10TH ZABBIX SUMMIT 2022

BUSINESS SERVICE MONITORING AND USE CASES

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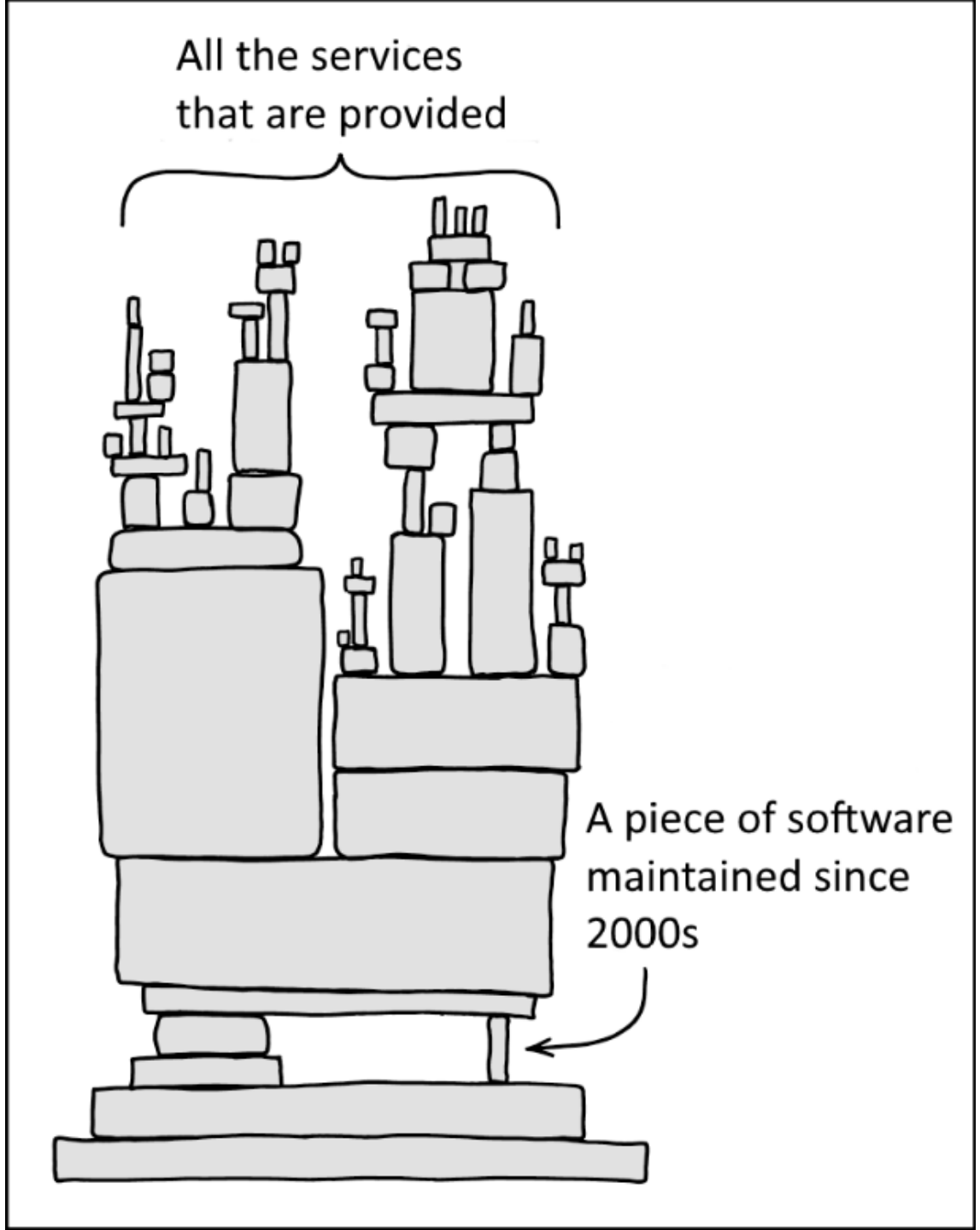
01

BUSINESS SERVICES REFRESHER

A QUOTE

- maybe


All the services
that are provided
A piece of software
maintained since
2000s

WHAT IS BUSINESS SERVICE MONITORING?

Business service monitoring provides a possibility to monitor infrastructure from the business perspective

- Display business structure using the IT infrastructure
- Calculate SLA* and SLO* of various services
- Show availability of services in use or provided
- Discover root causes of business impacts
- Identify the weakest spots

