

ZABBIX

5.4

RELEASE

DAY!

ENGLISH

SCHEDULED REPORT GENERATION

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TECHNICAL SUPPORT ENGINEER

ZABBIX



REPORTING IN 5.4

Zabbix version 5.4 makes the first step in bringing the end user out of the box scheduled reporting

- ✓ New web service component responsible for generating reports
- ✓ No need to use custom scripts
- ✓ Quick and simple to install
- ✓ Works with existing Email media types
- ✓ Respects user permissions and roles
- ✓ Ability to test the report before implementing it



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SCHEDULED REPORTS

New 'Scheduled reports' section added in 5.4

ZABBIX << Demo Instance

Monitoring

Inventory

Reports

System information

Scheduled reports

Availability report

Triggers top 100

Audit

Action log

Notifications

Configuration

Administration

Scheduled reports

Create report

Filter

Name

Show

All

Created by me

Status

Any

Enabled

Disabled

Expired

Apply

Reset

<input type="checkbox"/>	Name ▲	Owner	Repeats	Period	Last sent	Status	Info
<input type="checkbox"/>	DC1 problems report	Arturs	Daily	Previous day	Never	Enabled	
<input type="checkbox"/>	DC2 problems report	Arturs	Daily	Previous day	Never	Enabled	
<input type="checkbox"/>	DC Global view	Arturs	Daily	Previous day	Never	Enabled	
<input type="checkbox"/>	Management report	Admin (Zabbix Administrator)	Daily	Previous day	Never	Enabled	
<input type="checkbox"/>	Network team	John Smith	Daily	Previous day	Never	Enabled	
<input type="checkbox"/>	NOC	NOC manager	Weekly	Previous day	Never	Enabled	
<input type="checkbox"/>	Website status	John Smith	Daily	Previous day	Never	Enabled	

0 selected

Enable

Disable

Delete

Displaying 7 of 7 found

CREATING A REPORT

Ability to create a scheduled report based on an existing dashboard

- ✓ Daily, Weekly, Monthly or Yearly report cycle
- ✓ Reports for Previous: Day/Week/Month/Year
- ✓ Restrict report generation by Start and End date

☰ Scheduled reports

* Owner

Arturs

×

Select

* Name

DC Global view

* Dashboard

DC Overview

×

Select

Period

Previous day

Previous week

Previous month

Previous year

Cycle

Daily

Weekly

Monthly

Yearly

Start time

00

:

00

Start date

YYYY-MM-DD

End date

YYYY-MM-DD



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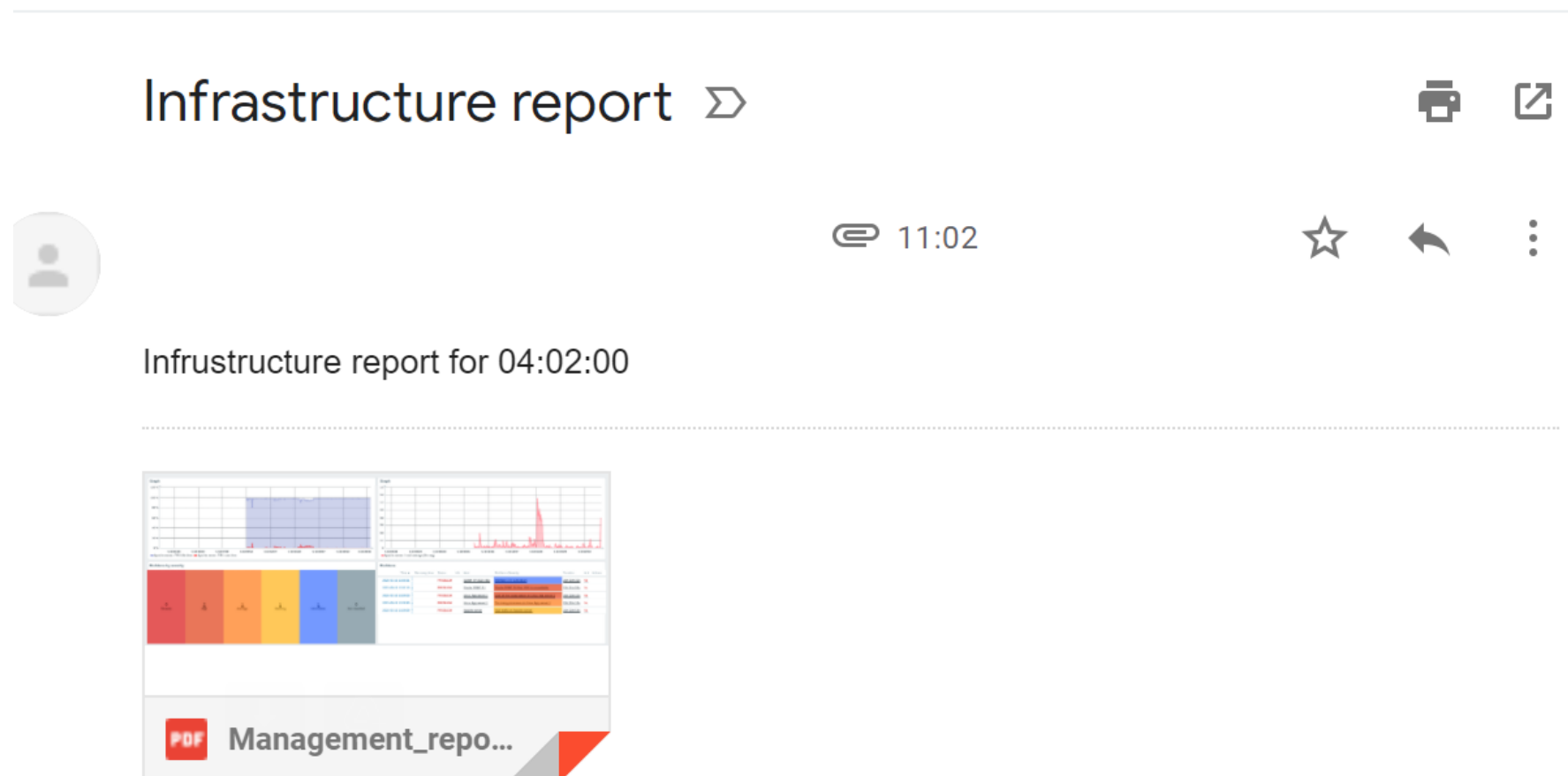
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RECEIVING A REPORT

