monsalta
performance monitoring and tuning

1•VIEW

Reporting in OneView

1 Introduction

A number of different reporting methods are available in OneView. The main reporting tool in OneView is the live dashboard providing you with a live overview of all your IT systems. Adding to this comes the information from the History View and the Summary View. Another source for data used for reporting is the SLA reporting.

Reporting in OneView can be used for many different things.

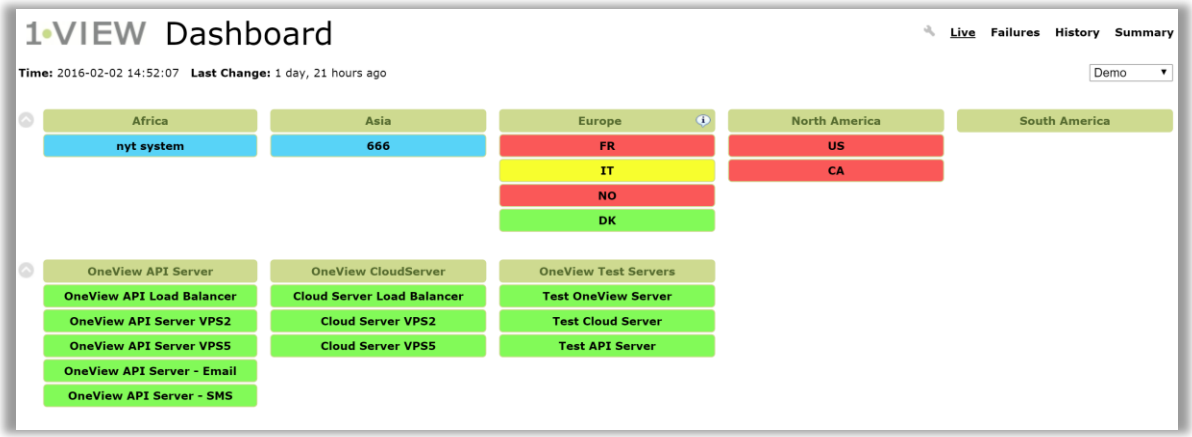
- Optimizing your system – are systems degrading over time
- Optimizing your system – have changes in your system solved issues previously encountered
- Reporting tool for the management on a daily basis
- Reporting tool for the management during a longer period of time – could be weeks, months or years

OneView holds transaction data for as long as the system is defined to keep the data – you can therefore create reports ranging over a long period.

2 Live View

The live view from OneView provides you with an instant picture of how your systems are performing right now.

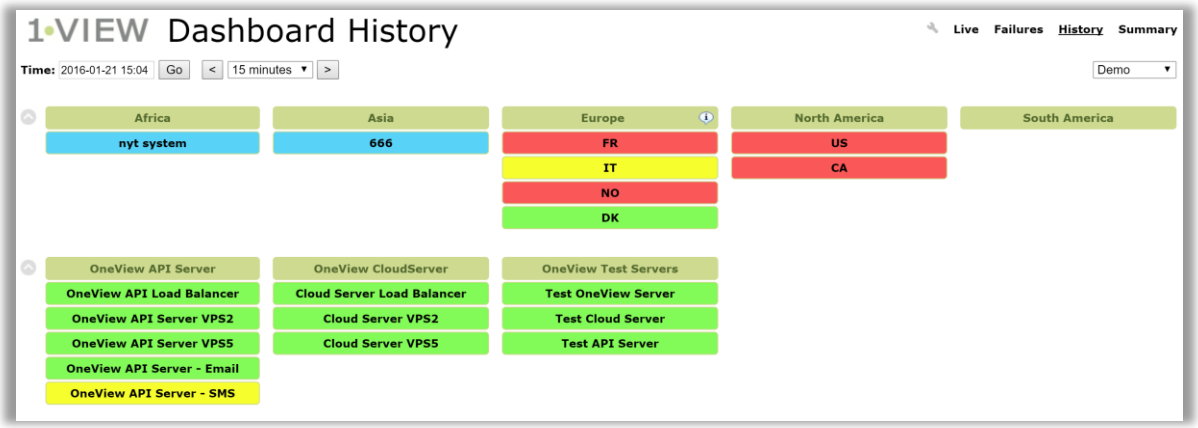
- **GREEN** indicating that the end users can use your IT systems without problems
- **YELLOW** indicating that the end users do not get the service they use to from your IT systems
- **RED** indicating that the users may not be able to work with your IT systems right now
- **BLUE** indicating that OneView is missing data for those systems



Use this view to report on the fly the status of your IT systems.

3 History View

The history view provides you with a view of your dashboard historically. You can set the required time in the top and adjust it to the exact time you wish to review the data from.



Use this view to report on a particular event that happened in the past. You can with the status with colors and make it easily understandable.