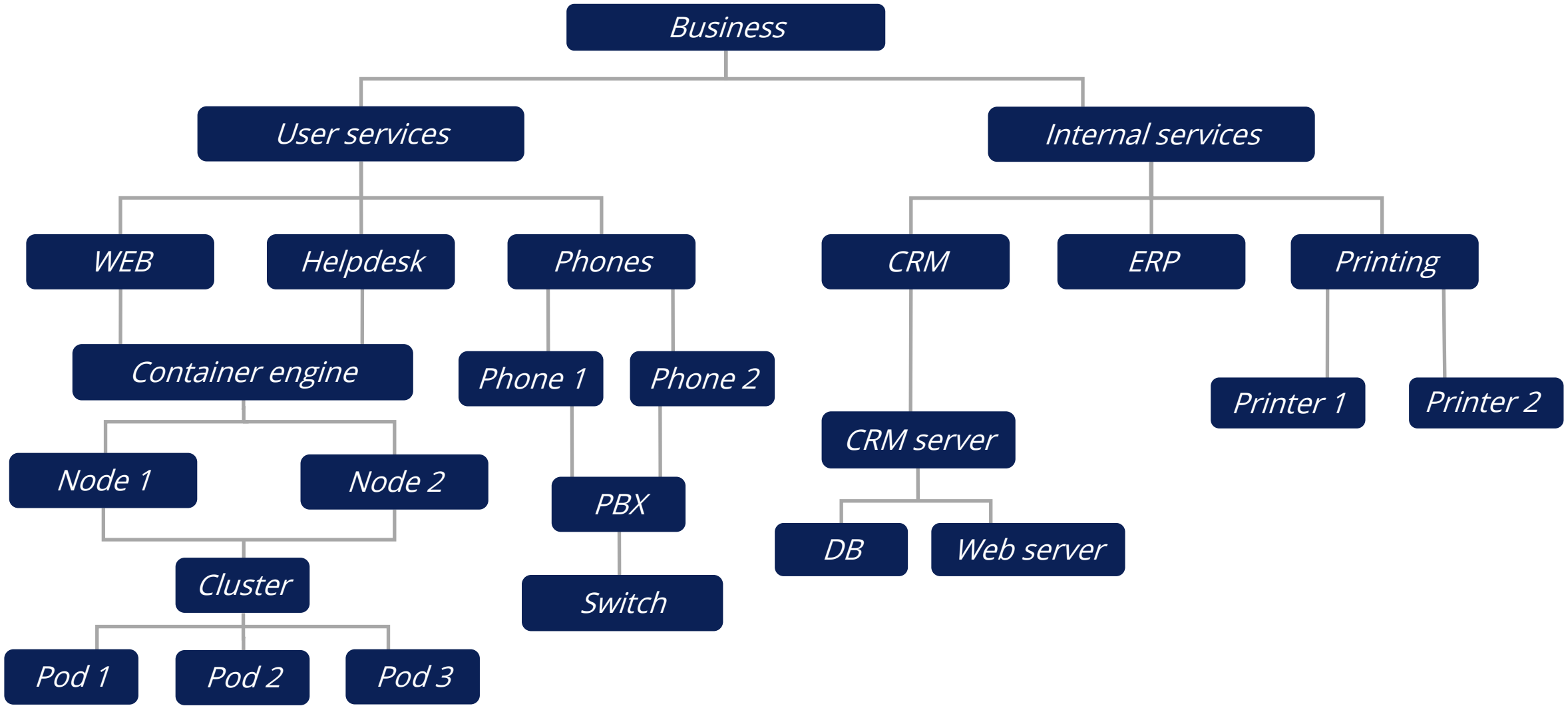
*SLA – Service Level Agreement

*SLO – Service Level Objective

02

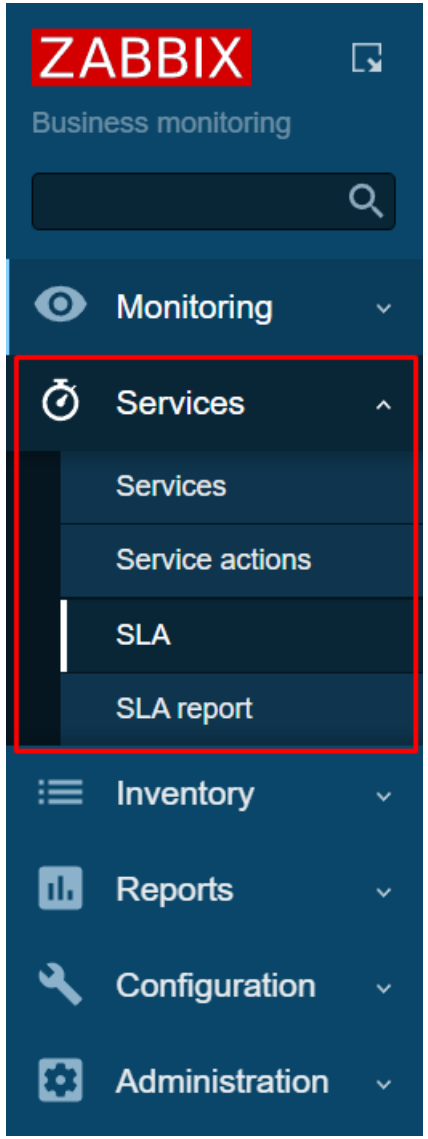
SERVICE DETAILS AND CONFIGURATION

SERVICE TREE



SERVICES CONFIGURATION

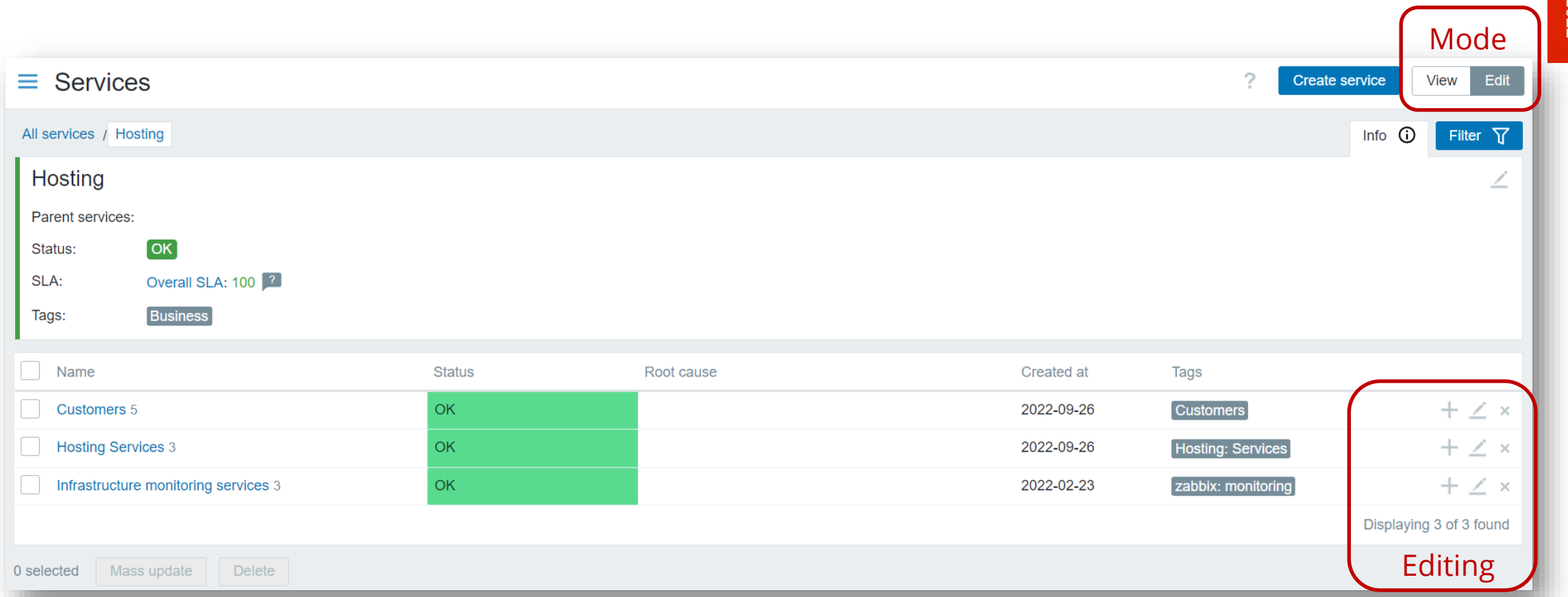
- Services – services tree configuration
- Service actions - actions for service events
- SLA - SLA* calculation configuration
- SLA report - SLA reports



*SLA – Service Level Agreement

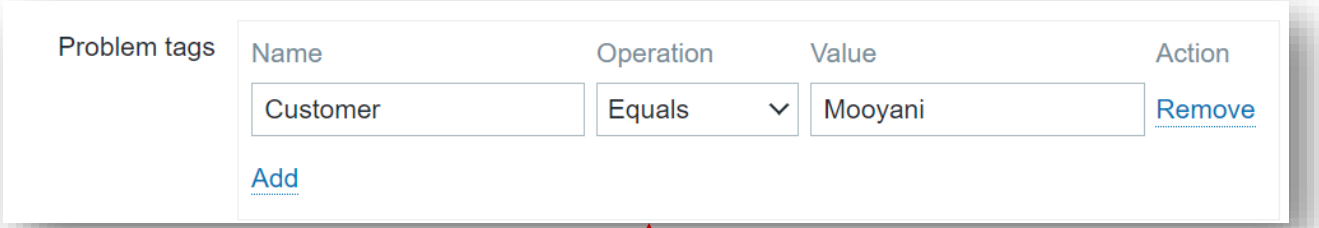
SERVICE VIEW AND CREATION

