Independent Solution Review – AppEnsure for Citrix Monitoring

Pawel Serwan, organizer of Polish Citrix Users Group

Pawel Serwan,
Organizer, Polish
Citrix Users Group

Monitoring is always one of the most important topics that you have to define during implementation and management of Citrix environment. Usually it is decided to use standard monitoring tool used in your company – if that is good for enterprise then why it wouldn't work for your Citrix platform? So you set required alerts, monitoring rules and wait…Wait for the first call from end user stating that his Citrix is not working at all, that she or he cannot do daily work. And you start your work – you try to find what might be the problem. You check your Citrix XenApp or XenDesktop servers and you have no idea what might be causing problem for your end user. You check the performance charts and alerts in the enterprise monitoring tool you decided to use and you see nothing. What is more you might only have insight into "your" servers which for sure doesn't ease finding the root cause of the problem. And whenever you ask colleague from e.g. Exchange or SAP team they state that everything is working fine on their end and that it has to be Citrix that is breaking everything. You probably know that story already – working as Citrix administrator or engineer you probably went that path many, many times. As one of my colleagues said this is THE STANDARD to blame Citrix first – and this is you who have to play role of attorney and prove that Citrix is innocent. So you dig into the infrastructure, catch traces and after long hours you find that there was a problem with Exchange or SAP that your colleagues decided not to mention or for some reason didn't notice ☺

At this point you decide – I need to find the way to see what is not working for the end user before she or he will call and identify the faulty server or infrastructure beforehand. In my cases I started to write the PowerShell scripts that were launching the application every 5 or 10 minutes and sending alerts in case of unsuccessful application launch. This worked but tracing all the new applications and changes happening in company's infrastructure was a bit of a challenge. So as everyone in similar situation I started to look for a monitoring platform that could help monitoring my Citrix infrastructure. And here you have few choices from the group of monitoring tools that are Citrix Ready and are designed specifically for XenApp and XenDesktop environments. In this article I do not want to say which one is the best. Every platform has its strengths and weaknesses. Instead I would like to review one tool that recently has enchained my attention – during last PLCUG meeting (www.plcug.pl) Sri Chaganty, CTO of AppEnsure, was talking a lot about the reasons why they have created the new monitoring platform. He was not showing anything regarding the solution and that has interested me enough to start discussion with Sri. As an outcome I was asked to write my review of their solution. Let's then take a look on AppEnsure monitoring platform.

First of all I would like to underline that this post was created in cooperation with AppEnsure but all comments are mine. I was trying to be as objective as possible. Second thing is that I have wrote this review based on my work with demo environment I was given access to. For that reason I'm not describing some parts like installation of solution etc. If you will be interested and would like to test the AppEnsure monitoring tool then please click banner on the right side of the site or visit their website: www.appensure.com.

Whole review is divided into sections and describe one of the aspects I take under consideration when testing new software.
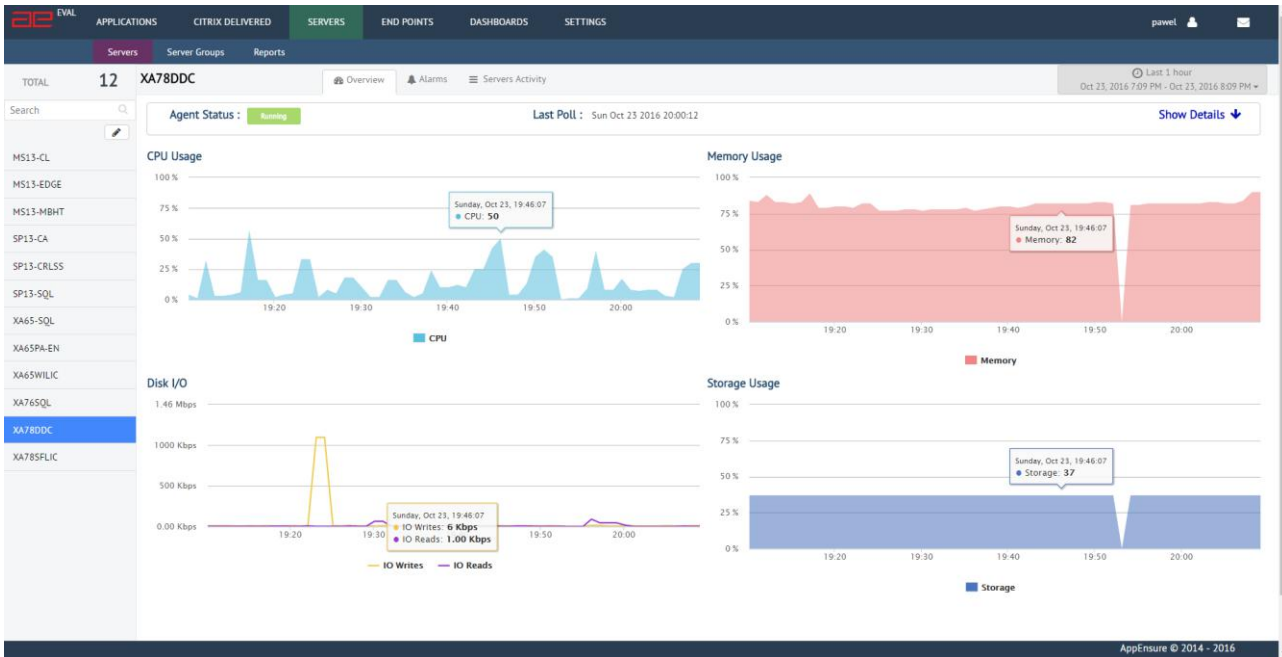
Administrator dashboard