4 Summary View

The summary view is used to sum up the status on different levels over a given period. This period can range from minutes to years.

Use the summary view to get a visible summary of your applications over a given period and use it as the place to start generating reports.

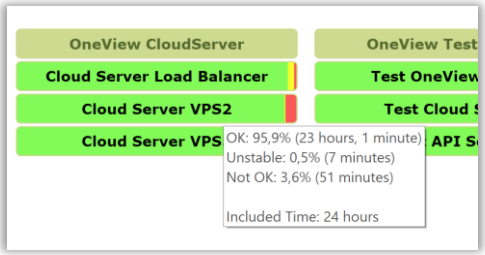
The summary view is available without prior login to OneView.

4.1 Setup of Summary View

From the Live Dashboard choose the option ‘Summary’ in the top right-hand corner. You are presented with a summary from the last 24 hours. Choose the period you wish to create a summary for by either picking from the drop-down list or by manually typing the date and time in the ‘from’ and ‘to’ fields. If time filters exist, these are chosen from the drop-down list next to the section ‘Filter’.

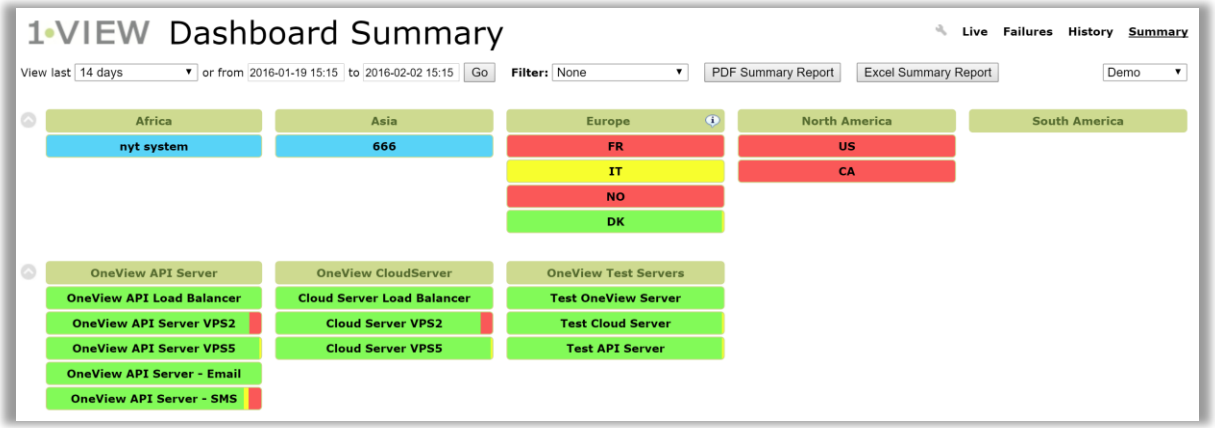
The result is presented as colored bars indicating the percentage of each status color within the chosen period. As an option, you can hover over the system and be presented with the actual percentage for the given period.

You are also presented with the option on creating either a PDF or Excel summary report – more on this subject later on in this chapter – sections 4.1.4 and 4.1.5.



4.1.1 Dashboard Summary

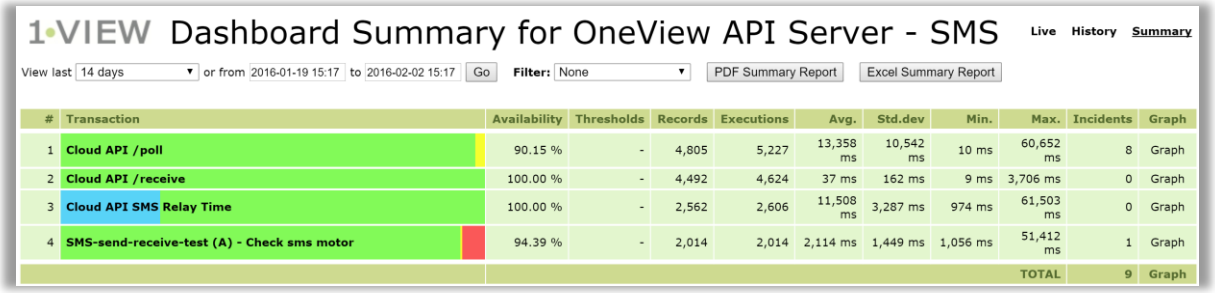
As mentioned the dashboard summary provides you with colored bars indicating the percentage of each status color within the chosen period. In the overall dashboard summary all systems are chosen and calculated. The dashboard summary on system level provides you with the same boxes as on the live dashboard.



4.1.2 Collection Summary

Should you wish to go into more detail on a specific collection you can click on the collection and view the same information only on transaction level.

This is useful if a system is unstable and you wish to investigate which transaction (or transactions) causes this behavior. As with the main summary dashboard you can hover over a transaction and received information on the percentage for the different colors.