- View – overview of the service tree
- Edit – enables editing the service tree



SERVICE TAGS

- Service has two types of tags:
  - The ones that link to problems



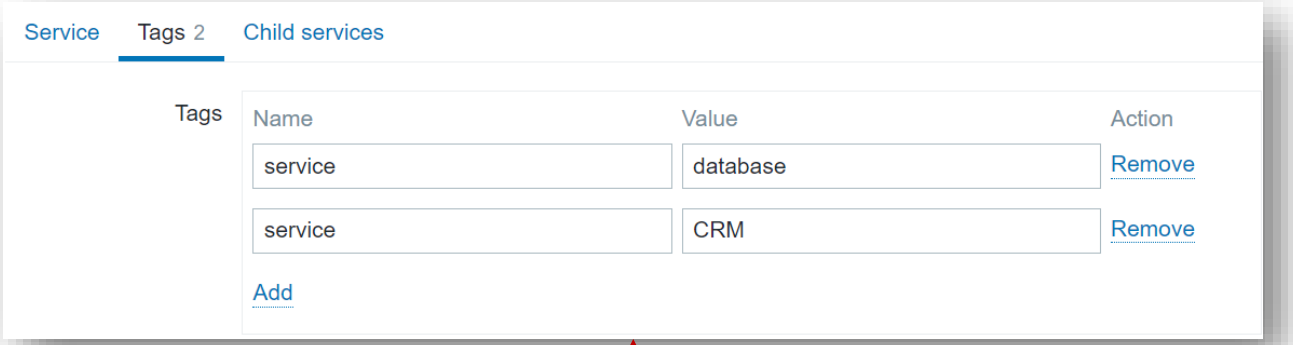
Name	Status	Root cause	Created at	Tags
Alan Willbot 3	OK		2022-09-26	Customer: Alan
Genevieve Tolove 3	OK		2022-09-26	Customer: Genevieve
Getaway Goington 2	OK		2022-09-26	Customer: Getaway
Mooyani Thoatron 2	High	VMT2OSWIN is not reachable	2022-09-26	Customer: Mooyani
Thornton Oblood 1	OK		2022-09-26	Customer: Thornton