Today every Citrix administrator has to work with multiple technologies: hypervisors, application servers, file servers, network etc. To be able to act proactively or to troubleshoot the problem we have to check multiple tools, view many dashboards and analyse many charts. That is why I was really glad to see that AppEnsure decided to simplify their graphical interface and make it clean. Thanks to that the welcome screen is not cluttered with all possible charts and alerts coming from your servers. You just have access to the standard configuration and summary view of your alarm distribution. The only problem you may face here is the naming convention used for tabs. It might be a bit challenging at the beginning to understand what the difference is between Citrix Applications, Shared Desktops and Citrix Desktops. Used naming doesn't give sufficient information to guess what is hidden beneath. To make it clear then:

- Citrix Applications – applications published in Citrix that are monitored by AppEnsure
- Shared Desktops – Citrix XenApp servers that are monitored by AppEnsure
- Citrix Desktops – VDI desktops managed by XenDesktop and monitored by AppEnsure

Additionally if you are fan of customized views then you might find static welcome page and some views as a drawback.
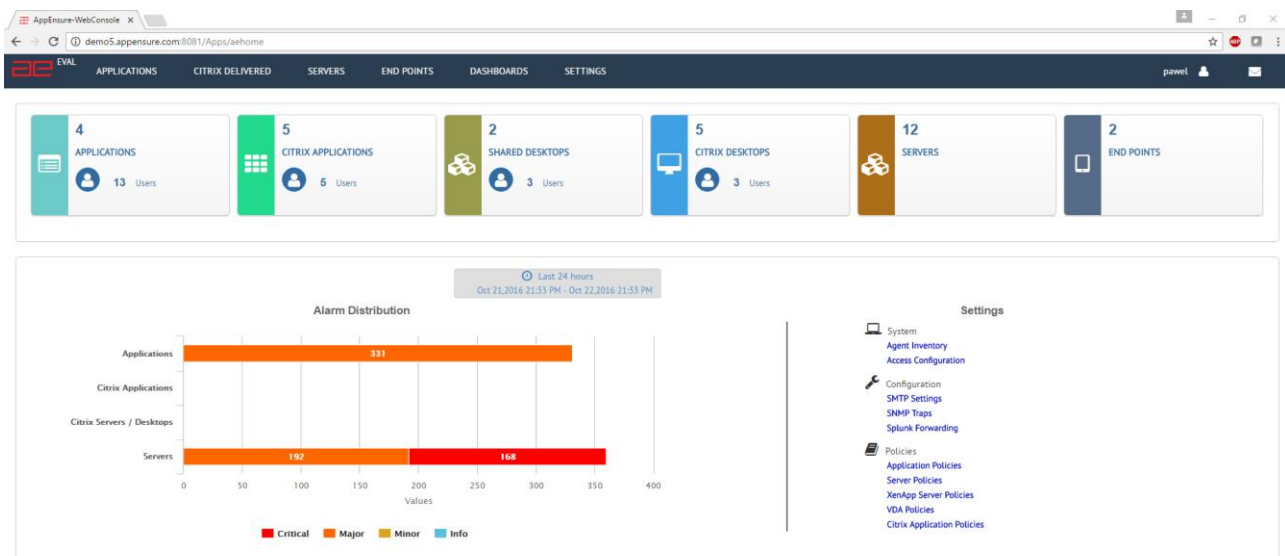
AppEnsure GUI allows to get detailed information gathered in one dashboard allowing to track many performance charts at once. This for sure ease the Citrix administrator work. What is more it is easy to get insight into detailed data about usage of resources by simply following the links inside the dashboard e.g. Application→Citrix sessions→ Citrix XenApp server.