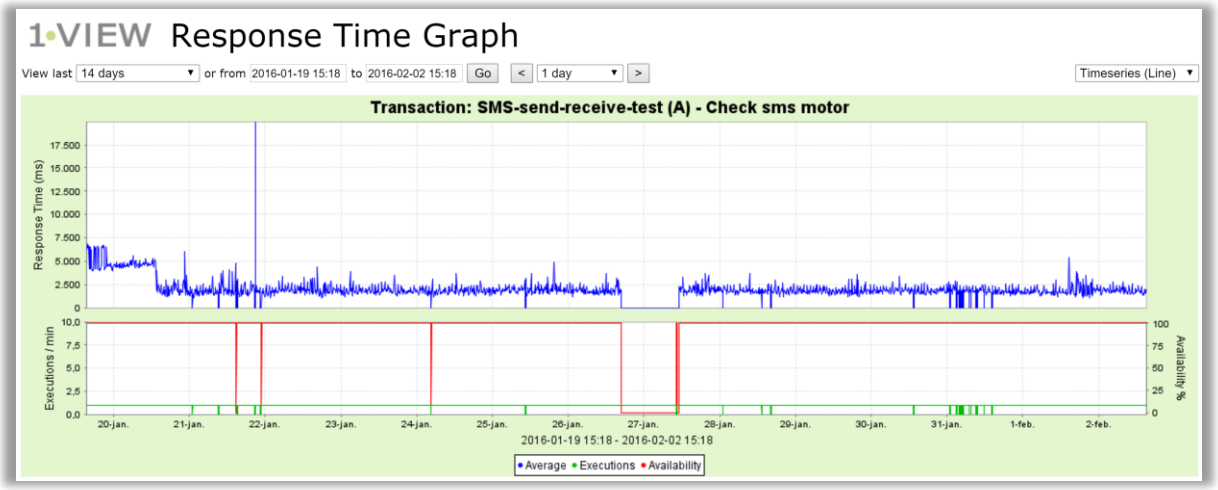
Adding to colors, you are also presented with the following relevant summary information for the period chosen:

- Availability percentage
- Number of records
- Number of executions
- Average response time
- Standard deviation response time
- Minimum response time
- Maximum response time
- Number of incidents

Incidents are defined as transactions in status red for more than a given number of minutes. The default value for incidents is 15 minutes but can be changed by a OneView system user.

4.1.3 Graphical Summary

From the summary dashboard on transaction level you can draw the graph for the same period in order to see the response time, number of executions and availability for either on transaction or more transactions



Using this view enables you to analyze your transactions by viewing the data graphically and reporting back on any changes that may have occurred both in a good or bad way.

If you are logged into the OneView system you can also choose to split up several transactions in the graph and view more transactions within the same window.

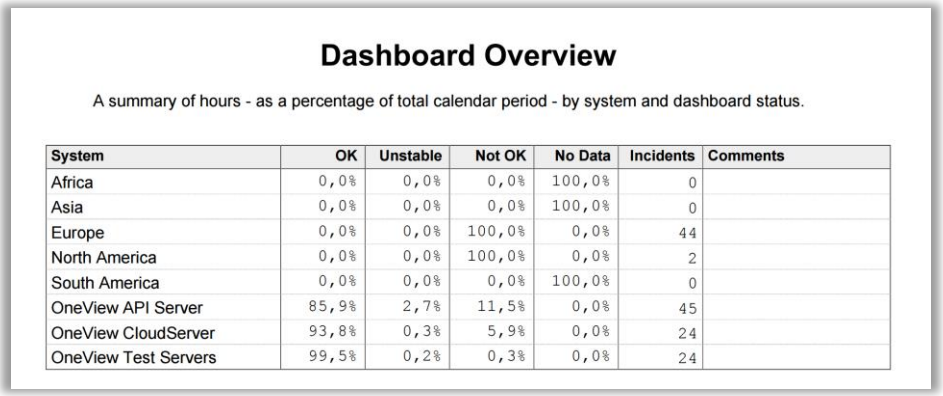
4.1.4 PDF Summary Report

The data from the summary view can be extracted into a PDF report by clicking ‘PDF Summary Report’ and then ‘Create Report’. This way you can convert the colors from the dashboard into numbers used for reporting.

The PDF report will be generated in the browser window and you can save it from there.

The first page of the summary report contains a title for the summary report together with the name of the dashboard the report has been generated for. The timeline for the report is also stated and if defined the time profile.

On the second page of the PDF summary report a dashboard overview is presented. This provides you with an overview on collection level.



