

Application Note

Monitoring SLA and Availability

Overview

Vantage DX Analytics provides tools to help you monitor and report on service level agreements (SLA). You can use the SLA management tools to monitor whether a service is performing at the required level, to report on its availability to internal or external customers, and to quickly identify which components are contributing to downtime. This feature can be used to monitor formal SLA contracts with your services providers, such as your ISP or Microsoft cloud applications, as well as instances where you want to monitor specific components in your IT environment to ensure their availability meets a certain standard to support the productivity of your users.

This application note provides information about how you can use VDX Analytics to configure SLA settings, and to monitor and report on SLA performance.

If you are new to Vantage DX, you may find it helpful to read *Understanding Vantage DX* for an overview of the solution and its modules. See the **Resources** section at the end of this document for more information.

Understanding SLA Monitoring

SLA management capabilities are integrated with the VDX Analytics business service feature; VDX Analytics boards do not include SLA management.

For information about how to use VDX Analytics business services to visualize and manage data, see *Manage Data Using Business Services*. See the **Resources** section at the end of this document for more information.

You can use the SLA feature to monitor the availability of services and applications that are hosted by a service provider, and the availability of your on-premises applications that your users depend on to be productive.

You do not need to have a formal service level agreement to benefit from SLA management in VDX Analytics. Use SLA management to monitor the availability of services that you rely on—whether or not a formal SLA exists between you and your service providers.

With or without a formal SLA, you can use SLA management to ensure that the services and tools required for productivity are consistently available. You can use SLA management to:

- See month-over-month trends.
- Identify and address service degradations before they impact the productivity of your users.
- Proactively address issues with your service providers.
- Prioritize changes to your IT environment.

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Example

The following sections provide information about configuring SLA settings, monitoring SLA, and producing and sharing SLA reports.

Configure SLA Settings

When you create a business service in VDX Analytics, you configure settings that impact the SLA calculations for that business service as follows:

- The ITIL perspective(s) you choose for the service health rollup for the business service.
- The service level objectives (SLO) settings for the business service.
- The health states to include in downtime calculations.



Note: If you change the SLO settings or the components included in the business service, the SLA calculations are updated for the time period since the change was made. Calculations are not made retroactively.

For more detailed information about creating business services in VDX Analytics, see the **Resources** section at the end of this document.

Choose SLA Perspectives

When you create a business service in VDX Analytics, you choose which perspectives to use for the health state calculations. The perspectives are based on ITIL standards. You can choose one or more perspectives:

- If you choose one perspective, the overall health of the business service—and all SLA calculations—are based on that perspective only.
- If you choose more than one perspective, the health state and the SLA calculations are based on the worst-case state of any of the selected perspectives.

For example, if you mainly want to focus on how your business service performance directly affects your end users, choose only the End User perspective for the health rollup setting. The overall health status of the business service, and the SLA data for that business service will be based on the performance data pulled from only the End User perspective components.

You can use the **Choose a service health rollup** checkboxes to choose the perspectives to include in the health state calculations:

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Create A Business Service

Business Services allow you to categorize components to make it easier to visualize and locate issues in your network.

Choose a name for your service*

Name

Add a description to your service

Description

Choose a service health rollup

End User Application Infrastructure

CREATE

You can choose one or more perspectives, and you can change them at any time. When you change the perspectives, the SLA recalculates retroactively and going forward.

Choose SLO Settings for SLA

After you create the business service with the service health rollup perspective(s), and then pin components to the appropriate perspectives, you can set the service level objectives (SLO). When you set your SLO, you can specify the uptime percentage goal, time period, and business hours to use in SLA calculations.

If you have a formal SLA, configure the SLO settings to match that agreement. If you do not have an SLA, configure the settings to reflect the availability statistics you deem necessary for optimal productivity. You can also choose to use the default settings provided by VDX Analytics, as follows:

- The SLA uptime goal is 99%.
- The time period for the calculation is one month.
- The time zone is based on the local time of the web server.
- Business hours and days are disabled; availability is calculated over a 24-hour period, 7 days a week.