To review the section regarding the administrator dashboard:

- Strengths
    - o Clean and visible dashboard
    - o Detailed data gathered in one view
    - o Easiness to follow data insight
- Weaknesses
    - o Tricky naming convention
    - o Static views (might be a strength as well!)

End User Logon Time Analysis

Every Citrix administrator knows that end users are the main source of alerts and problems reported to IT Service Desk. For sure you have heard many times that Citrix is working slowly and user wants his standard PC back. But when you ask about the details what is exactly happening you often hear – it works bad. And that's it. Luckily AppEnsure platform allows to check and monitor the logon times for end users. Not only you can check a real time logon duration analysis but also you can see what was happening during user session – you can compare and track the XenApp server statistics, End Point statistics, ICA session statistics and much more. All data are gathered on one dashboard and give very good insight into user session. And what is more they are easy to follow and read. Despite the amount of data the dashboard is still clear and neat.
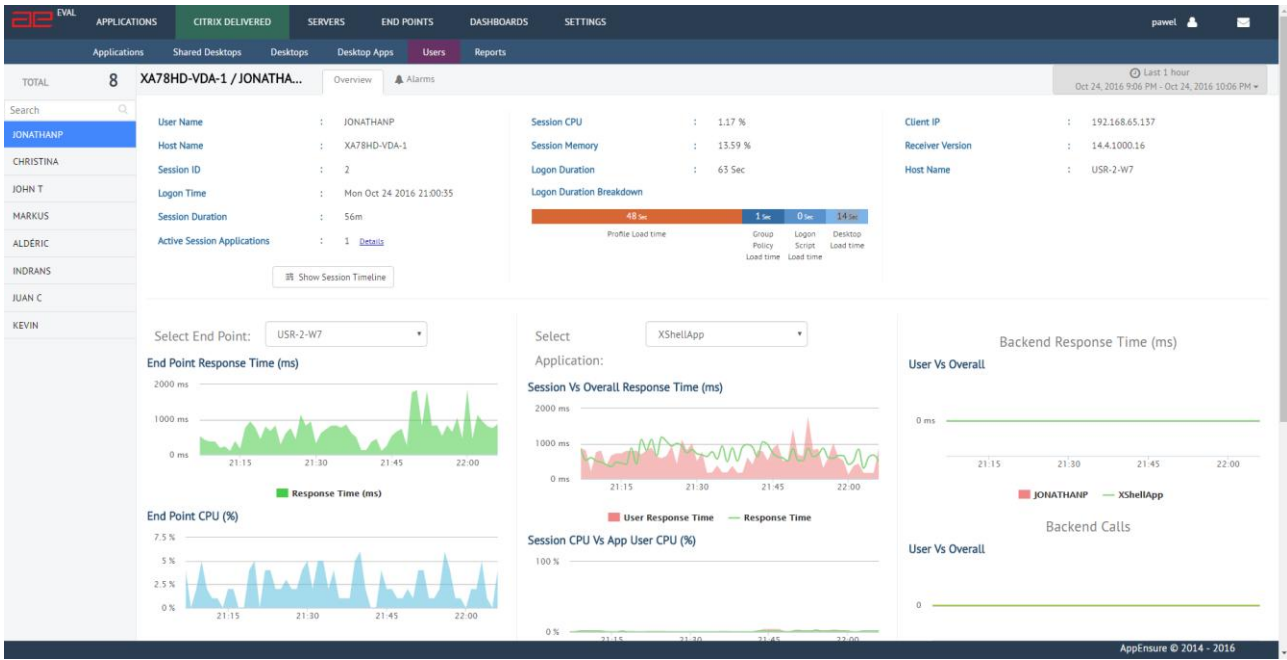
The other feature I like very much is a possibility to compare last Session Logon Duration analyses. This gives you a very good information about the problem that aroused for the end user on the specific day. The only missing functionality for me is the possibility to drill down into more detailed information about the phase of user's logon. I hope to see that in the next release of AppEnsure.
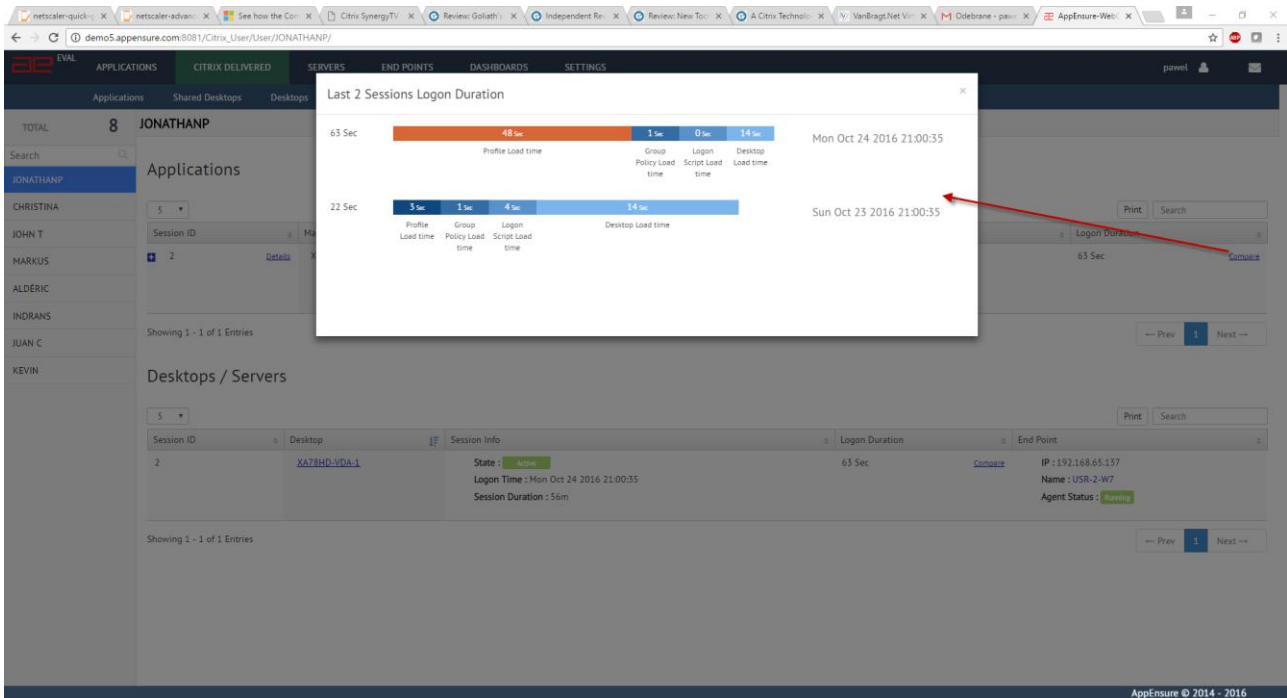
The last feature which I think is very nice is the automated alert notification that is generated for every end user session with logon time deviation higher than 30 seconds. This is out of the box feature which in my