Displaying 5 of 5 found

Time	Severity	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
09:11:09	High				VMT2OSWIN	VMT2OSWIN is not reachable	55s	No		component: system, Customer: Mooyani

SERVICE TAGS

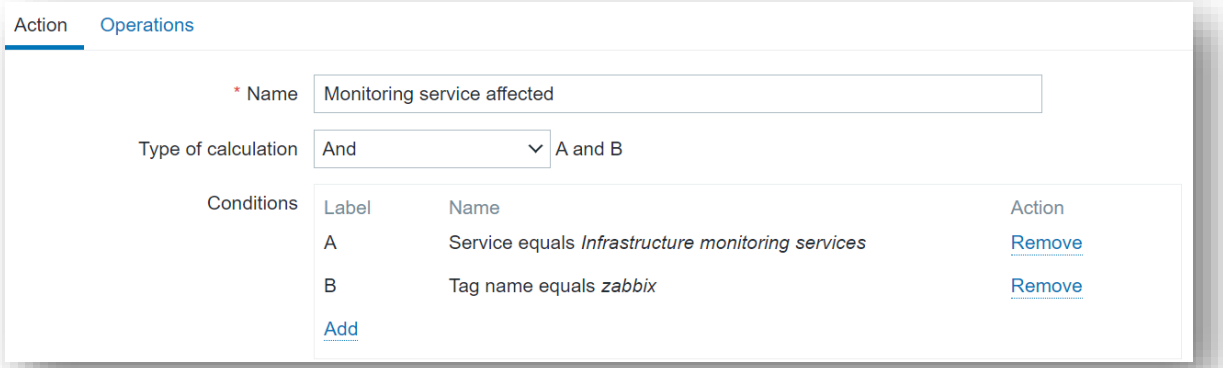
- Service has two types of tags:
  - And its own tags, used in SLA calculations, Service actions and Service permissions



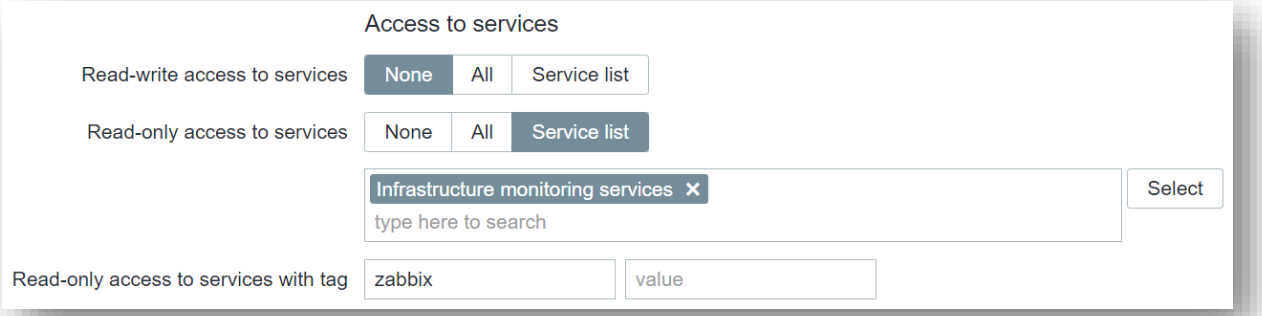
Name ▲	Conditions
Shared DB service failure	Service equals *Hosting* Value of tag *service* equals *database*

SERVICE ACTIONS AND PERMISSIONS

- **Services** has a separate **actions** section, which reacts to the service events only and supports multiple escalation steps