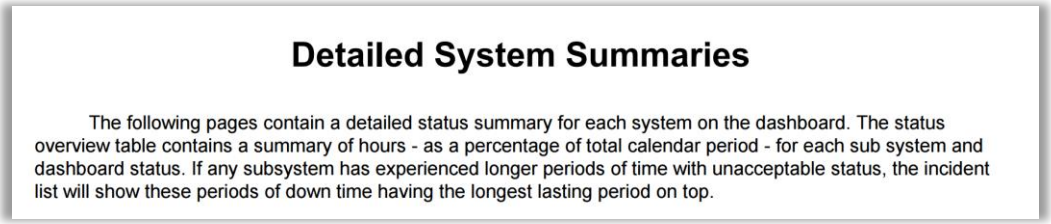
Dashboard Overview

A summary of hours - as a percentage of total calendar period - by system and dashboard status.

System	OK	Unstable	Not OK	No Data	Incidents	Comments
Africa	0,0%	0,0%	0,0%	100,0%	0	
Asia	0,0%	0,0%	0,0%	100,0%	0	
Europe	0,0%	0,0%	100,0%	0,0%	44	
North America	0,0%	0,0%	100,0%	0,0%	2	
South America	0,0%	0,0%	0,0%	100,0%	0	
OneView API Server	85,9%	2,7%	11,5%	0,0%	45	
OneView CloudServer	93,8%	0,3%	5,9%	0,0%	24	
OneView Test Servers	99,5%	0,2%	0,3%	0,0%	24	

From page three the detailed system summaries start. As seen from the screenshot below it contains a summary of hours - as a percentage of total calendar period - for each sub system and dashboard status. If any subsystem has experienced longer periods of time with unacceptable status, the severe incident list will show these periods of down time having the longest lasting period on top.

An incident is per default defined as 15 minutes of down time.



Detailed System Summaries

The following pages contain a detailed status summary for each system on the dashboard. The status overview table contains a summary of hours - as a percentage of total calendar period - for each sub system and dashboard status. If any subsystem has experienced longer periods of time with unacceptable status, the incident list will show these periods of down time having the longest lasting period on top.

OneView API Server

Status Overview

Subsystem	OK	Unstable	Not OK	No Data	Incidents	Comments
OneView API Load Balancer	99,4%	0,3%	0,3%	0,0%	24	
OneView API Server VPS2	94,1%	0,1%	5,8%	0,0%	5	
OneView API Server VPS5	99,7%	0,1%	0,2%	0,0%	8	
OneView API Server - Email	99,8%	0,2%	0,0%	0,0%	0	
OneView API Server - SMS	92,2%	2,3%	5,5%	0,0%	8	

Severe Incidents

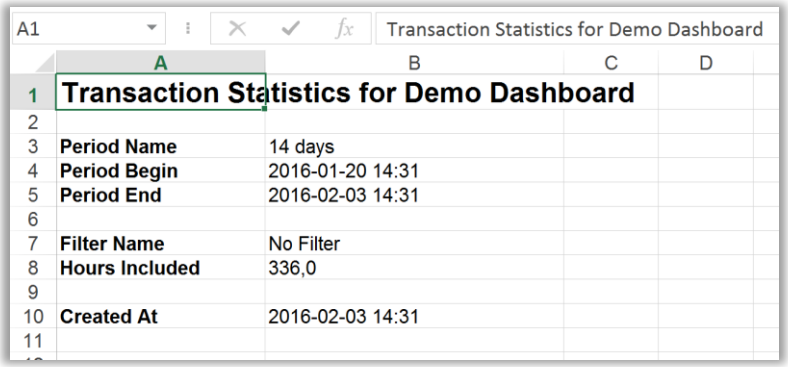
Subsystem	From	To	Duration	Comments
OneView API Server - SMS	2016-01-26 17:22	2016-01-27 11:12	17 hours, 50 minutes	
OneView API Server VPS2	2016-01-27 20:42	2016-01-28 14:10	17 hours, 28 minutes	
OneView API Server VPS2	2016-02-03 09:11	2016-02-03 10:39	1 hour, 28 minutes	
OneView API Server VPS2	2016-02-03 07:02	2016-02-03 07:29	27 minutes	
OneView API Server VPS5	2016-01-22 16:07	2016-01-22 16:27	20 minutes	

4.1.5 Excel Summary Report

The data from the summary view can be extracted into an Excel Summary report by clicking ‘Excel Summary Report’ and then ‘Create Report’. Once extracted the data can be used for use in reports manually created for other reporting purposes.

Click ‘Create Report’ and the Excel file will be downloaded.

The first Excel sheet contains general information on what is extracted.

