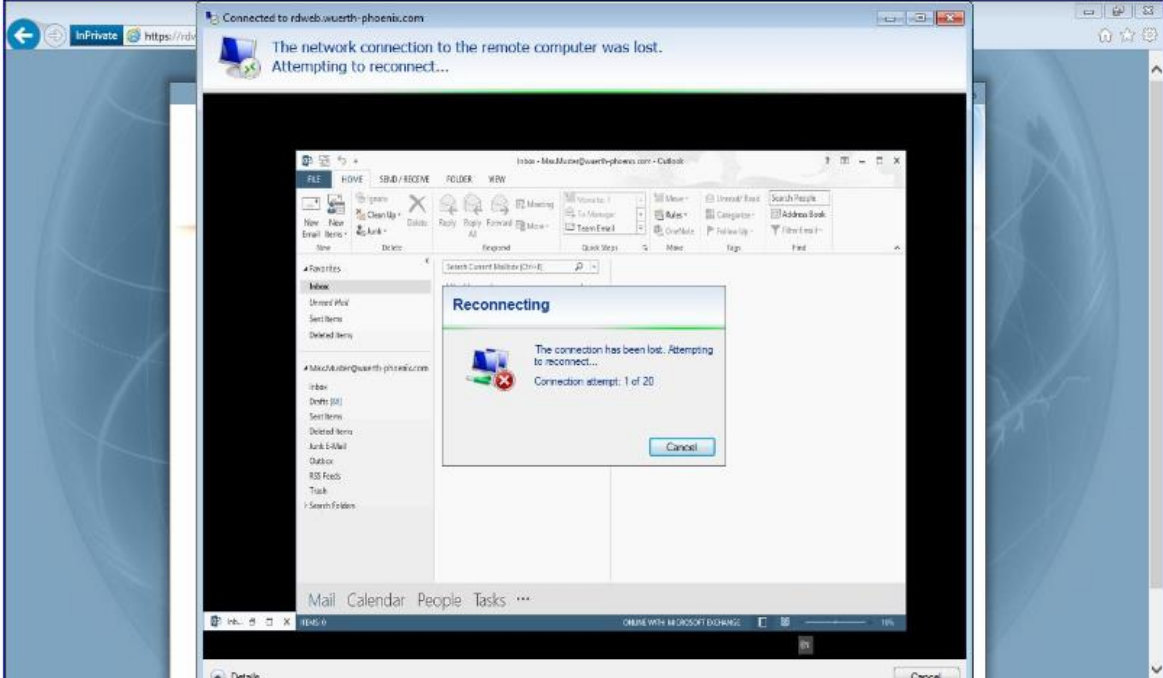
New Features: HTML Reports

- Alyvix 2 automatically creates HTML Reports, to get information about performance and other significant metrics. For an easier troubleshooting, screenshots of the tested application are directly shown within the HTML reports.

