MARTELLO

Teams VIP Usage Issue Reporting and Analysis with Martello Vantage DX

The Challenge

VIPs usually do not open IT tickets when Teams is not performing optimally but they are extremely prompt to complain. Analyzing their Teams usage and the nature and frequency of their issues is key to ensure their satisfaction. Unfortunately, the Teams Call Quality Dashboard does not offer end-to-end analysis capabilities.

Overview

Discover how you can easily understand how your VIPs are using Teams Voice and Videos, what their issues are and tie them back to potential performance problems at their offices or homes.

Let's Get Started!

Let's start with the User dashboard.

Click on the burger menu then Analyze, then Users Dashboard.
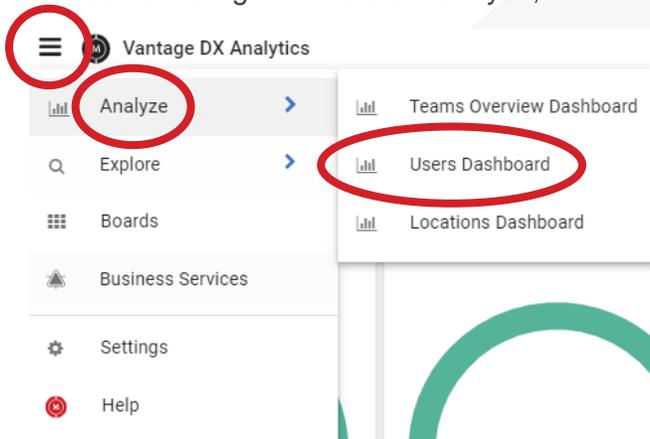
Let's say that you got alerted because a VIP has a recurring issue. And that VIP has the impression that the call quality is better at their home than in their office in Ottawa.

With Vantage DX alerting, you would have detected and been alerted about this situation already. Now you want to analyze it and understand if there really is a difference between their home and office.

On the top left of that dashboard, you can see the option to filter per user:
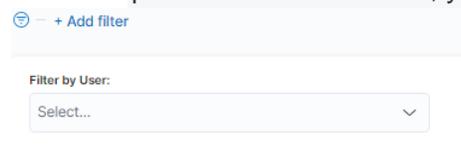
Let's take Kate Mills for example. For that look for "kmills"

Right away you can identify if the problem with that VIP is recurring by looking at the gauges.
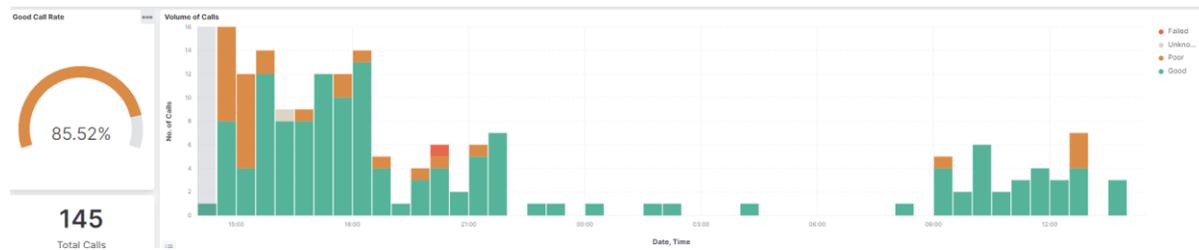
Anything under 90% isn't good enough for a VIP (or for any user really!). Right next to the gauge is the volume of calls with all the call quality issues identified in orange.
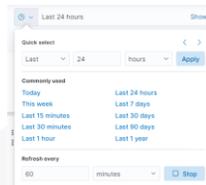
If you modify the time period on the top right [   ] you will be able to detect a pattern of issues during a period of time and to also understand if the number of problems are linked with the overall usage of Teams.