Report will be generated in PDF format

- ✓ Report will contain the Dashboard information
- ✓ {TIME} macro can be used to provide the time of when the report was sent



RECEIVING A REPORT - EXAMPLE

Report will be generated in PDF format



REPORTS – PERMISSIONS

After performing the upgrade to 5.4 you will see two new options in role permissions

- ✓ **Scheduled reports UI element**
 - ✓ Allows to view scheduled reports
 - ✓ Accessible to Super admin and Admin user Types

≡ User roles

* Name

NoC Admin

User type

Admin

Access to UI elements

Monitoring

☒ Dashboard

☒ Overview

☒ Discovery

☒ Problems

☒ Latest data

☒ Services

☒ Hosts

☒ Maps

Inventory

☒ Overview

☒ Hosts

Reports

☐ System information

☐ Audit

☒ Scheduled reports

☒ Availability report

☐ Action log

☒ Triggers top 100

☒ Notifications

Configuration

☒ Host groups

☒ Maintenance

☒ Discovery

☒ Templates

☒ Actions

☒ Services

☒ Hosts

☐ Event correlation

Administration

☐ General

☐ User groups

☐ Media types

☐ Proxies

☐ User roles

☐ Scripts

☐ Authentication

☐ Users

☐ Queue

* At least one UI element must be checked.




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REPORTS – PERMISSIONS

If **Scheduled reports UI element** is unchecked, the user won't be able to access the Scheduled reports section





Access denied


– You are logged in as "NoCUser". You have no permissions to access this page.

– If you think this message is wrong, please consult your administrators about getting the necessary permissions.

Go to "Dashboard"

Monitoring


Inventory


Reports


Availability report


Triggers top 100


Notifications


Configuration

Support

Share

Help

User settings

Sign out



REPORTS – PERMISSIONS

After performing the upgrade to 5.4 you will see two new options in role permissions

- ✓ **Manage scheduled reports action**
 - ✓ Allows to create and edit scheduled reports
 - ✓ Accessible to Super admin and Admin user Types

Access to API

Enabled ☒

API methods

Allow list

Deny list

type here to search

Select

Access to actions

☒ Create and edit dashboards

☒ Create and edit maps

☒ Create and edit maintenance

☒ Add problem comments

☒ Change severity

☒ Acknowledge problems

☒ Close problems

☐ Execute scripts

☐ Manage API tokens

☒ Manage scheduled reports

Default access to new actions

☒

Update

Clone

Delete

Cancel



REPORTS – PERMISSIONS

If **Manage scheduled reports action** is unchecked, the user won't be able to create new or view existing reports