Test Execution Log

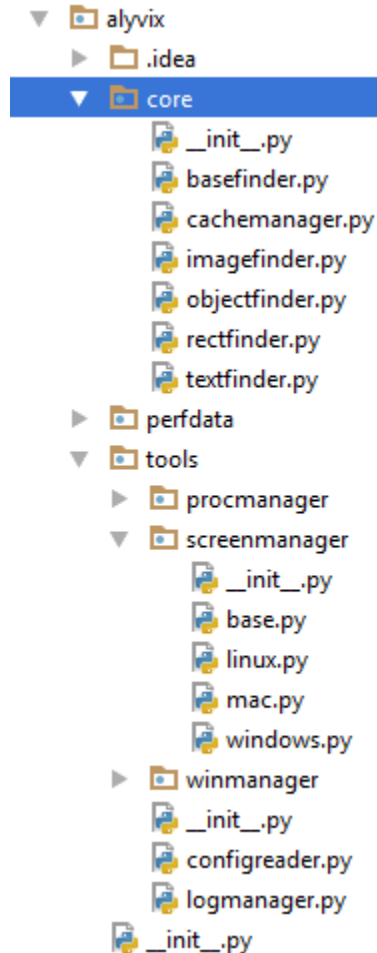
<input checked="" type="checkbox"/> TEST SUITE: Wuerth Rdesktop	00:01:28.420
Full Name:	Wuerth Rdesktop
Source:	C:\alan\ride_test\wuerth_rdesktop.robot
Start / End / Elapsed:	20150904 15:04:36.042 / 20150904 15:06:04.462 / 00:01:28.420
Status:	1 critical test, 0 passed, 1 failed 1 test total, 0 passed, 1 failed
<input checked="" type="checkbox"/> TEARDOWN: Finish	00:00:00.046
Start / End / Elapsed:	20150904 15:06:04.416 / 20150904 15:06:04.462 / 00:00:00.046
<input checked="" type="checkbox"/> KEYWORD: Screenshot.Take Screenshot	00:00:00.046
<input checked="" type="checkbox"/> TEST CASE: outlook	00:01:27.828
Full Name:	Wuerth Rdesktop.outlook
Start / End / Elapsed:	20150904 15:04:36.588 / 20150904 15:06:04.416 / 00:01:27.828
Status:	FAIL (critical)
Message:	step reinsert_creds timed out, execution time: 60
<input checked="" type="checkbox"/> KEYWORD: OperatingSystem.Set Environment Variable alyvix_testcase_config, C:\alyvix\config.xml	00:00:00.000
<input checked="" type="checkbox"/> KEYWORD: Process.Start Process C:\Program Files (x86)\Internet Explorer\iexplore.exe, https://rdweb.wuerth-phoenix.com , -private	00:00:00.000
<input checked="" type="checkbox"/> KEYWORD: AlyvixProxywuerth_rdesktop.Login vx/FkBOCpqR46w==, qQ36zEzEIJJe	00:00:13.182
<input checked="" type="checkbox"/> KEYWORD: AlyvixProxywuerth_rdesktop.App Folder	00:00:04.821
<input checked="" type="checkbox"/> KEYWORD: AlyvixProxywuerth_rdesktop.Open Outlook	00:00:04.804
<input checked="" type="checkbox"/> KEYWORD: AlyvixProxywuerth_rdesktop.Connect	00:00:04.852
<input checked="" type="checkbox"/> KEYWORD: AlyvixProxywuerth_rdesktop.Reinsert Creds vx/FkBOCpqR46w==, qQ36zEzEIJJe	00:01:00.154
Start / End / Elapsed:	20150904 15:05:04.262 / 20150904 15:06:04.416 / 00:01:00.154
15:06:04.416	FAIL step reinsert_creds timed out, execution time: 60

New Features: HTML Reports

		REPORT
<p>[-] TEST SUITE: Wuerth Rdesktop</p> <p>Full Name: Wuerth Rdesktop</p> <p>Source: C:\alan\ride_test\wuerth_rdesktop.robot</p> <p>Start / End / Elapsed: 20150904 15:04:36.042 / 20150904 15:06:04.462 / 00:01:28.420</p> <p>Status: 1 critical test, 0 passed, 1 failed 1 test total, 0 passed, 1 failed</p>		00:01:28.420
<p>[-] TEARDOWN: Finish</p> <p>Start / End / Elapsed: 20150904 15:06:04.416 / 20150904 15:06:04.462 / 00:00:00.046</p>		00:00:00.046
<p>[-] KEYWORD: Screenshot.Take Screenshot</p> <p>Documentation: Takes a screenshot in JPEG format and embeds it into the log file.</p> <p>Start / End / Elapsed: 20150904 15:06:04.416 / 20150904 15:06:04.462 / 00:00:00.046</p> <p>15:06:04.462 INFO</p>		00:00:00.046
		