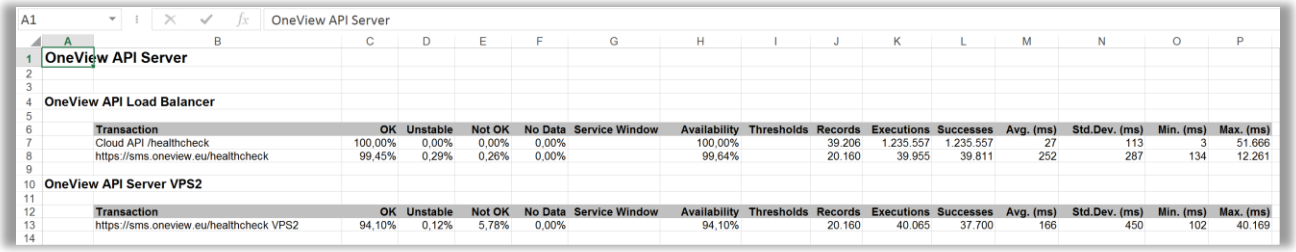


The second sheet contains a summary of the overall dashboard for the period.

Status Summary for Demo Dashboard

System	OK	Unstable	Not OK	No Data	Incidents	Service Window
Africa	0,00%	0,00%	0,00%	100,00%	0	
Asia	0,00%	0,00%	0,00%	100,00%	0	
Europe	0,00%	0,00%	100,00%	0,00%	1	
North America	0,00%	0,00%	100,00%	0,00%	1	
South America	0,00%	0,00%	0,00%	100,00%	0	
OneView API Server	85,88%	2,65%	11,46%	0,00%	16	
OneView CloudServer	93,77%	0,28%	5,95%	0,00%	11	
OneView Test Servers	99,52%	0,20%	0,28%	0,00%	13	

The remaining sheets contains information on Collection level. The data contained in the Excel Report Summary is a detailed summary of the availability, the number of executions, the minimum and maximum response time and more as seen in the screenshot below.



A1 OneView API Server

OneView API Server

OneView API Load Balancer

Transaction	OK	Unstable	Not OK	No Data	Service Window	Availability	Thresholds	Records	Executions	Successes	Avg. (ms)	Std.Dev. (ms)	Min. (ms)	Max. (ms)
Cloud API /healthcheck	100,00%	0,00%	0,00%	0,00%		100,00%		39.206	1.235.557	1.235.557	27	113	3	51.666
https://sms.oneview.eu/healthcheck	99,45%	0,29%	0,26%	0,00%		99,64%		20.160	39.955	39.811	252	287	134	12.261

OneView API Server VPS2

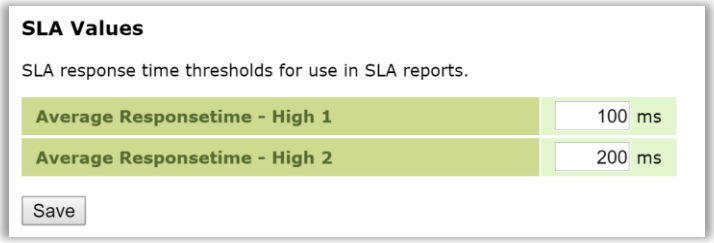
Transaction	OK	Unstable	Not OK	No Data	Service Window	Availability	Thresholds	Records	Executions	Successes	Avg. (ms)	Std.Dev. (ms)	Min. (ms)	Max. (ms)
https://sms.oneview.eu/healthcheck VPS2	94,10%	0,12%	5,78%	0,00%		94,10%		20.160	40.065	37.700	166	450	102	40.169

5 SLA Reporting

For reporting on SLAs OneView has a number of SLA reports that can be run. Both the SLA report ”Response Time SLA Summary Report” and “Response Time Report” calculate statistical numbers for a period of time – the report are presented in two different ways.

Setting up the SLA report requires administrator rights whereas running the SLA report requires user rights.

The first step to creating an SLA report is by setting the SLA value on transaction level. Set the value by editing the transaction.



Note: In later versions of OneView the thresholds can also be set when setting up the SLA report.

5.1 SLA report ”Response Time SLA Summary Report”

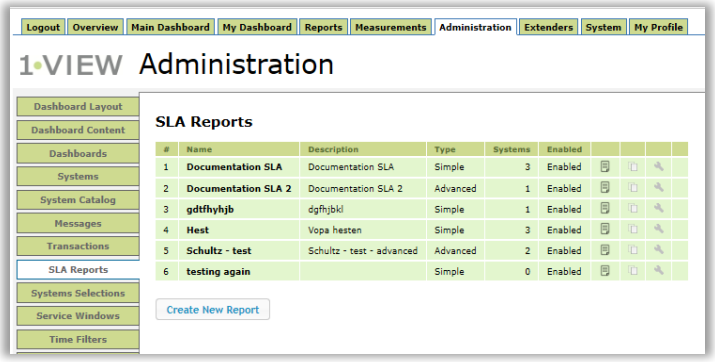
The SLA report Response Time SLA Summary Report provides you with an overview of your system’s performance with special focus on SLA reporting. The report can be generated over any given period depending on the requirements from your management.

Two variations of this report exist – simple and advanced.