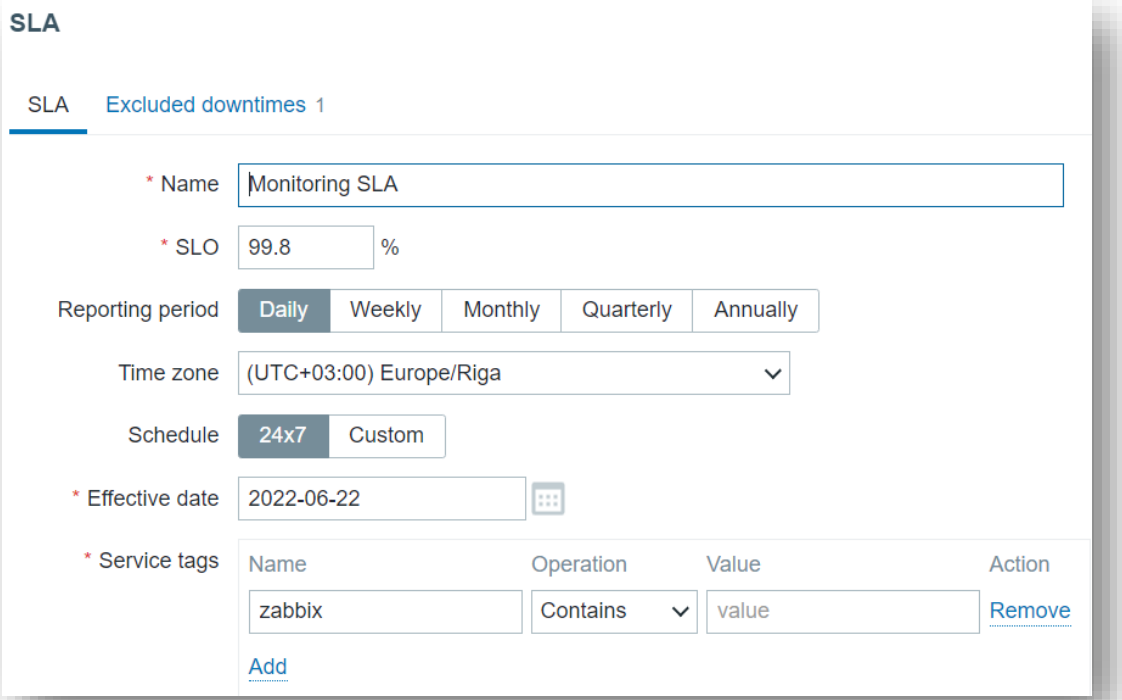


- Service permissions - to manage user/customer access



DEFINING SLA AND CREATING REPORTS

- Define SLA calculation logic
  - Target SLO (Service Level Objective)
  - Reporting period
  - Time zone
  - Schedule
  - Planned downtimes



- Track overall results

Service ▲	SLO	2022-07-28	2022-07-29	2022-07-30	2022-07-31	2022-08-01	2022-08-02
Database	99.8%	100	100	100	100	100	100
Frontend	99.8%	100	100	100	100	100	100
Infrastructure monitoring services	99.8%	100	100	100	100	100	100
Zabbix cluster	99.8%	100	100	100	100	100	100

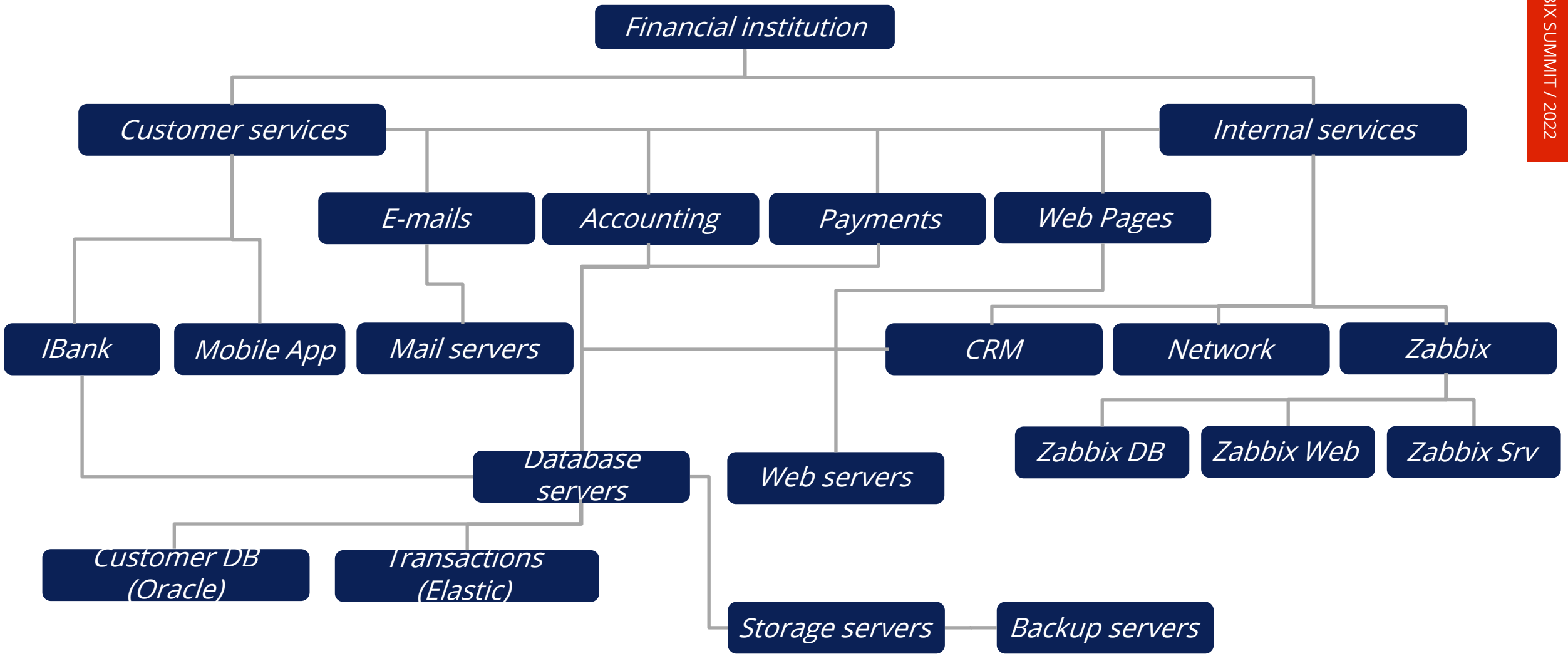
03

REAL USE CASES

REAL BUSINESS EXAMPLES

- A starting point
- Overview of the possibilities
- Better understanding
- More than Proof of Concept