opinion is very helpful. It helps you identify user session with logon problem even before end user will call you or contact IT Service Desk.
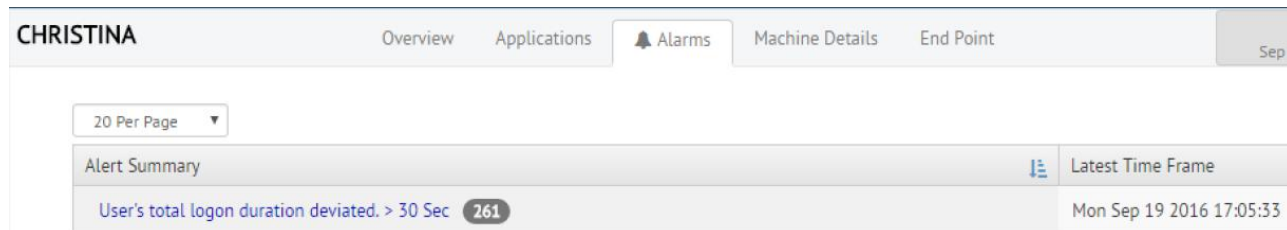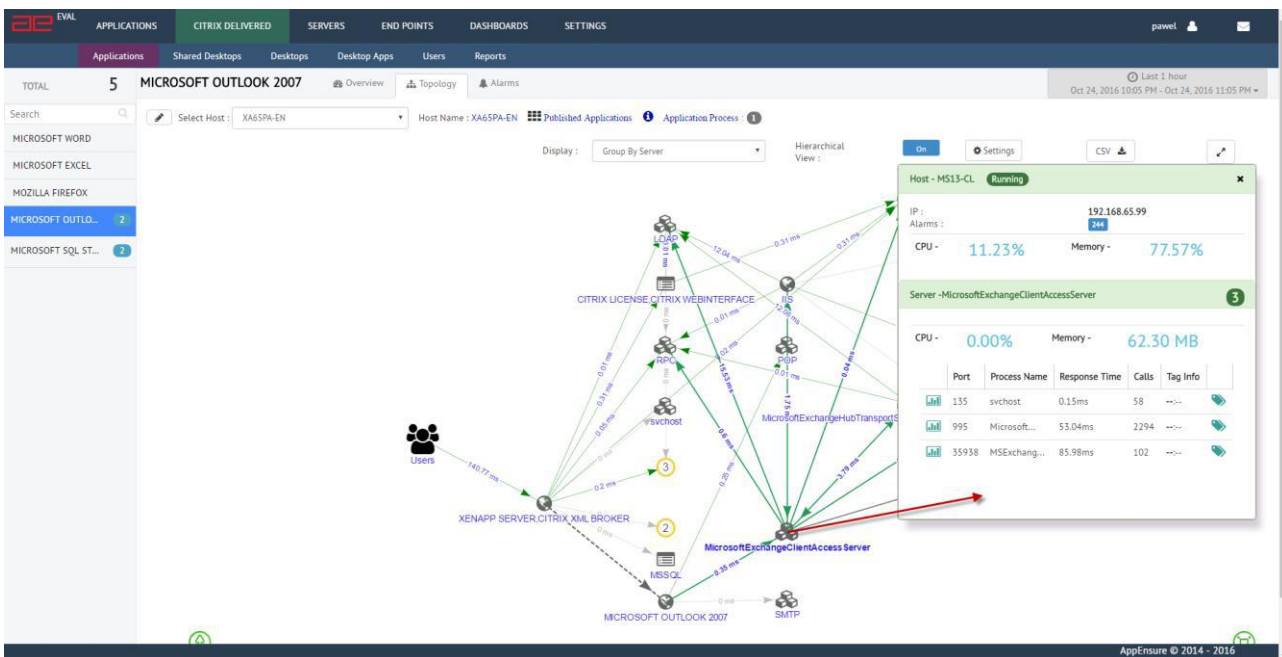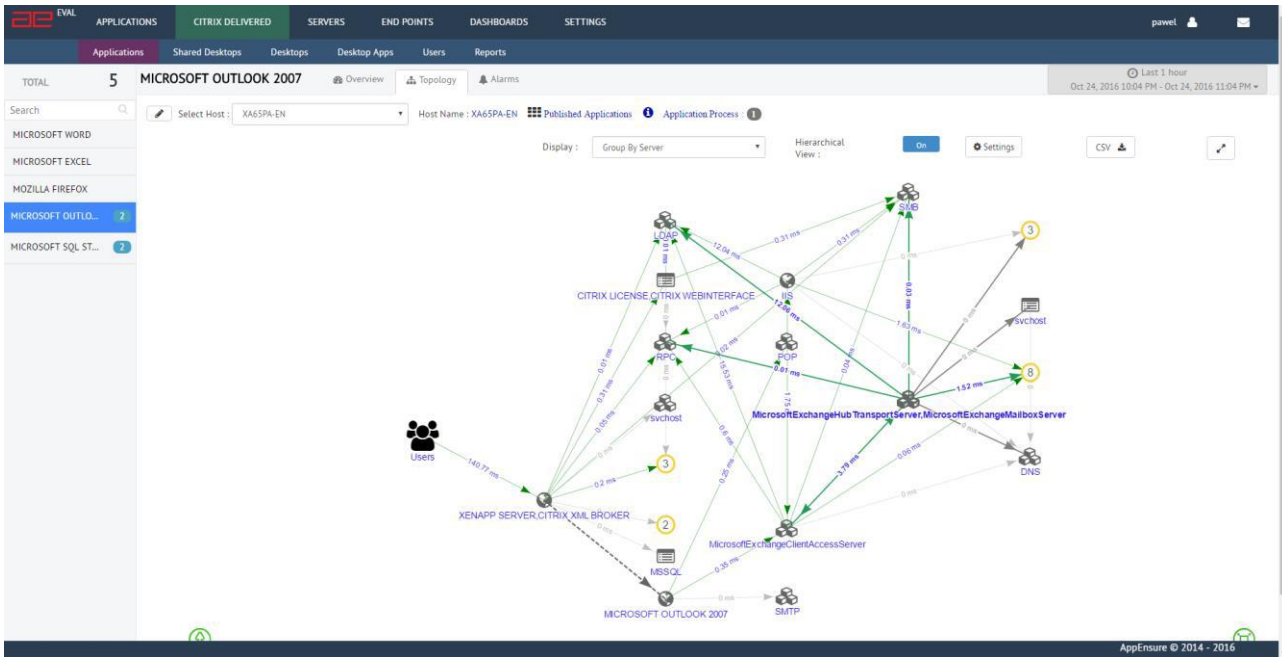