Below are 3 charts that allows you to understand better how your VIP is usage Teams:
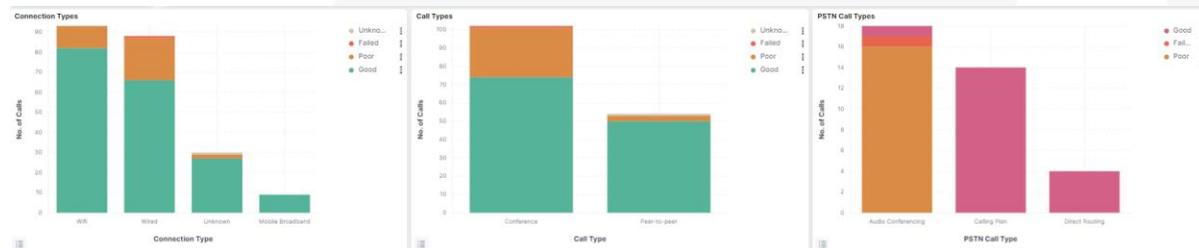
- How are they connected?
   o This allows you to spot for example, if a disproportionate number of bad calls are happening on Wi-Fi, which means you would suspect the network equipment in this location.
- The type of calls do they perform.
   o Are problems happening more with conferences over peer to peer or is it even, as in this example?
- The type of Teams Phone PSTN calls they are using.
   o This allows you to check if one time has disproportionate errors over the others to ease the troubleshooting.

You can click on any of these columns to filter the entire view of what you want to see.

Every column is actionable and will filter the entire dashboard with what you want to focus on.

Let's check for example all the calls made on Wired.
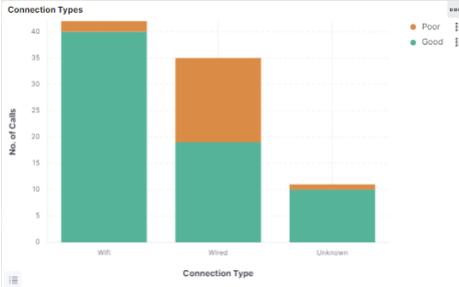
If you click on the Wired column, on the green part, a pop up will open to ask you if you want all the Wired calls or only the Wired calls that are good (because you clicked on the green part).

Let's close the pop and click on the orange part of the column.

Select filters to apply

☑ source.vdx_internet_connection_type: Wired

☑ labels.status: Poor

Cancel   **Apply**

Now the pop up asks you if you want all the Wired calls or only the poor ones.

Let's keep both filters to have the dashboard filtered by Poor wired calls.
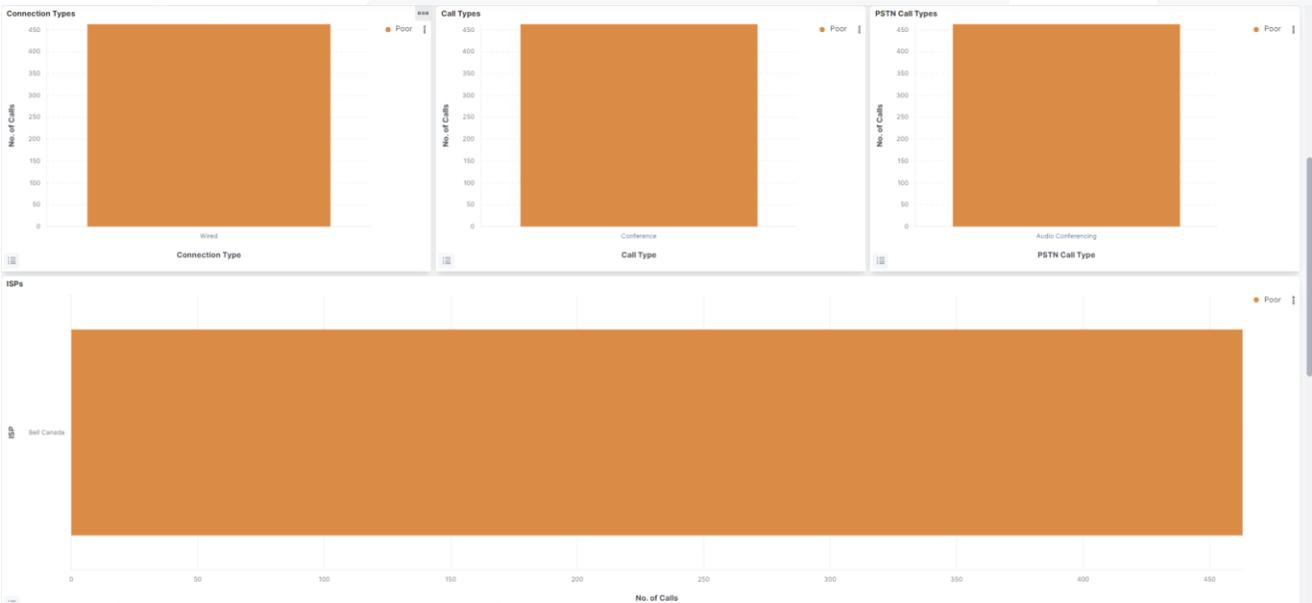
Now you see:

- The Good call success rate at 0, because we only monitor calls with Wired issues.
- The volume of the Wired calls over the period that is selected which is again useful to detect some patterns of problems linked with the high volume of calls or with specific times of the day or week if you change the time period.
- The type of calls that are made with Wired and if there are any PSTN amongst them.

You can do that on every chart of the dashboard to automatically filter the data with what you want to see in order to understand better the situation of your VIP.

Now let's remove the filters that we just inserted in order to get back to the full VIP dashboard.
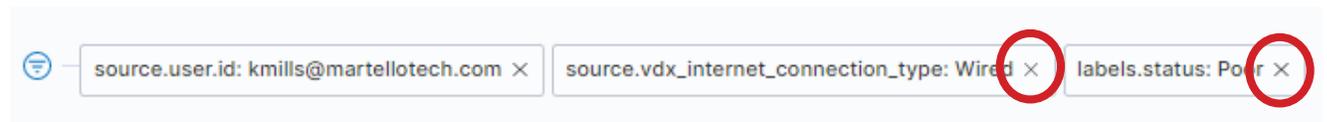
If we continue on that user dashboard, we see the ISPs that this VIP is using to support the internet traffic
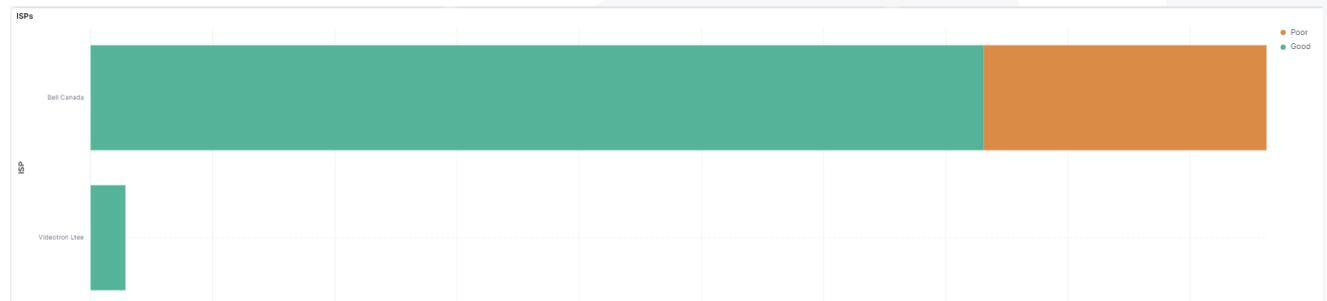
This is extremely important to identify if one of the ISPs is having most of the issues in a specific location. This would be a first good indicator of an ISP problem or outage that can be confirmed lower in this dashboard.

Bell is the official ISP used by the Office while the second ISP in the list is the one at the VIP's location. Right away we see that *yes* there is a difference in the user experience between the office and their home.

Right under this you have the list of all the calls that you can analyze by clicking on each one then + then Go to Call dashboard.

Recent Calls — Displays up to 50 Calls

⬆ Export

Call ID	Date	↓ Start Time	End Time	Duration	Call Type
31383336-3930-3936-3936-303030303032	2023-02-02	22:26	22:30	4.00 min	Conference
31383336-39...	2023-02-02	22:22	22:26	4.00 min	Conference
31383336-39...	2023-02-02	22:18	22:22	4.00 min	Conference
31383336-39...	2023-02-02	22:14	22:18	4.00 min	Conference

Apply filter to current view

🖥 Go to Calls Dashboard

If you want to only see the calls with issues, select any orange part in the dashboard to display the pop up and select poor calls.