The following image shows the default SLO settings:

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Configure Service Level Objective ✕

Define the SLO settings for this Business Service. Downtime is defined in the admin settings under 'General Settings'. i

Set an SLO Goal *

99

Set a time period

Week Starts On: Sunday

Set a time zone

(UTC) Coordinated Universal Time

Toggle to set business hours ☐

Downtime will impact service SLA 24/7

SAVE

If you change the SLO settings, the SLA recalculates going forward but not retroactively.

Choose Downtime Health States for SLA

You can choose the component health states that you want to include in SLA uptime versus downtime calculations. This setting applies to all of your business services.

On the **General Settings** tab, you can use the **Downtime** checkboxes to choose the health states you want to include as downtime for SLA calculations:

Downtime

Please select below which states should be considered as downtime to your organization.

- Unknown
- Unreachable
- In Maintenance Mode
- Warning
- Critical

If you change the downtime health state settings, the SLA calculations for all of your business services update retroactively and going forward.

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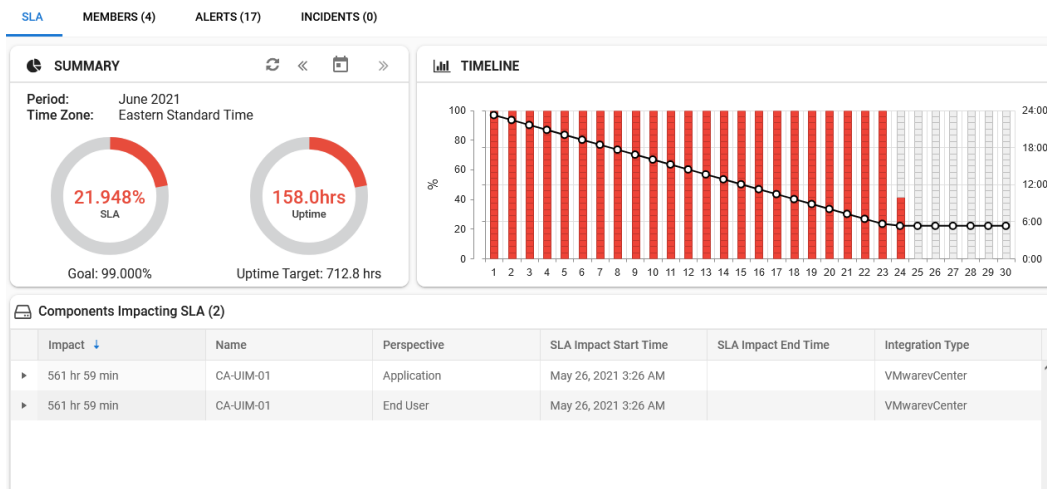
Monitor SLA

The business service SLA tab displays the following SLA information for the business service:

- **Summary**—Shows the following information about the SLA status for the current month:
 - The availability of the service as a percentage of the SLA goal.
 - The SLA goal.
 - The amount uptime, in hours, during the specified time period.
 - The targeted amount of uptime, in hours, during the specified time period.
- **Timeline**—Shows the daily status for the selected time period. The SLA goal displays as a line, and bar graphs show the daily status in comparison to the SLA goal. You can hover over the bar graph to see hourly information.
- **Components Impacting SLA**—Lists the components that have impacted the SLA during the period shown in the graph. The list shows the duration of the impact, the name of the component, the perspective, the start and end time of the impact, and the source integration.

You can use the controls at the top of the Summary window to view information for a different month.


The following image shows an example of the SLA tab:



When you review the components that impacted SLA, you can select one or more outages that contributed to downtime and exclude them from SLA calculations. For example, if a component was out of service due to maintenance, but maintenance mode was not scheduled, you can choose that specific outage and exclude it from the SLA calculations.



