

Detecting Microsoft 365 and Microsoft Teams Outages with Martello Vantage DX

The Challenge

Microsoft 365 and Microsoft Teams outages can have various root causes. Detecting them in real time is critical for IT teams to limit the business impact. Only with 24/7 monitoring and reporting that constantly tests the Teams service quality can you stay one step ahead of an outage. Unfortunately, such monitoring features are not provided by Microsoft.

Overview

Read on to discover how you can monitor the quality of service for Microsoft Teams and Microsoft 365 applications for your critical locations and quickly detect *and* qualify outages.

Let's Get Started!

Let's start by answering this burning question. How can you be notified that an outage is *starting* or *about* to happen either locally, regionally, or globally.

With Vantage DX, wherever the outage *is* and *whoever* is responsible - you will be the first to know.

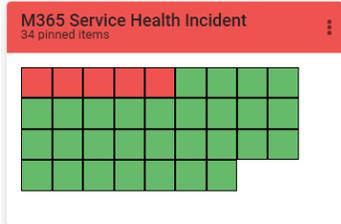
In Vantage Analytics, click on burger menu then the board:



Here is our alerting board. This is where you define *how* you want to be notified when outages - local, regional or global - are happening.

We can show you various ways of customizing your alerts for detecting local or global outages. We will focus on alerts configurations that are directly linked with Microsoft 365 and Teams outage detection.

The first one that matters is of course what Microsoft says about their own service.



This alert configuration board groups all the warnings coming from Microsoft Service Health. This information is nice to have but often does not come early enough as Microsoft can take some time to qualify and notify users in the case of an outage. If you want to detect an outage early, qualify it and organize your response, you will need Vantage DX outage alerts.

But first check out what information you can find here and how it works. Every alert in Vantage DX will work the same way.

If you click on the board, you'll be able to see the details of the warning provided by Microsoft on their service.



Click on any red member and you'll see all the notifications coming from Microsoft for that particular workload.

Raw Properties

Service	Microsoft Teams
Status	ServiceDegradation
Id	microsoftteams
Advisories	<ul style="list-style-type: none">Id: TM485572Feature: Teams ComponentsStart Time: 2022-12-14T23:18:45Description: Users may intermittently see a black screen during Microsoft Teams meetings that include video.

Let's click back  and then go to **ALERTS (8)** to see the list of active alerts coming from Microsoft. You can click on any of them to have the details.

Finally, if you click on **INCIDENTS (1)** you will see that you can synchronize the alerting with your existing ITSM tools - like ServiceNow for example.

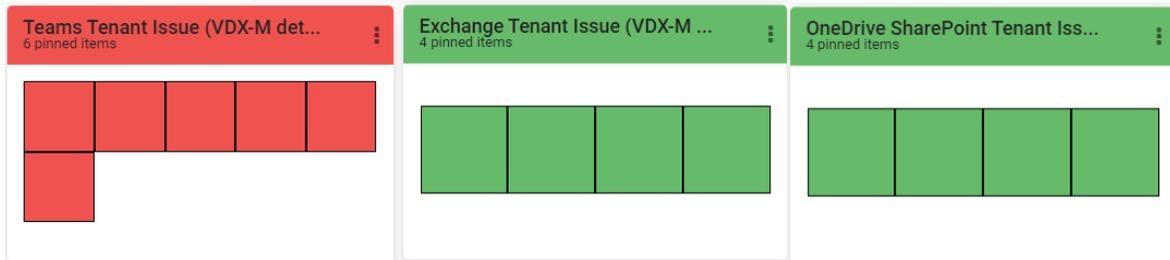
Click on the incident (INC0020621) to see the details.

INC0020621	Active	ServiceNow
Assigned To	Martello Service	
Target	app128036.yul1.service-now.com:ven01075001	
Description	<p>Incident created by Vantage DX Analytics.</p> <p>The following alerts have been associated with this incident by Vantage DX Analytics (https://vdxdemo.vantage-dx.com/iq/url/49770e2d-6dee-4648-830f-da094f39d75d):</p> <p>Warning: Performance issue on Teams Advanced, Target: Microsoft Teams Advanced on London Office, Created: 12/13/2022 4:05:30 AM, LastUpdated: 12/13/2022 4:05:30 AM, Source: Gizmo: VDX Monitoring, Assignee:</p> <p>Message: Performance issue On London Office - Mean Opinion Score is between the thresholds 3.5 and 3.8</p>	

You can synchronize individual alerts, groups of alerts or warning with your ITSM. This gives your IT ticketing team visibility of your most important SaaS investment – Microsoft - to speed up service remediation times.