For more information about the call quality dashboard and how to troubleshoot calls, please watch our video: Troubleshooting Teams Call Quality Issues with Martello Vantage DX: https://youtu.be/iEccK9gEiY8

At the bottom of their dashboard, you can discover the results of the Vantage DX Diagnostics.

Recent Failed Vantage DX Diagnostics Tests — Displays up to 50 Tests

⤓ Export

Service	Date	↓ End Time	Reason(s)	Failure Found at	Failure Found at IP	Site Name	Location
Salesforce	2022-12-14	09:09	Packet Loss, Round Trip Time	Level 3 Communications	4.30.180.198	kmills@martellotech.com	Ottawa, Ontario, CA
Salesforce	2022-12-14	08:54	Packet Loss, Round Trip Time	Level 3 Communications	4.30.180.198	kmills@martellotech.com	Ottawa, Ontario, CA
Microsoft Teams	2022-12-14	08:39	Packet Loss, Round Trip Time	Bell Backbone	64.230.99.132	kmills@martellotech.com	Ottawa, Ontario, CA
Microsoft Teams	2022-12-14	08:24	Packet Loss, Round Trip Time	Bell Backbone	64.230.99.132	kmills@martellotech.com	Ottawa, Ontario, CA
Microsoft Teams	2022-12-14	08:09	Packet Loss, Round Trip Time	Bell Backbone	64.230.99.132	kmills@martellotech.com	Ottawa, Ontario, CA
Microsoft Teams	2022-12-14	07:54	Packet Loss, Round Trip Time	Bell Backbone	64.230.99.132	kmills@martellotech.com	Ottawa, Ontario, CA
Microsoft Teams	2022-12-14	07:39	Packet Loss, Round Trip Time	Bell Backbone	64.230.99.132	kmills@martellotech.com	Ottawa, Ontario, CA
Microsoft Teams	2022-12-14	07:24	Packet Loss, Round Trip Time	Bell Backbone	64.230.99.132	kmills@martellotech.com	Ottawa, Ontario, CA
Salesforce	2022-12-14	07:09	Packet Loss, Round Trip Time	Level 3 Communications	4.30.180.198	kmills@martellotech.com	Ottawa, Ontario, CA
Salesforce	2022-12-14	06:54	Packet Loss, Round Trip Time	Level 3 Communications	4.30.180.198	kmills@martellotech.com	Ottawa, Ontario, CA

Vantage DX Diagnostics is our network path performance monitoring feature.

For that to work you need to install a small agent (windows service) either on the site or the user you want to monitor and troubleshoot.

This probe is checking the latency between every hop of the route to the Microsoft cloud service, discover who owns each part of the network, and alert in case of problem.

What you see here is the results of the latest tests operated from the Kate Mills device. You can test the route to Microsoft Teams and to any other end point whether it is a cloud service or even an on-premises application or device.

The problem for Teams is clearly seen as the Bell Backbone that is introducing Packet Loss and Round-Trip Time at a particular hop. This confirms the issues we just saw with the user experience of the calls going through that particular ISP.

With network path monitoring you can immediately identify where the latency comes from, who is responsible and then who to contact – in this case the ISP – to fix the issue.

If you want more information about the network path monitoring, a detailed view of the paths and possible configurations you can see more information in our video: Track Microsoft and a Third Party's Quality of Service with Martello Vantage DX: https://youtu.be/WWsi6CuIUD4

Let's come back to Kate Mills.

We clearly identified that calls done using Bell at the office have lower success rate. We know that in the route to the cloud, Kate Mills has latency introduced by Bell.

The last thing to check is if the entire office in Ottawa is experiencing the same issue.