Click the arrow next to the outage to display options to exclude the outage from the SLA calculations. You can use the **Exclude** button to exclude an outage from SLA calculations:

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 Components Impacting SLA (2)

Impact ↓	Name	Perspective	SLA Impact Star...	SLA Impact End ...	Integration Type
▼ 561 hr 59 min	CA-UIM-01	Application	May 26, 2021 3:...		VMwarevCenter

EXCLUDE INCLUDE

<input type="checkbox"/>	Start Time ↓	End Time	Excluded from SLA	
<input type="checkbox"/>	May 26, 2021 3:26 AM		No	 

1 - 1 of 1 items

You can later use the **Include** button to re-include the outage in the SLA calculations. You can add a comment to explain the reason for excluding or including outages.



Tip:

You can use the list of **Components Impacting SLA** to identify trends and understand which parts of your environment are impacting your business. For example, you can identify whether the same location is consistently impacting SLA, or whether the same component is repeatedly impacting SLA. You can use this information to prioritize changes to your environment, such as identifying which servers to upgrade or replace first.

Create and Share SLA Reports

In addition to monitoring SLA information, you can generate and download reports. You can choose to generate reports for a single business service or for multiple business services. The reports contain all of the information in the SLA tab, in a consolidated format for multiple business services. You can use the reports to share SLA information as required.

To generate and download a report for a single business service, click the **Actions** button on the business service **SLA** tab. To generate and download a report for multiple business services, use the **Business Services** page to select multiple business services and click **Generate Report** for a consolidated report.

Use Case Examples

Use the SLA management feature to monitor the service that you receive from a provider, or the availability of applications that your users need to be productive. For example:

- **Internet Services**

Your ISP provides an integral connection for all of your business services. You can integrate other monitoring tools with VDX Analytics. If you have a monitoring tool that

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monitors the service you receive from your ISP, you can integrate it and create a business service that allows you to report on the level of service you receive.

- **Microsoft Cloud Applications**

Understanding the availability of your business-critical applications is challenging when you subscribe to cloud-based applications. VDX Analytics integrates with Microsoft 365 so that you can monitor the health and the availability of the hosted Microsoft 365 applications that you receive from the Microsoft data center.

For use cases and examples about using VDX Analytics business services and SLA management, see the following Application Notes:

- *Monitor Co-Authoring Platforms*
- *Identify Call Quality Trends with Dynamic Offices*
- *Monitor a Hybrid Exchange Environment*

See the **Resources** section at the end of this document for information about downloading Application Notes.

Resources

For more information, see the following documents:

- For an overview of the Vantage DX solution and its capabilities, see the *Understanding Vantage DX* Application Note.
- For a comprehensive overview of the Vantage DX solution, see the *Vantage DX Deployment Guide*.
- For detailed information about adding and configuring VDX Analytics integrations, see the *Vantage DX Analytics Integration Guide*.
- For detailed information about creating business services and working with SLA data, see the *Vantage DX Analytics User Guide*.
- See the following Application Notes for information and examples about key features in Vantage DX:
 - *Manage Data Using Business Services*
 - *Manage Data Using Boards*
 - *Monitor and Troubleshoot Teams Call Quality*
 - *Monitor Co-Authoring Platforms*
 - *Customize Monitored Sites in Vantage DX Monitoring*
 - *Identify Call Quality Trends with Dynamic Offices*
 - *Monitor a Hybrid Exchange Environment*

All documentation is available on the Martello website at:

<https://martellotech.com/documentation/vantage-dx/>

About Martello Technologies

Martello Technologies Group Inc. (TSXV: MTLO) is a technology company that provides digital experience monitoring (DEM) solutions. The company develops products and solutions that provide monitoring and analytics on the performance of real-time applications on networks, while giving IT teams and service providers control and visibility of their entire IT infrastructure. Martello's products include unified communications performance analytics software and IT analytics software.

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