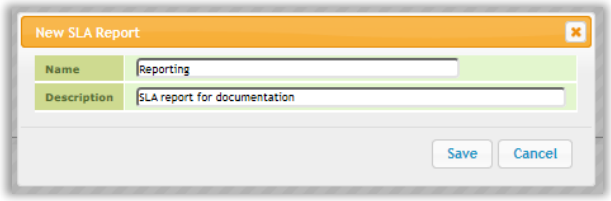
5.1.1 Set up of Response Time Summary SLA Report

In order to perform this step you need to log into OneView with administrator rights.

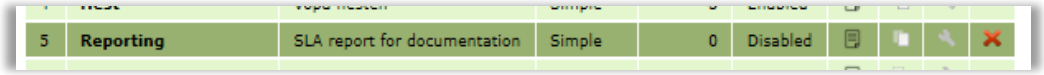
Open the ‘Administrator’ tab in OneView and pick the tab ‘SLA Reports’ on the left-hand side.



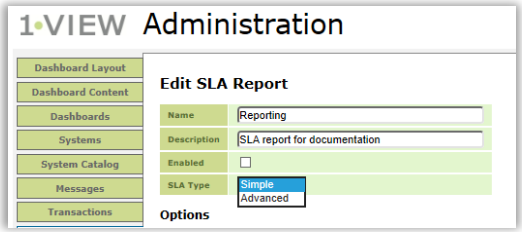
Click 'Create New Report' and add a new name for the SLA Report – click 'Save' to add the new report.



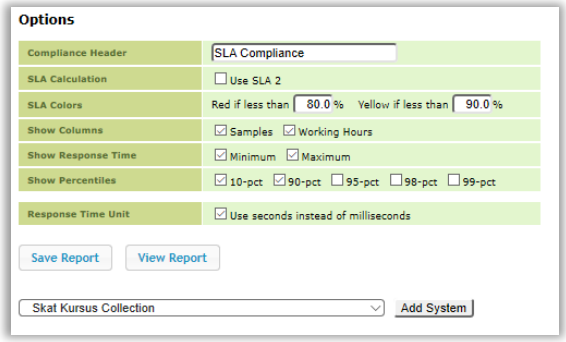
Per default the new SLA report is added as a simple report. To edit the report click the icon 🔧 next to the name. The remaining icons are for viewing the report, copying the report and deleting the report.

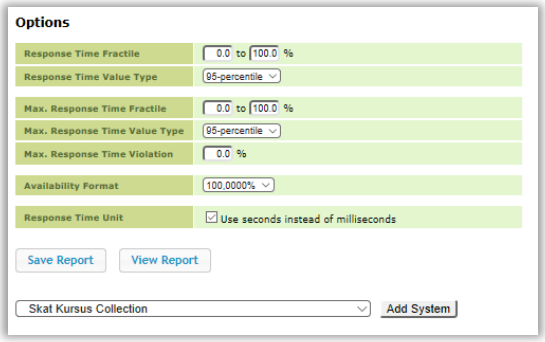


Pick whether you wish to continue with the simple report or start an advanced report by using the drop-down list from 'SLA Type'.