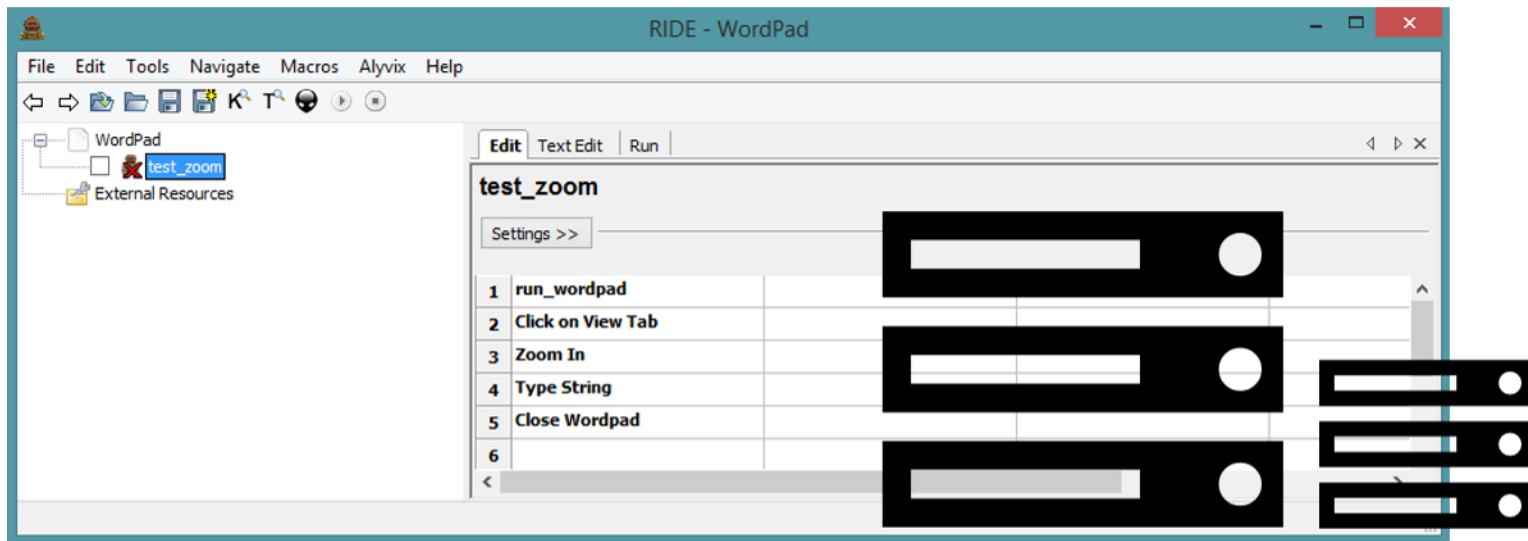
New Features: API

- Well documented APIs allow to develop plugins, which can be reused and shared with the community.



New Features: Less CPU Consumption

- Alyvix 2 is optimized to run on machines with lower CPU performance.



New Features: Log Retention

- Alyvix 2 provides detailed logs and further grants to overwrite old logs. The log retention can be configured.

```
[-] KEYWORD OperatingSystem. Set Environment Variable alyvix_testcase_config, c:\alyvix\config.xml 00:00:00.001
Documentation: Sets an environment variable to a specified value.
Start / End / Elapsed: 20150806 17:35:42.978 / 20150806 17:35:42.979 / 00:00:00.001
17:35:42.978 INFO Environment variable 'alyvix_testcase_config' set to value 'c:\alyvix\config.xml'

[-] KEYWORD BuiltIn. Comment run_wordpad 00:00:00.001
Documentation: Displays the given messages in the log file as keyword arguments.
Start / End / Elapsed: 20150806 17:35:42.979 / 20150806 17:35:42.980 / 00:00:00.001

[-] KEYWORD ${process_id} = Process. Start Process calc.exe 00:00:00.006
Documentation: Starts a new process on background.
Start / End / Elapsed: 20150806 17:35:42.980 / 20150806 17:35:42.986 / 00:00:00.006
17:35:42.980 INFO Starting process:
['calc.exe']
17:35:42.982 INFO ${process_id} = 1

[-] KEYWORD BuiltIn. Sleep 2 00:00:02.002
Documentation: Pauses the test executed for the given time.
Start / End / Elapsed: 20150806 17:35:42.987 / 20150806 17:35:44.989 / 00:00:02.002
17:35:44.989 INFO Slept 2 seconds

[-] KEYWORD Process. Terminate Process ${process_id}, Kill=True 00:00:00.102
Documentation: Stops the process gracefully or forcefully.
Start / End / Elapsed: 20150806 17:35:44.989 / 20150806 17:35:45.091 / 00:00:00.102
17:35:44.990 INFO Forcefully killing process.
17:35:45.091 INFO Process completed.
```