REAL FINANCIAL SERVICES TREE



ZABBIX SERVICE VIEW

Name	Status	Root cause	Created at	Tags
Financial institution 15	OK		2022-09-07	Service: Bank

Financial institution

Parent services:

Status: OK

SLA: Every service SLA: 100 Overall SLA: 100

Tags: Service: Bank

Name	Status	Root cause	Created at	Tags
AS/400	OK		2022-09-07	Service: AS/400
Accounting 2				
Analytic systems				
Backup systems 1				
Customer services 6				
DB2 4				
External Git 1				
Internal Services 9				
Microsoft services 4				
Network infrastructure 1				
Oracle systems 2				
Payment Services				

Customer services

Parent services: Financial institution 15

Status: OK

SLA: Customer service SLA: 100 Every service SLA: 100

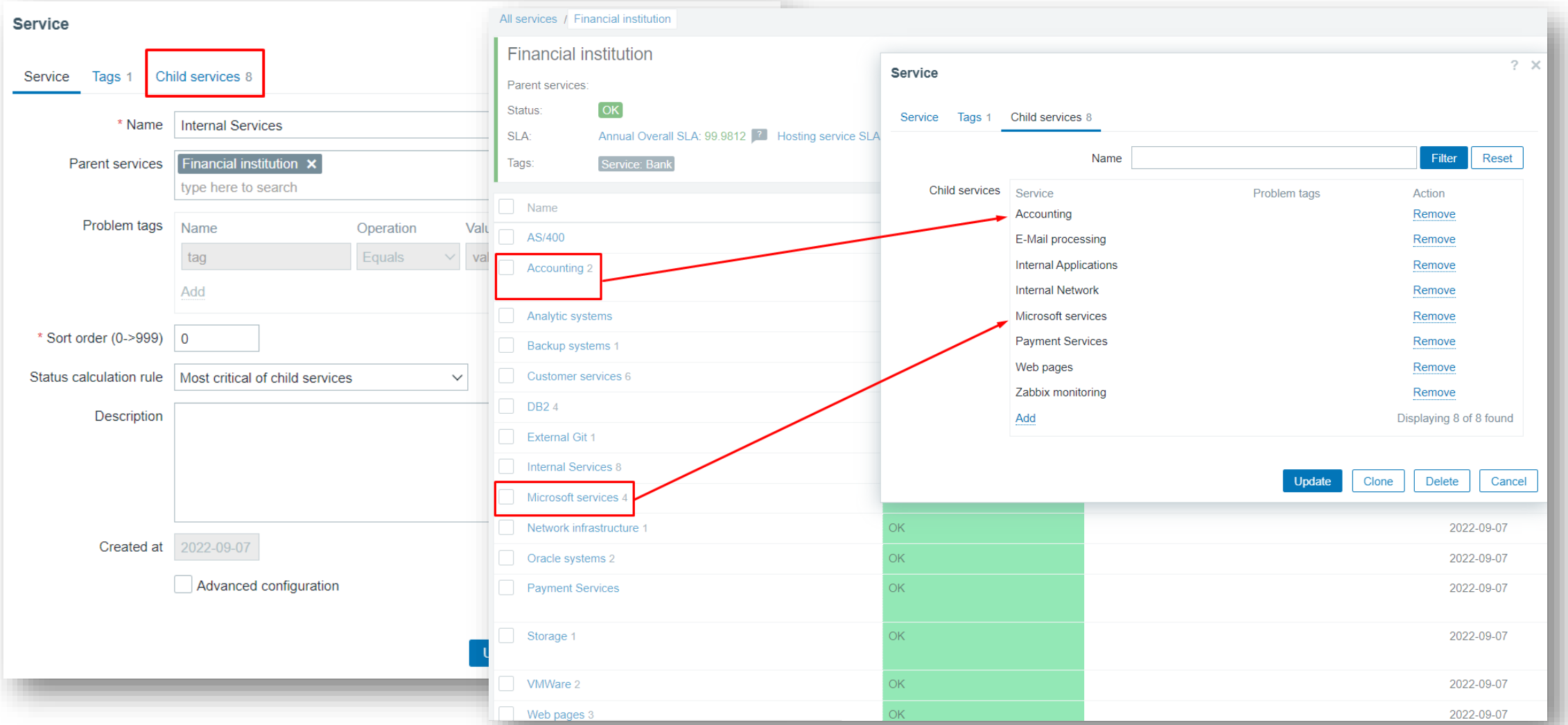
Tags: Service: Customers

Name	Status	Root cause	Created at	Tags
Accounting 2	OK		2022-09-07	Service: Accounting Service: Customers Service: Internal
E-Mail processing	OK		2022-09-07	Service: Customers Service: Internal
IBank	OK		2022-09-07	Service: Customers
Mobile Notifications	OK		2022-09-07	Service: Customers
Payment Services	OK		2022-09-07	Service: Customers Service: Internal Service: Payment
Web pages 3	OK		2022-09-07	Service: Customers Service: Internal Service: Web