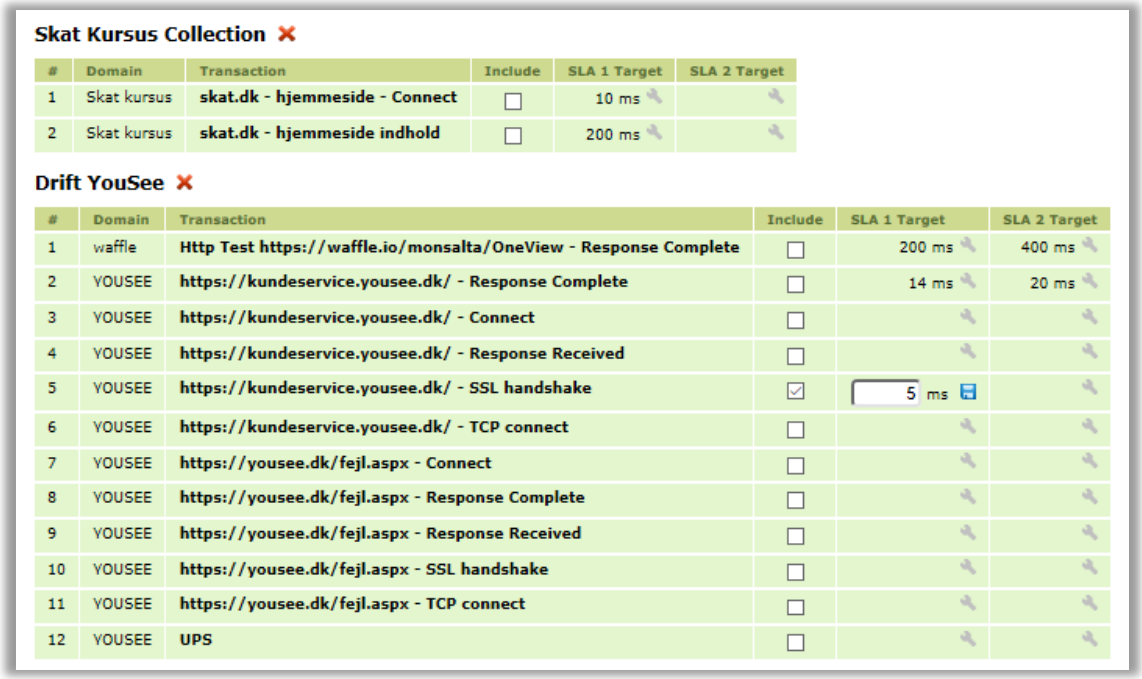


The options when setting up the simple and the advanced SLA reports vary a little





- Define the SLA calculations you want to be included in the
- Select one or more Systems that you want to include in the report – this is done by locating the system from the drop-down list
- For each system you include in your report you must choose one or more transactions that you want to include in your report – this step is performed once the system has been picked
    - To include or exclude a transaction tick of the include field next to the transation
    - If the SLA target need to be set click the wrench and enter the value – finish by clicking save (💾)



Skat Kursus Collection ✖

#	Domain	Transaction	Include	SLA 1 Target	SLA 2 Target
1	Skat kursus	**skat.dk - hjemmeside - Connect**	☐	10 ms	
2	Skat kursus	**skat.dk - hjemmeside indhold**	☐	200 ms	

Drift YouSee ✖

#	Domain	Transaction	Include	SLA 1 Target	SLA 2 Target
1	waffle	**Http Test https://waffle.io/monsalta/OneView - Response Complete**	☐	200 ms	400 ms
2	YOUSEE	**https://kundeservice.yousee.dk/ - Response Complete**	☐	14 ms	20 ms
3	YOUSEE	**https://kundeservice.yousee.dk/ - Connect**	☐		
4	YOUSEE	**https://kundeservice.yousee.dk/ - Response Received**	☐		
5	YOUSEE	**https://kundeservice.yousee.dk/ - SSL handshake**	☑	5 ms	
6	YOUSEE	**https://kundeservice.yousee.dk/ - TCP connect**	☐		
7	YOUSEE	**https://yousee.dk/fejl.aspx - Connect**	☐		
8	YOUSEE	**https://yousee.dk/fejl.aspx - Response Complete**	☐		
9	YOUSEE	**https://yousee.dk/fejl.aspx - Response Received**	☐		
10	YOUSEE	**https://yousee.dk/fejl.aspx - SSL handshake**	☐		
11	YOUSEE	**https://yousee.dk/fejl.aspx - TCP connect**	☐		
12	YOUSEE	**UPS**	☐		

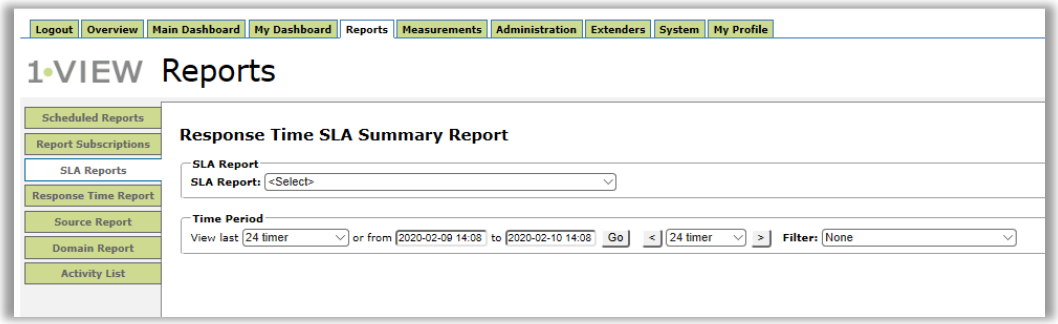
- Save the SLA report by clicking ‘Save Report’
- To verify the report, click ‘View Report’
- Finally enable to report by clicking ‘Enabled’ in the top section

You are now ready to run the Response Time Summary SLA Report

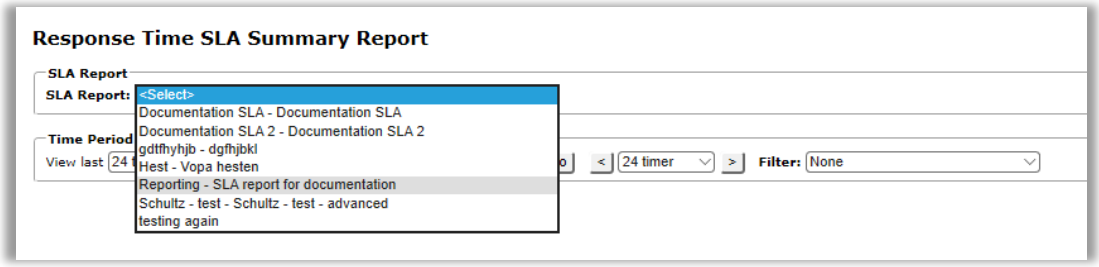
5.1.2 Running of Response Time Summary SLA Report

All registered users can run an SLA report.