To review the section regarding the end user logon time analyses:

- Strengths
    - Detailed information about the user's logon duration
    - All information regarding users session, ICA statistics, XenApp/XenDesktop statistics and end point statistics gathered in one dashboard
    - Easiness to follow data insight
    - Possibility to compare last logon duration times for end user session
    - Alerts send for end user session with logon time deviation higher than 30 seconds
- Weaknesses
   - Missing detailed insight into end user logon process phases

End to end visibility

As I have stated in the beginning the biggest problem for every Citrix administrator is the limited view on the company's infrastructure. Unless you work in small teams or you are the architect who can log everywhere it is almost impossible to get insight into every system, platform, frontend or backend server that exists in your company. One good example might be here MS Outlook client that you publish in Citrix XenApp environment. Users are complaining about the poor performance in Citrix session and of course Citrix is blamed as the one which is causing the problem. Unfortunately, you have no idea what is happening on the network or on the Exchange servers as you do not have any insight into those systems. You ask your colleagues to check that and they say that everything is working fine on their end. And you are lost ☺

What if I could tell you that AppEnsure allows you to have end to end visibility of user session and all connections to the frontend and backend servers including e.g. Exchange servers. When I saw that for the first time I said - "WOW"! The topology map that is drawn by AppEnsure shows you all network connections and all nodes that participate in the communication between end user client and application server. That allows to quickly identify faulty part of the infrastructure: server or network device/link. I think this is one of the best features of AppEnsure. You have to check this on your own. This one of course requires to have an agent installed on the server. This will give you an insight into all metrics of application or backend server. But even without installing agents on those servers AppEnsure will show you what is the time response from the server which quickly allows to identify faulty server or network link. I think that is one of the best features of AppEnsure monitoring platform.
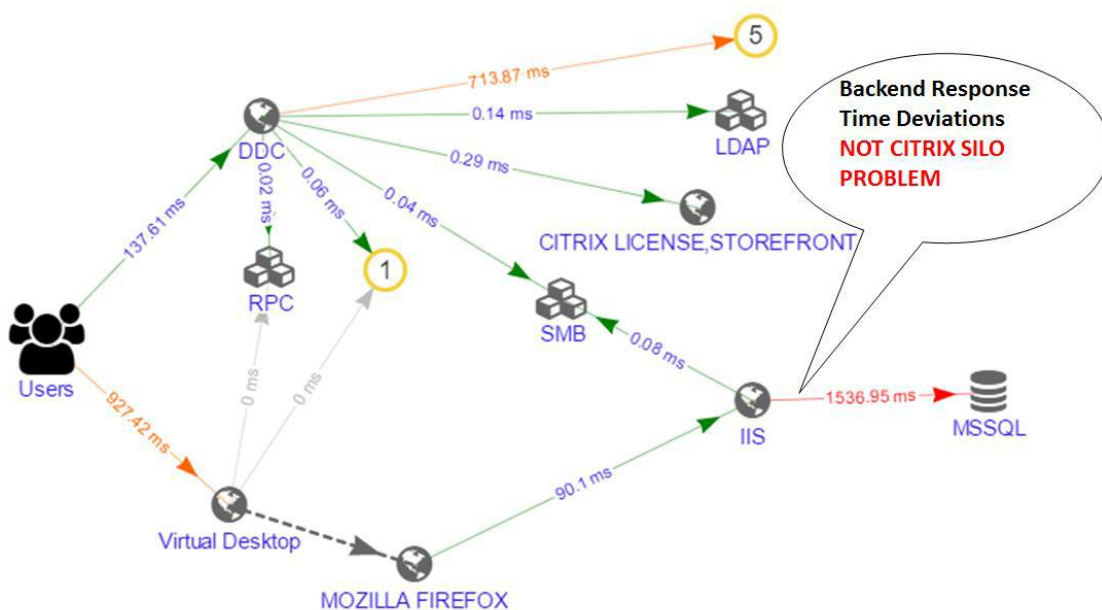
Back-end Response Time affecting multi users – when you are permitted to install agent only on Citrix infrastructure
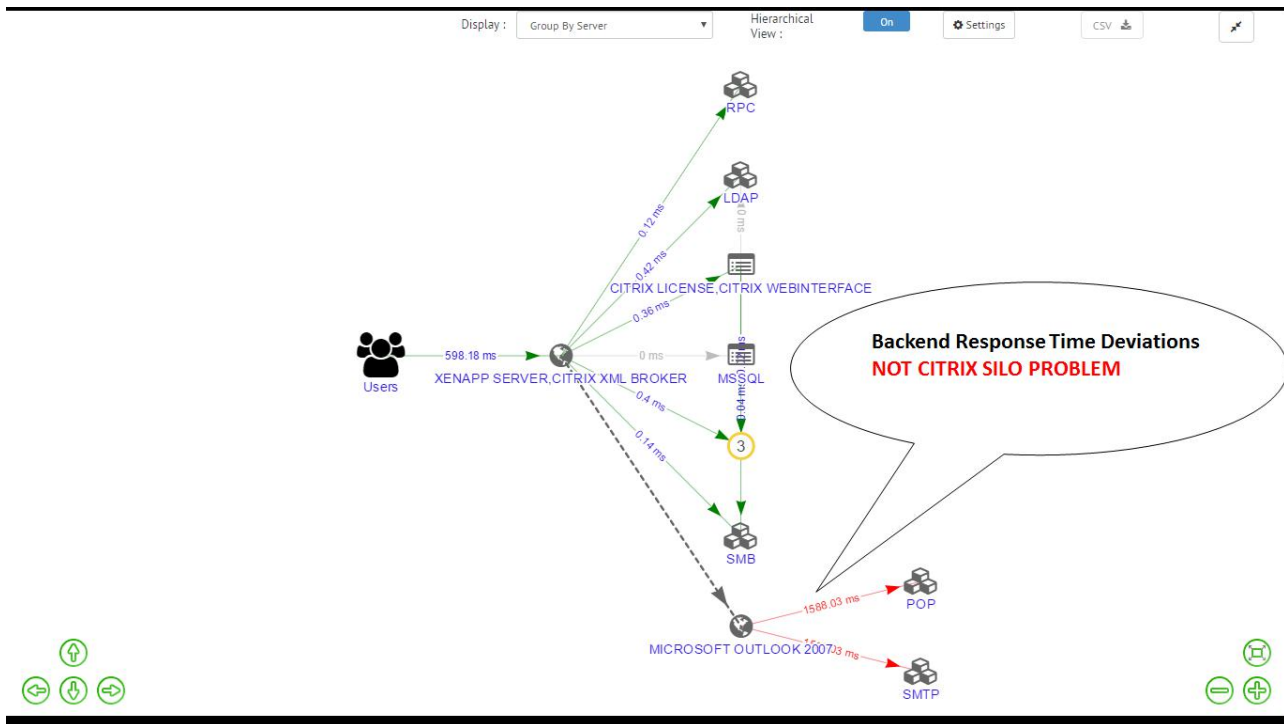
Back-End Response Time for Office365 (or any SaaS)
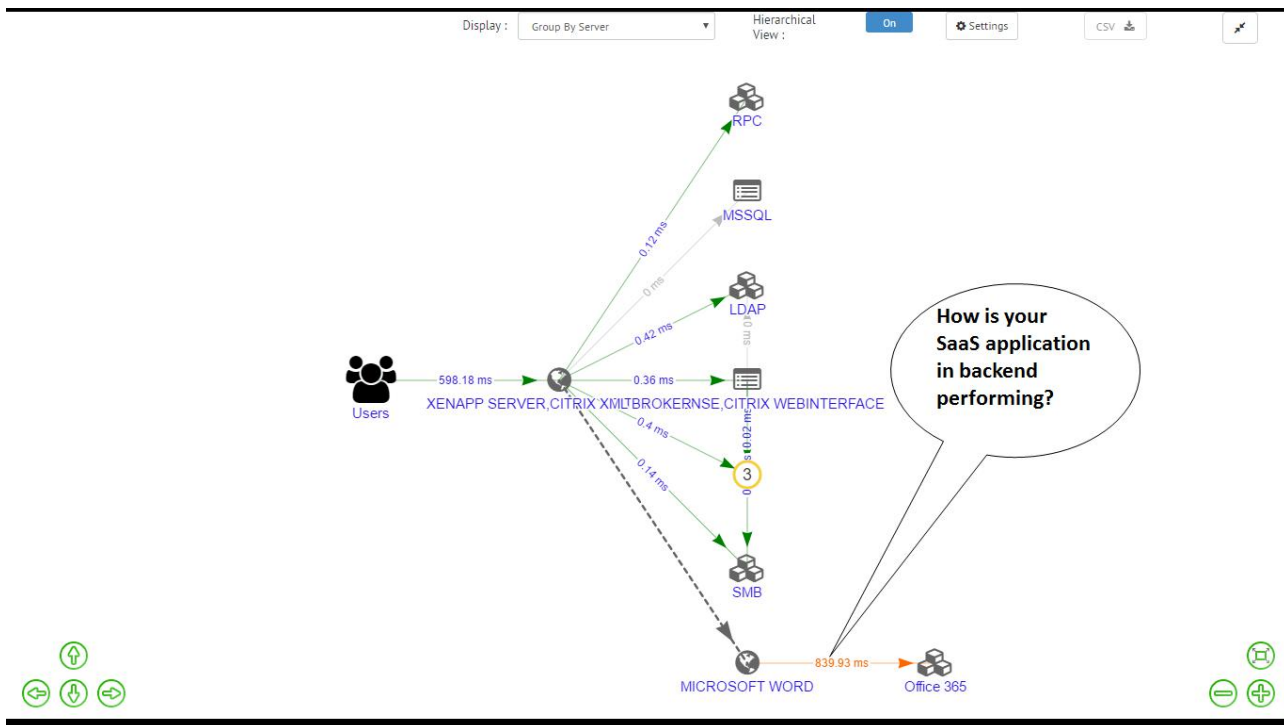
To review the section regarding the end to end visibility:

- Strengths
    - Detailed information about the system topology
    - Quickly allows to identify server or network link that is causing slow response time in user session
    - Possibility to get information even without having agents installed
- Weaknesses
    - I was not able to find weakness to report ☺

Monitoring capabilities

AppEnsure monitoring solution is not only targeted to Citrix applications. It can monitor as well your infrastructure: end points, servers and applications. The whole idea of AppEnsure is to focus on end user experience. And that is why it is possible to get insight into data regarding user sessions and backend server response times. Having all required information in one dashboard eases troubleshooting of every problem and shortens time required to find a root cause. Below I have listed the main strengths and weaknesses I have found regarding standard monitoring capabilities of AppEnsure.

Strengths:

- Central management of agents installed on the end points and servers
- Platform is delivered as OVA appliance that you have to deploy on VMware host – quite easy installation
- Possibility to monitor applications on VDI machines – allows separation of problems with Citrix itself and the application/backend servers
- AppEnsure detection algorithm used to automatically deliver root cause analysis when an application deviates from its normal response time – this one is very useful!

- Auto discovery of servers, applications, end-points and servers
- Supports any type of application – packaged, custom developed or composite, in every location

Weaknesses:

- Limited number of performance counters available for monitored objects
- Limited number of available reports – something to be improved in next releases
- I was a bit missing more detailed documentation – as I was told it will be available soon.
- More reports available for XenApp and XenDesktop (e.g. ICA latency, application usage etc.)

Summary

AppEnsure monitoring solution is a powerful tool that should find usage in many IT environments. As I stated in the beginning it has its strengths and weaknesses as every product but I hope that the strengths are the things you will remember from this review. For sure I would recommend to contact guys from AppEnsure and ask for the demo. You can schedule a demo by simply clicking the below banner and sharing your contact information. They will contact you and show all features of AppEnsure monitoring platform.