Scheduled reports

* OwnerAdmin (Zabbix Administrator)Select

* NameManagement report

* DashboardInaccessible dashboardSelect

PeriodPrevious dayPrevious weekPrevious monthPrevious year

CycleDailyWeeklyMonthlyYearly

Start time06:46

Start date2021-05-13

End date2021-05-15

SubjectInfrastructure report

MessageInfrastructure report for {TIME}

* Subscriptions

Recipient	Generate report by	Status	Action
Admin (Zabbix Administra...	Admin (Zabbix Administra...	Include	Remove

Add userAdd user group

DescriptionTest

Enabled☒

Update

Clone

Test

Delete

Cancel



REPORTS – RECIPIENTS

Report subscriptions can contain users or user groups

- ✓ When selecting a user you can specify to include or exclude the user from receiving reports
- ✓ User group to host group permissions are still applied]
- ✓ We can specify which user is going to be generating the report
 - ⊗ The current user performing the configuration changes
 - ⊗ Or the recipient

Subscription

* Recipient

Admin (Zabbix Administrator) X

Select

Generate report by

Current user

Recipient

Status

Include

Exclude

Add

Cancel



REPORT PREREQUISITES

Two additional packages need to be installed to enable the reports

- ✓ **zabbix-web-service** – additional report service
 - ⊗ Needs to be reachable from the Zabbix server
 - ⊗ By default listens on port **10053**
 - ⊗ Can be installed on a separate machine
- ✓ **Google Chrome** is required
 - ⊗ Chromium reported to work on some distros (not 100% tested)
 - ⊗ Google Chrome packages not included with Zabbix



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INSTALLING THE PREREQUISITES

- ✓ Install the **zabbix-web-service** package

```
#yum install zabbix-web-service
```

- ✓ Install the **Google Chrome** package

```
#wget https://dl.google.com/linux/direct/google-chrome-stable_current_x86_64.rpm
```

```
#yum install google-chrome-stable_current_x86_64.rpm
```



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CONFIGURING REPORTS – WEB SERVICE

Web service supports many different configuration options

✓ Logging

```
### Option: LogType - system (syslog), file, console (standard output)
### Option: LogFile - Log file location
### Option: LogFileSize - Size in MB before rotation
### Option: DebugLevel - 0 - 5
```

✓ List of allowed server addresses

```
### Option: AllowedIP List of comma delimited IP addresses, optionally in CIDR
notation, or DNS names of Zabbix servers
```

✓ Timeout settings

```
### Option: Timeout - Spend no more than Timeout seconds on processing (Default
- 3)
```



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CONFIGURING REPORTS – WEB SERVICE

Web service supports many different configuration options

✓ Listen Port

```
### Option: ListenPort - Service will listen on this port for connections from  
the server  
(Default - ListenPort=10053)
```

✓ Encryption settings

```
### Option: TLSAccept - unencrypted or cert  
### Option: TLSCAFile - pathname of a file containg top level CA(s)  
certificates  
### Option: TLSCertFile - pathname of a file containing the service certificate  
### Option: TLSKeyFile - pathname of a file containing the service private key
```



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CONFIGURING REPORTS - SERVER

In addition, server also now contains report related parameters

- ✓ Number of report writer instances

```
### Option: StartReportWriters - Number of pre-forked report writer instances.  
(Default - 0)
```

- ✓ Zabbix Web Service URL

```
### Option: WebserviceURL - URL to Zabbix web service, used to perform web  
related tasks. (No default value)
```

```
#Example: http://192.168.1.156:10053/report
```



CONFIGURING REPORTS – FRONTEND

As our last step, let's enable communication between frontend and the web service

- ✓ Available in **Administration – General – Other**
- ✓ Specify the **Zabbix frontend** url that will be reachable by the web service

Other configuration parameters ▾

Frontend URL

http://192.168.1.156/zabbix/

* Group for discovered hosts

Discovered hosts ✕

Select

Default host inventory mode

Disabled

Manual

Automatic

User group for database down message

Zabbix administrators ✕

Select

Log unmatched SNMP traps

☒



REPORTS – TESTING

Once the report has been configured you can send out a test report

* Owner

Admin (Zabbix Administrator) ✕

Select

* Name

Management report

* Dashboard

Web server status ✕

Select

Period

Previous day

Previous week

Previous month

Previous year

Cycle

Daily

Weekly

Monthly

Yearly

Start time

06

:

46

Start date

2021-05-13 📅

End date

2021-05-15 📅

Subject

Infrastructure report

Message

Infrastructure report for {TIME}

* Subscriptions

Recipient	Generate report by	Status	Action
👤 Admin (Zabbix Administra...	Admin (Zabbix Administra...	Include	Remove
Add user Add user group			

Description

Test

Enabled

☒

Update

Clone

Test

Delete

Cancel



Currently test reports do not resolve the {TIME} macro



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COMMON ISSUES

Make sure that the user has a properly configured Email media

- ✓ Make sure that the Email media type settings are properly configured
- ✓ Test the media type
- ✓ Test the report

<input type="checkbox"/> Name ▲	Owner	Repeats	Period	Last sent	Status	Info
<input type="checkbox"/> DC2 problems report	Arturs	Daily	Previous day	Never	Enabled	
<input type="checkbox"/> DC Global view	Arturs	Daily	Previous day	Never	Enabled	
<input type="checkbox"/> Management report	Admin (Zabbix Administrator)	Daily	Previous day	2021-05-13 16:49	Enabled	
<input type="checkbox"/> Network team	John Smith	Daily	Previous day	Never		
<input type="checkbox"/> NOC	NOC manager	Weekly	Previous day	Never		
<input type="checkbox"/> Website status	John Smith	Daily	Previous day	Never	Enabled	

Failed to create 1 report(s):
No media configured for the report recipients.

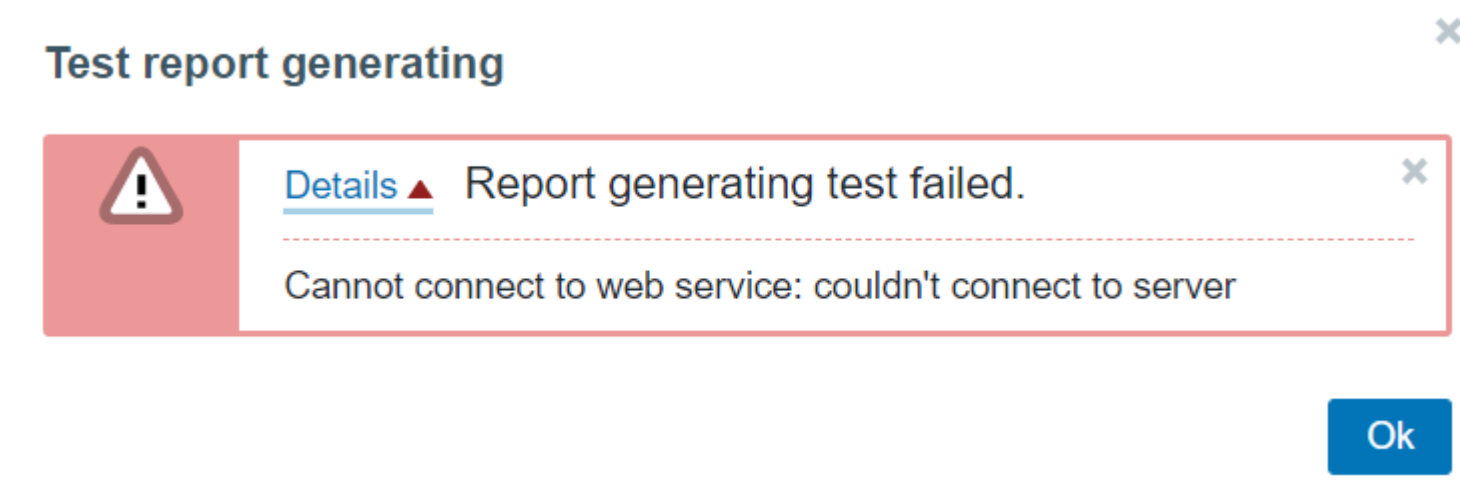
Displaying 6 of 6 found



COMMON ISSUES

Make sure that the correct Web service address is configured on the Zabbix server in **WebServiceURL** parameter

- ✓ Confirm that the Zabbix server can connect to Zabbix web service
- ✓ Check firewall settings if the Zabbix web service is running on a dedicated machine
- ✓ Make sure that third party security software isn't blocking the communication




COMMON ISSUES

Make sure that the Web service URL is configured without any typos

- ✓ Located in Zabbix server configuration file

```
WebServiceURL=http://192.168.1.156:10053/reportwrong
```