Displaying 6 of 6 found

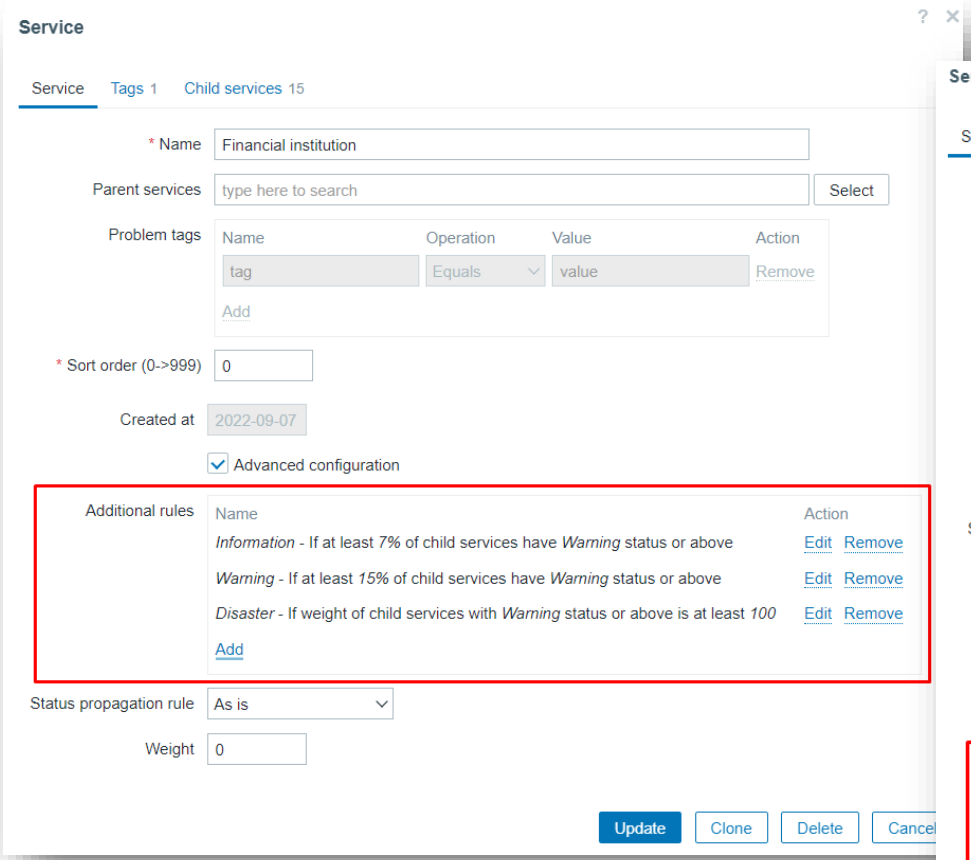
ZABBIX SERVICE VIEW

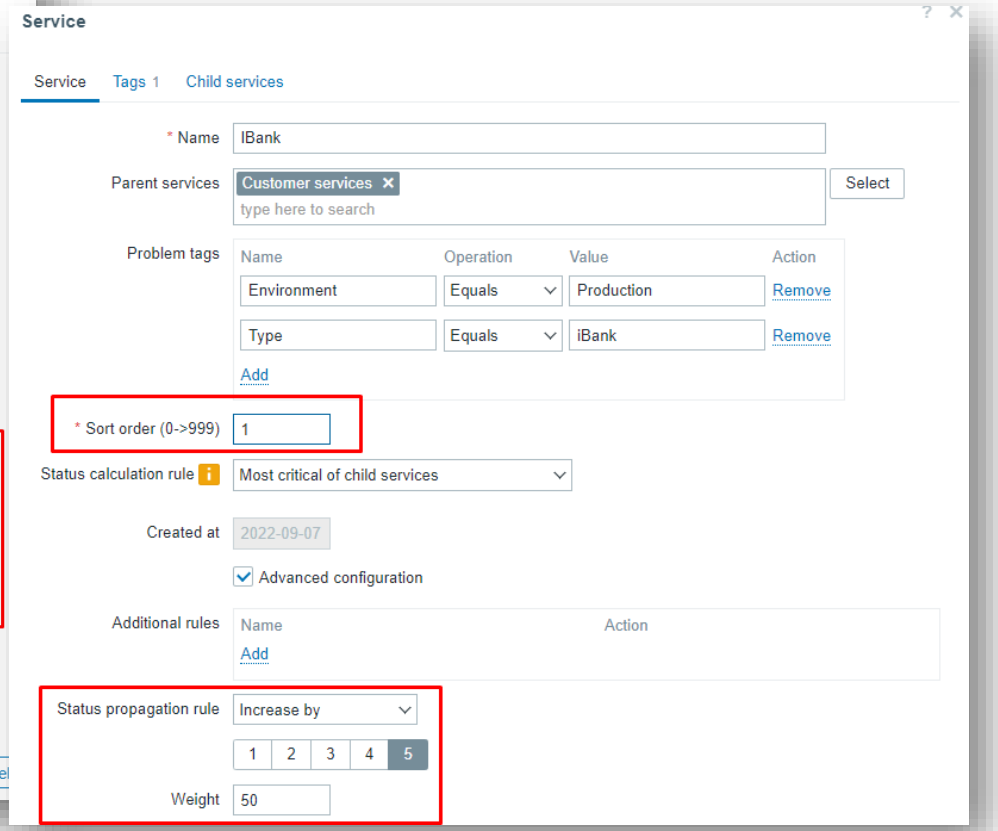
Child services can be Parent services at the same time