Let's go back to the general alerting board to see other alert configurations that can be used to detect outages (click ).

For this demo we have configured tenant outage detections for four Microsoft 365 workloads - Teams, Exchange, OneDrive and SharePoint:



These boards centralize the results of the 24/7 synthetic transactions that are made from your critical offices.

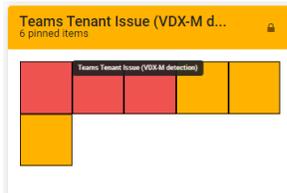
Each of these alert configurations will notify you when there are performance problems or an outage taking place within your own Microsoft 365 tenant.

Which means, you can create alert configurations for Teams, OneDrive, Exchange, SharePoint or any Microsoft 365 web application.

Here are the characteristics of this outage notification:

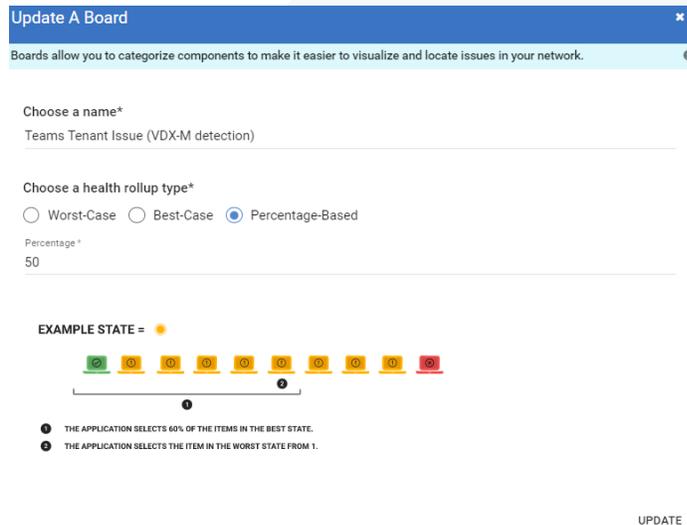
- It notifies you if 50% (configurable) of the synthetic users testing the Microsoft workload with the availability and performance for each feature at monitored sites are experiencing issues.
- This alert is based on the synthetic transactions performed via Vantage DX Monitoring robots at various deployed sites.
- The % threshold of locations having issues can also be customized.
- You can configure multiple tenant outage alert configurations to get country, regional and global tenant outage alerts.
- It is also considered critical if a global outage is preventing the transactions from happening twice in a row over 5 minutes (configurable).

If any service degradation is found at your locations, the alert configuration runs the rules you have configured to alert you for the detected issue. Let's check the one from Teams for example where it seems we have a problem.



Click the 3 dots on the right (color may vary depending on the current status) .

The pop up shows you the rule you can apply to detect and qualify an outage.

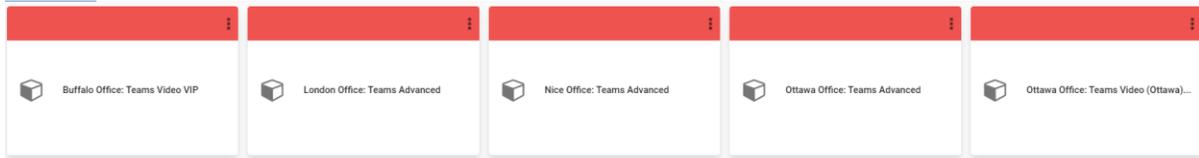


You can be alerted when one location has a service issue (local outage), or choose to be alerted only when all locations are having problems (global outage) or when a % of locations experience difficulties (regional outage).

Of course, you can set up as many alerting board configurations if you want to be notified for all three conditions.

As you can see, the Microsoft 365 outage alerting in Vantage DX is very flexible.

Let's close this pop up and go in the Teams tenant alert.



As you can see, most of our locations are experiencing either warnings or critical issues. Clicking on any square gives you a summary of the last known issues. If you want details for every alert, you can click on the tab.

ALERTS (6)

Let's open the first one.

Microsoft Teams Advanced on Ottawa Office
Performance issue on Teams Advanced

ACTIVE ALERT	LAST UPDATED ON	CREATED ON
Active	2023-01-19 at 10:11 AM	2023-01-19 at 10:06 AM
ALERT STATE	ALERT OPENED	RETRIEVED FROM INTEGRATION
Open	11 minutes ago	VANTAGE DX MONITORING

Details

Message

Performance issue On Ottawa Office
- Mean Opinion Score is between the thresholds 3.5 and 3.8
Critical issue On Ottawa Office
- Mean Opinion Score is under the threshold 3.5

We see that this alert was about service degradation for Teams voice.

Our robots are performing calls every 5 min to determine if the quality of the call was good - or not.