New Features: Enhanced Security



- For security reasons, credentials within the test cases are encrypted.

```
C:\Anaconda\Scripts>python alyvix_crypto_utility.py

Alyvix crypto utility, by Alan Pipitone
http://www.alyvix.com

Press e to encrypt data, press d to decrypt data.
Press k to set the key to encrypt/decrypt data.
Press q to quit.

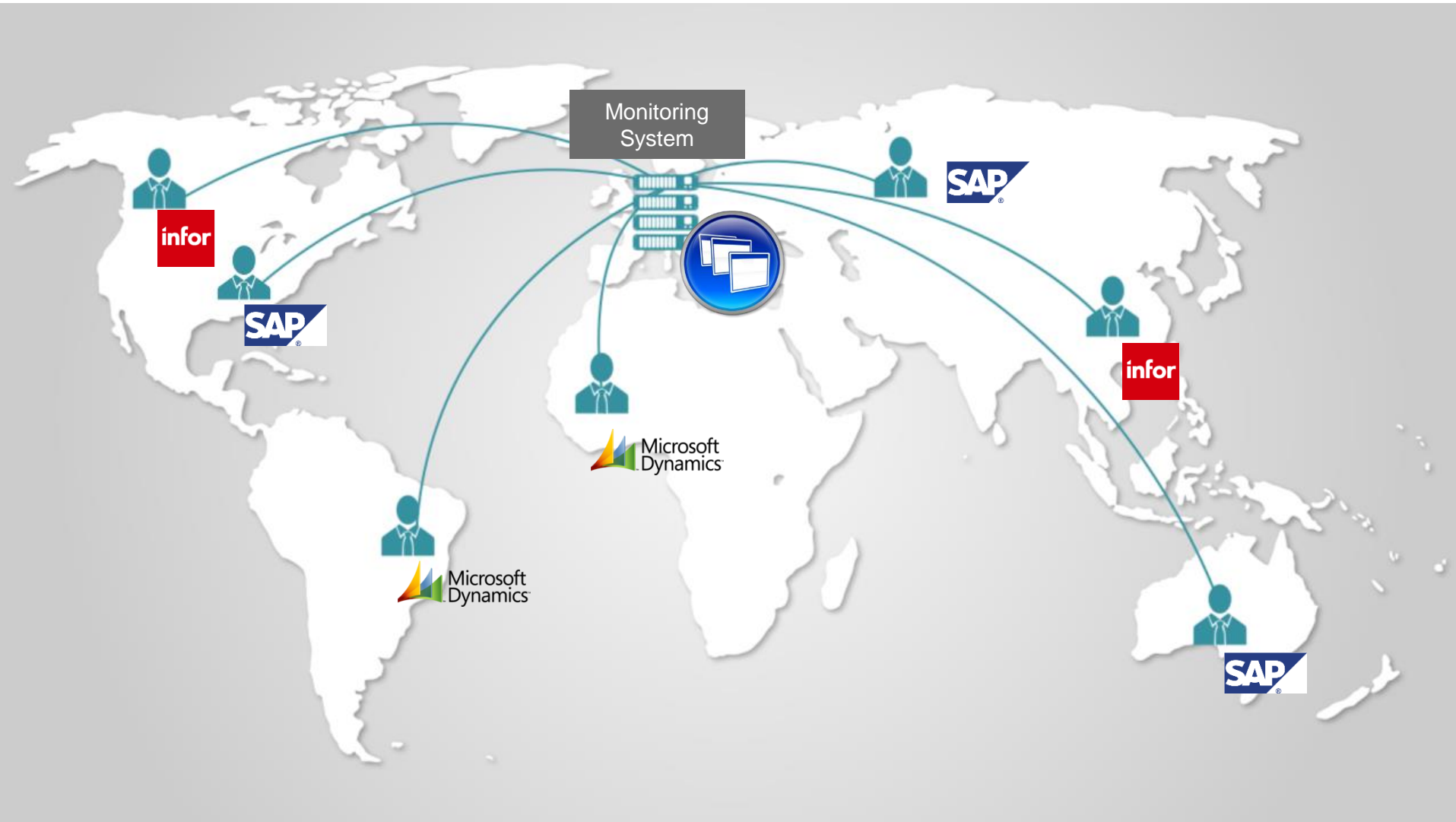
Type your choice: e
Type the text to encrypt: domain\myuser
rAD0nBeZib1k70x/7g==

Type your choice: e
Type the text to encrypt: mypassword
pRbpnA2Eor9v/Q==

Type your choice:
```

1	Start Process	C:\Program Files (x86)\Internet Explorer\iexplore.exe		-private
2	Login	rAD0nBeZib1k70x/7g==	pRbpnA2Eor9v/Q==	
3	Open Outlook			
4	New Mail			
5	Insert and Send			
6	Terminate All Processes	Kill=True		