Test report generating



[Details ▲](#) Report generating test failed.
404 page not found

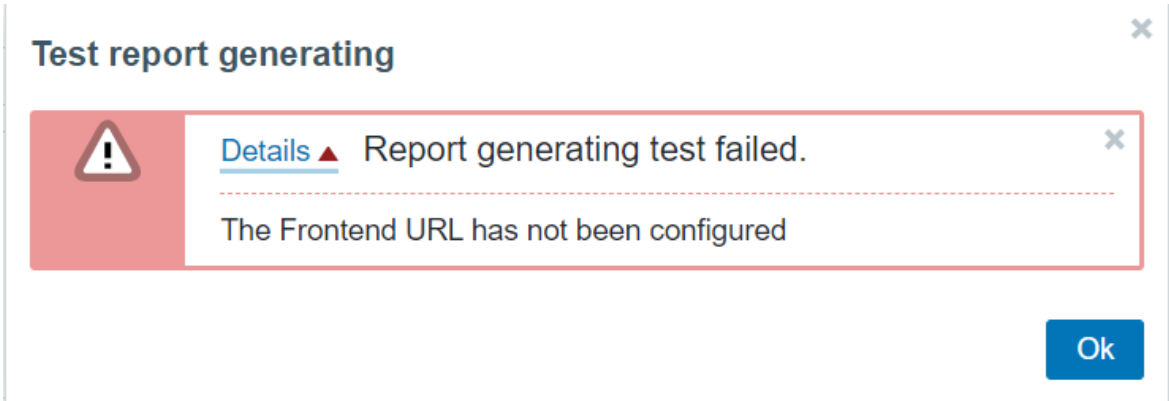
Ok



COMMON ISSUES

Don't forget to assign the frontend URL in Administration – Other

- ✓ If the URL is misconfigured you might start receiving empty reports
- ✓ If the URL syntax is wrong, you will receive an error message about malformed URL



Other configuration parameters

Frontend URL

* Group for discovered hosts

Default host inventory mode

User group for database down message

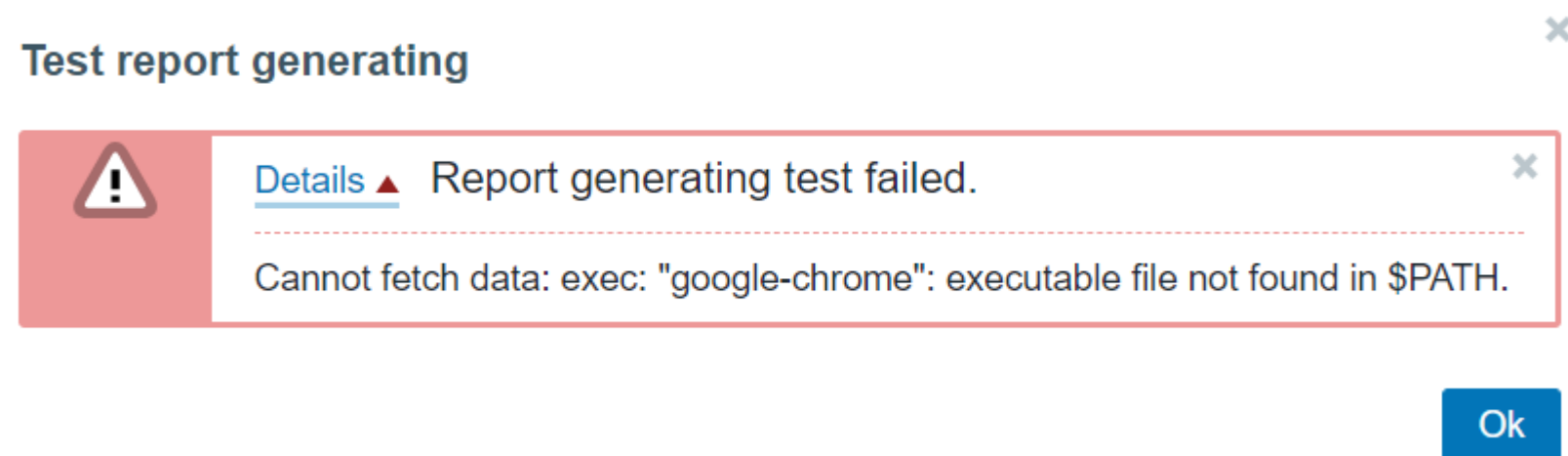
Log unmatched SNMP traps ☒



COMMON ISSUES

Remember that Google Chrome does not come pre-packaged with Zabbix!

- ✓ Install Google Chrome separately
- ✓ Make sure that Google Chrome is available via \$PATH environmental variable



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THANK YOU!
QUESTIONS?