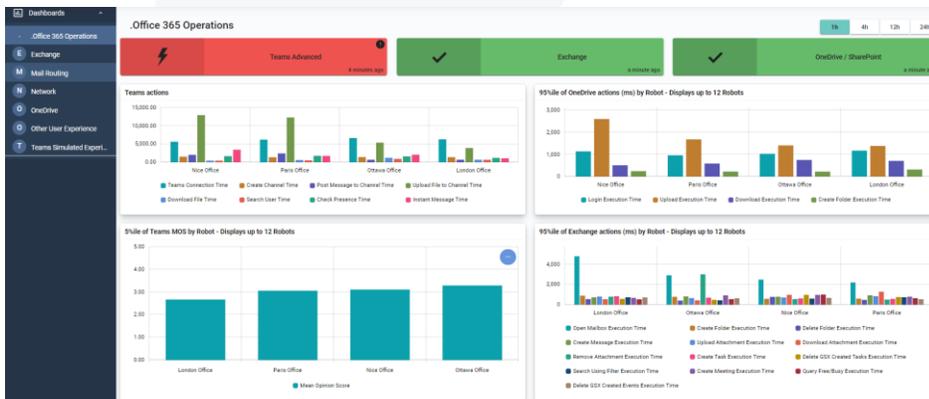
In this case it was not.

Let's dig into the synthetic transactions Vantage DX is doing to detect and qualify your Teams and Microsoft 365 outages.



At the bottom of the screen, click on the: Go to Source Button:

It opens the specific views for the synthetic transactions.



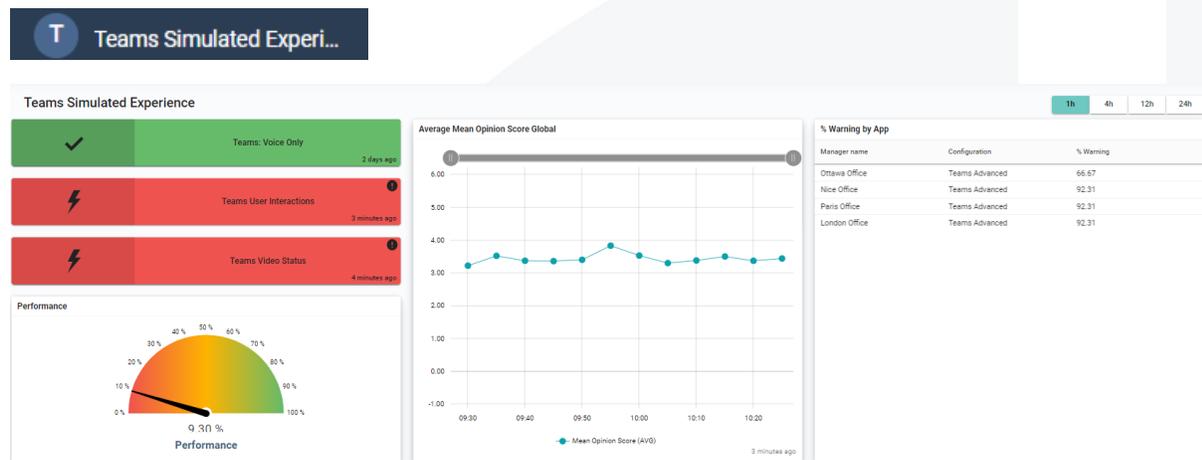
You are now on the main page that summarized the main workloads and feature tests that are made.

These synthetic transactions are performed by what we call robots that are installed on every critical location you may have. At the end, they are just windows services that you can deploy on any windows machine, and they act as a user, using the exact same protocols and embedded thick clients to perform the availability and performance tests for every critical feature of Microsoft 365.

We always recommend putting these robots on a machine that is on 24/7 to deliver 24/7 monitoring data and alerts. Outages can happen during off hours and the only way to detect them and anticipate any business productivity issues is to continuously test the Microsoft services.

The goal is to have a baseline so that you can understand what is normal and what is not and to be able to detect local, regional, or global outages faster to improve your response time to incidents and ensure a better service to your business lines.

If we want to focus on Teams, you can choose the Teams dedicated tab on the left:



You can choose the time range on the upper right.

In real time, you are presented with the health status for Teams Voice, Video or Collaboration (user interactions).

Next to it you have the trend mean opinion score reflecting voice quality and the % of warnings by location that are being tested.