For that, let's go in the location dashboard:
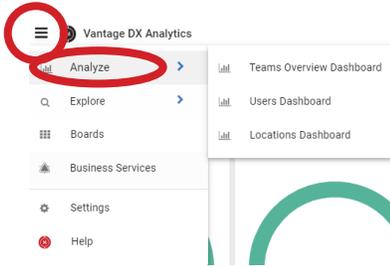
Then let's choose Ottawa as a location:

That location dashboard is structured the same way the user one is.
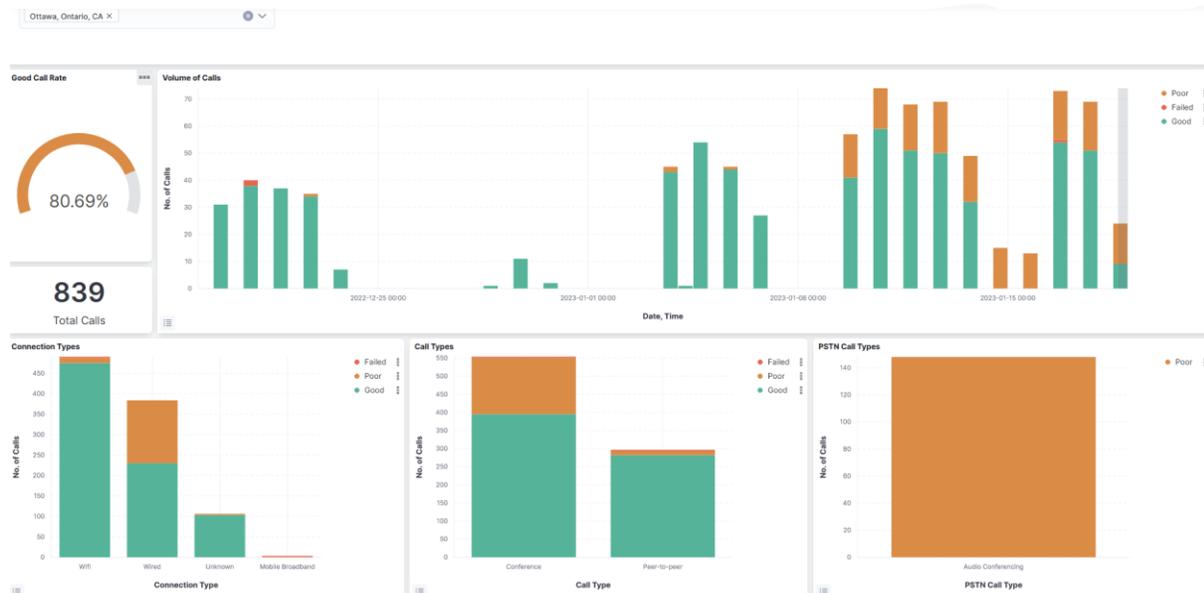
You can understand:

- The overall success rates
- The usage of Teams voice and videos with the associated issues
- How people are connected
- The type of calls they perform
- The type of Teams Phone connectivity they use

- The ISPs supporting the traffic
- The top users in Ottawa

Clearly, once again, the problem is found at the Bell backbone, so we know that our VIP Kate Mills is not the only one to experience problems in that office.

Now to confirm that the problem is also specifically with Bell in Ottawa, we also have below the results of our diagnostic probe sitting in the Ottawa location that also clearly indicates that Bell is introducing latency in the network path to Microsoft Teams which affect everybody in this office.

Now you *know* that you have issues with your internet service provider that is causing Teams call issues - whether they are cloud or PSTN - and that affects both regular users and your VIPs. It is high time to call Bell to fix the situation in Ottawa in order to improve the user experience for this VIP and all the other users.

If you had alerts configured for user experience at that location, you would have been alerted to this as well.

The location dashboards also provide the results of the synthetic transactions that are running from Ottawa and that are testing the service quality continuously. You can also find more information about that feature in our video: Detect, Prioritize and Analyze Teams User Experience Issues with Martello Vantage DX: https://youtu.be/b0LHnnb8UHs.

Conclusion

You have seen how you can easily be alerted to your VIPs issues, how to track SLA for this particular type of users. You also can then visually understand the severity of the issue, how often they occur and how you can quickly troubleshoot to get to the root cause.

Ottawa　　•　　Geneva　　•　　Nice　　•　　Paris　　•　　Dallas　　•　　New York