Distributed Testing of a Citrix Farm



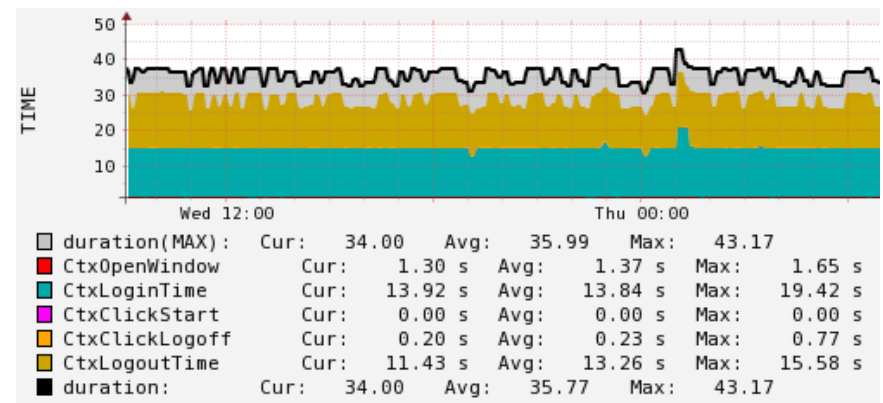
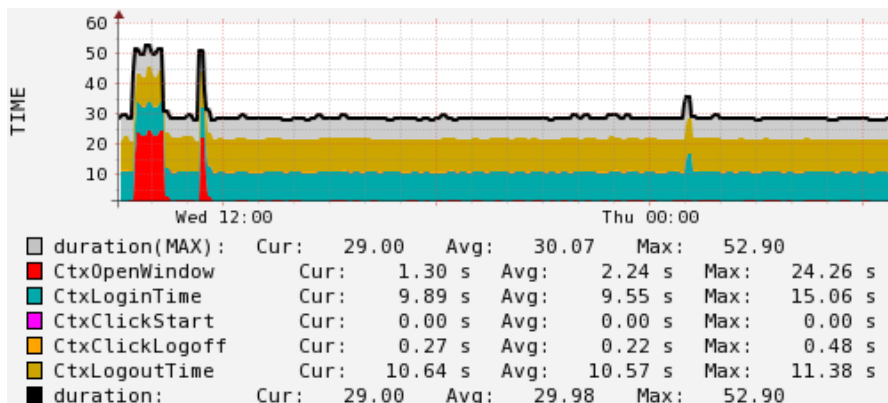
Performance Statistics



select host / services with leftclick to send multiple commands. Select multiple with shift + mouse.
select all (hosts) - unselect all - all problems - all with downtime

Host ▲▼	Service ▲▼	Status ▲▼	Last Check ▲▼	Duration ▲▼	Attempt ▲▼
neteye03	ALEXA_CitrixAccessGateway	OK	10:02:27	11d 6h 53m 33s	1/3 OK: all steps are ok
	ALEXA_CitrixAppliance	OK	10:01:53	10d 6h 43m 22s	1/3 OK: all steps are ok
	ALEXA_CitrixCertificate	OK	10:01:19	3d 7h 22m 13s	1/3 OK: all steps are ok
	ALEXA_CitrixClient	OK	10:00:47	3d 7h 23m 3s	1/3 OK: all steps are ok
	ALEXA_CitrixConsole	OK	10:00:16	3d 8h 23m 31s	1/3 OK: all steps are ok
	ALEXA_CitrixDesktop	OK	09:59:38	14d 22h 51m 25s	1/3 OK: all steps are ok
	ALEXA_CitrixFlow	OK	09:58:59	19d 19h 34m 2s	1/3 OK: all steps are ok
	ALEXA_CitrixGateway	OK	09:58:30	0d 8h 47m 4s	1/3 OK: all steps are ok
	ALEXA_CitrixHost	OK	09:57:49	18d 8h 36m 50s	1/3 OK: all steps are ok
	ALEXA_CitrixSession	OK	09:57:13	3d 7h 36m 45s	1/3 OK: all steps are ok
ALEXA_CitrixUser	OK	09:56:37	0d 8h 49m 13s	1/3 OK: all steps are ok	

Same check performed
from different access point



THANK YOU
FOR YOUR ATTENTION!