Below, you see the detail of the tests that are made and the results for your locations:

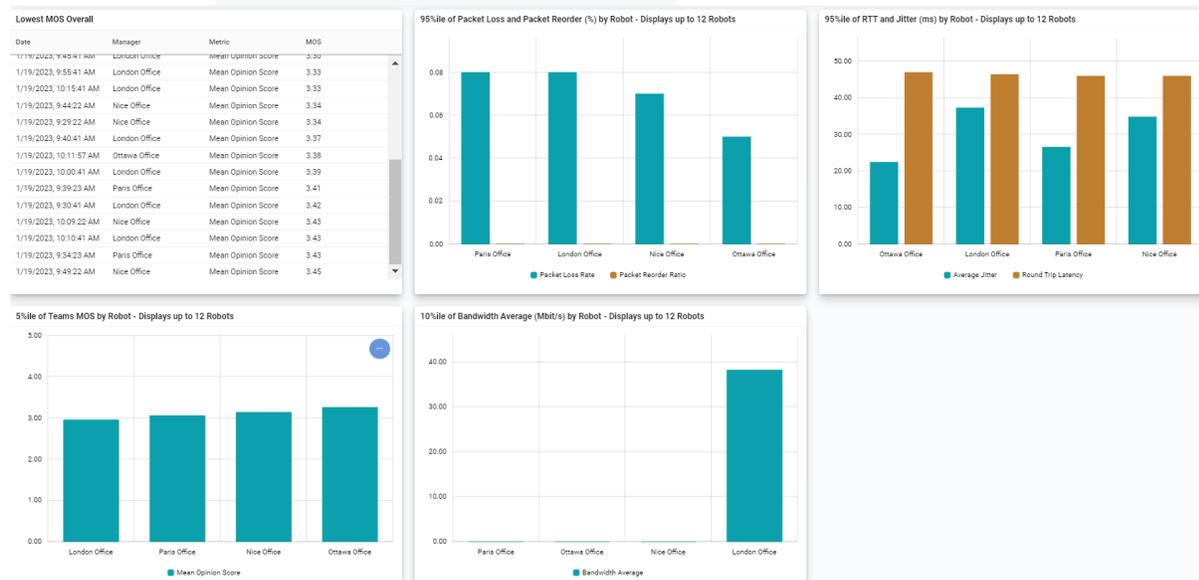


The tests that the robots are doing for Teams are from multiple locations, encompassing the entire collaboration side (chat channel, presence, upload, download) as well as audio and video calls.

This allows you to instantly compare the service quality delivered to your critical locations and detect any potential issues that might arise.

Finally, you have the results below of the Teams Voice and Video tests with network performance data - at the moment of the test.

This view allows you to compare the quality of service from multiple locations in real time. It also provides you with information if any local, regional or global outages are detected.



The goals are always the same. Detecting if any service degradation is about to occur, understanding what locations are at stake, differentiating what normal good service is compared to a poor one.

You can click and explore the other tabs to have the details of the other tests we do in this trial environment.

Note that Vantage DX can do much more including testing Azure AD Connect, ADFS, Exchange on prem, and every Microsoft 365 web application.

Let's go back to Vantage DX Analytics to continue to see how you can track any Microsoft workload outage whether they come from Microsoft or anywhere else.

Click once on the  to come back to the alerting configuration board.

Another interesting alert, especially for Teams to detect an outage, this time on the call service, is the Teams Country Critical issue:



This one alerts you if more than 20% of the users in a specific country are experiencing poor quality calls. This percentage can of course be configured.

If you click on this board, you'll see every country where we had critical issues in the past. They are now green which means the alerts aren't active anymore.

This board is not based on synthetic transactions but on problems happening during calls with real users. Vantage DX collects the information, organizes it by country and, depending on the rule selected, informs you if a specific country starts to have enough bad calls to be considered an outage.



Clicking on any country will give you a summary of the most important information (top locations, users, etc.) for this country.

What we have seen here is just an example that we have set up for this environment.

Of course, when using the tool, you can create and customize specific alerts on every Microsoft 365 workload or web application and correlate them with Microsoft Service Health notifications and other tests (network) that Vantage DX is already doing.

Conclusion

You can see how Vantage DX is continuously tests the service delivered by Microsoft 365 and Microsoft Teams at the feature level, from multiple locations and exactly as your user would do.

This means that you can be notified as soon as service degradation appears in any location, city, country, region or globally. Everything can be customized to your needs.

This also means that you don't need to wait for your users, or Microsoft, or any third-party provider to know what is going on and how it will affect your business lines. This saves precious time to coordinate the best possible response to an incident.

Learn More

Please watch “Track Microsoft and a Third Party’s Quality of Service with Martello Vantage DX”: <https://youtu.be/WWsi6CuIUD4>, to discover how to track and report on service quality for your Microsoft services and how to detect third party outages that can affect service quality.