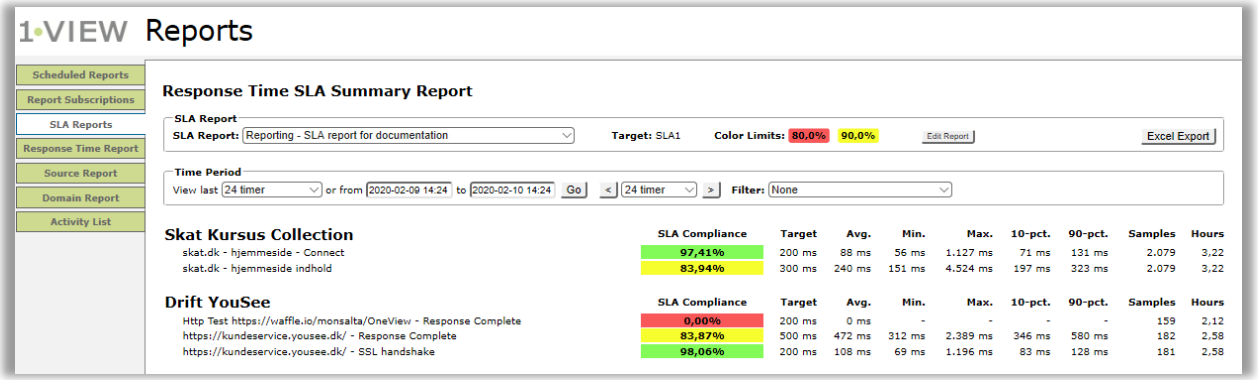
Go to the tab Reports and pick the tab SLA Reports to the left:



- Choose the SLA report you want to run from the drop-down menu
- Set the period you want to calculate the report for
- The report starts generating – please note that the IO capacity of your OneView server can influence on the amount of time used for generating the SLA report

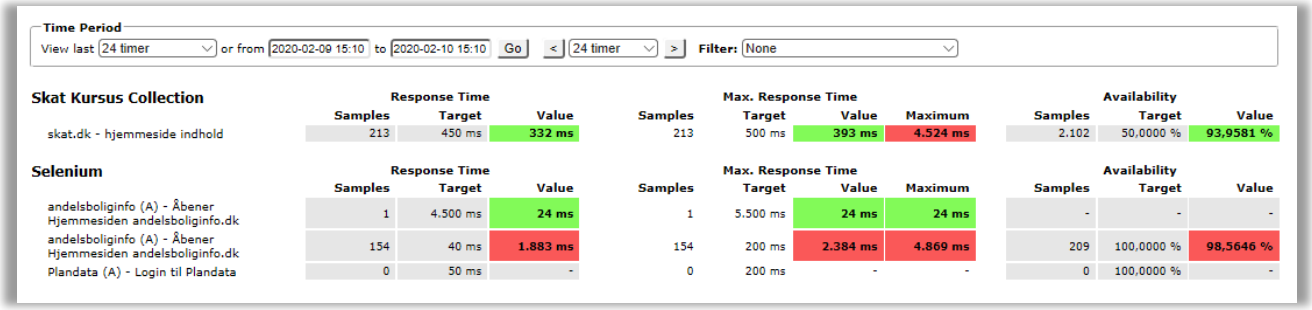


The SLA report will be generated, and it is possible to view the fields defined previously. The screenshot below is from the simple report.



By clicking on the SLA Compliance link, you can access the data daily within the defined period.

The view from the advanced SLA report looks a little bit different:



5.2 SLA report 'Response Time Report'

The SLA report Response Time Report also provides you with an overview of your system's performance with special focus on SLA reporting. The report can be generated over any given period depending on the requirements from your management.

5.2.1 Set up of 'Response Time Report'

The only thing required to set up the response time by period SLA report is to make sure that all transactions required in your SLA report are set up at transaction level.

5.2.2 Running of 'Response Time Report'

All registered users can run an SLA report.

Go to the tab Reports and pick the tab 'Response Time Report' to the left.

- Set the period you want to calculate the report for
- Set a filter if required
- Pick the calendar period. The calendar period can be either hour, day, week or month
- Choose the system you want to create the Response Time by Period for. Note that you can choose between three level for generating the report – collection, system and subsystem level
- Click 'HTML' to generate the report in the browser window or click 'Excel' to generate an Excel sheet with the data