SERVICES HIT DIFFERENTLY

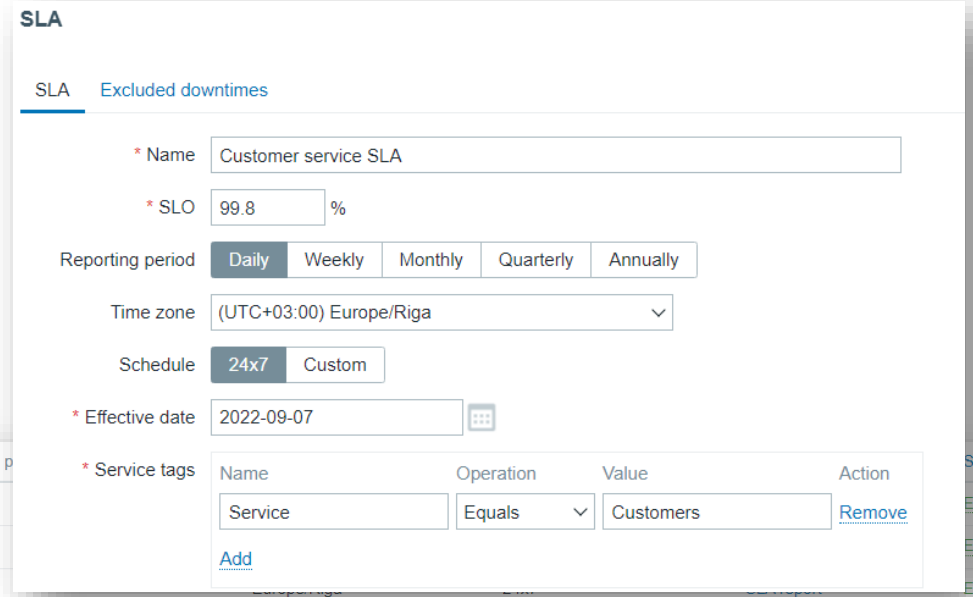
- Defining the impact of the service outage





TO SLO
AND BEYOND

Always fulfil need to know, whether promises are delivered or not



Name ▲	SLO	Effective date	Reporting p				Status
Accounting SLA	90%	2022-09-07	Daily				Enabled
Annual Customer service SLA	99.8%	2022-09-07	Daily				Enabled
Annual Overall SLA	99.8%	2022-09-07	Annually				Enabled
Customer service SLA	99.8%	2022-09-07	Daily	Europe/Riga	24x7	SLA report	Enabled
Every service SLA	99.5%	2022-09-07	Daily	Europe/Riga	24x7	SLA report	Enabled
Internal service SLA	95%	2022-09-07	Weekly	Europe/Riga	Custom	SLA report	Enabled
Microsoft service SLA	90%	2022-09-07	Daily	Europe/Riga	Custom	SLA report	Enabled
Overall SLA	99.8%	2022-09-07	Daily	Europe/Riga	24x7	SLA report	Enabled
Web page SLA	99.8%	2022-09-07	Daily	Europe/Riga	24x7	SLA report	Enabled
Weekly Customer service SLA	99.8%	2022-09-07	Daily	Europe/Riga	24x7	SLA report	Enabled
Weekly Every service SLA	99.5%	2022-09-07	Daily	Europe/Riga	24x7	SLA report	Enabled
Weekly Internal service SLA	95%	2022-09-07	Weekly	Europe/Riga	Custom	SLA report	Enabled

ALL IN ONE FORM

Service ▲	SLO	2022
Financial institution	99.8%	99.99

Service ▲	SLO	2022-08-28 – 09-03	2022-09-04 – 09-10	2022-09-11 – 09-17
Accounting	95%	100	100	N/A
E-Mail processing	95%	99.57	100	N/A
Internal Applications	95%	100	100	N/A
Internal Network	95%	99.80	100	N/A
Internal Services				
Microsoft services				
Payment Services				
Web pages				

Service ▲	SLO	2022-09-05	2022-09-06	2022-09-07	2022-09-08
Accounting	99.8%	100	100	100	100
Customer services	99.8%	100	100	100	100
E-Mail processing	99.8%	100	100	100	100
IBank	99.8%	100	100	100	100
Mobile Notifications	99.8%	100	100	100	100
Payment Services	99.8%	100	100	100	100
Web pages	99.8%	100	100	100	100

OR ANOTHER

Customer SLA

Service	SLO	2022-09-07	2022-09-08	2022-09-09	2022-09-10	2022-09-11
Accounting	99.8%	100	100	N/A	N/A	N/A
Customer services	99.8%	100	100	N/A	N/A	N/A
E-Mail processing	99.8%	100	100	N/A	N/A	N/A
IBank	99.8%	100	100	N/A	N/A	N/A
Mobile Notifications	99.8%	100	100	N/A	N/A	N/A
Payment Services	99.8%	100	100	N/A	N/A	N/A
Web pages	99.8%	100	100	N/A	N/A	N/A

Displaying 7 of 7 found

Accounting server

2022-09-08 11:46:41

Up (1)

Exchange server

2022-09-08 11:46:41

Up (1)

Accounting server

2022-09-08 11:46:41

Up (1)

iBank Response code

2022-09-08 11:46:19

200

iBank response Time

2022-09-08 11:46:19

216.65ms

Failed transactions

2022-09-08 11:46:22

0

Problems by severity

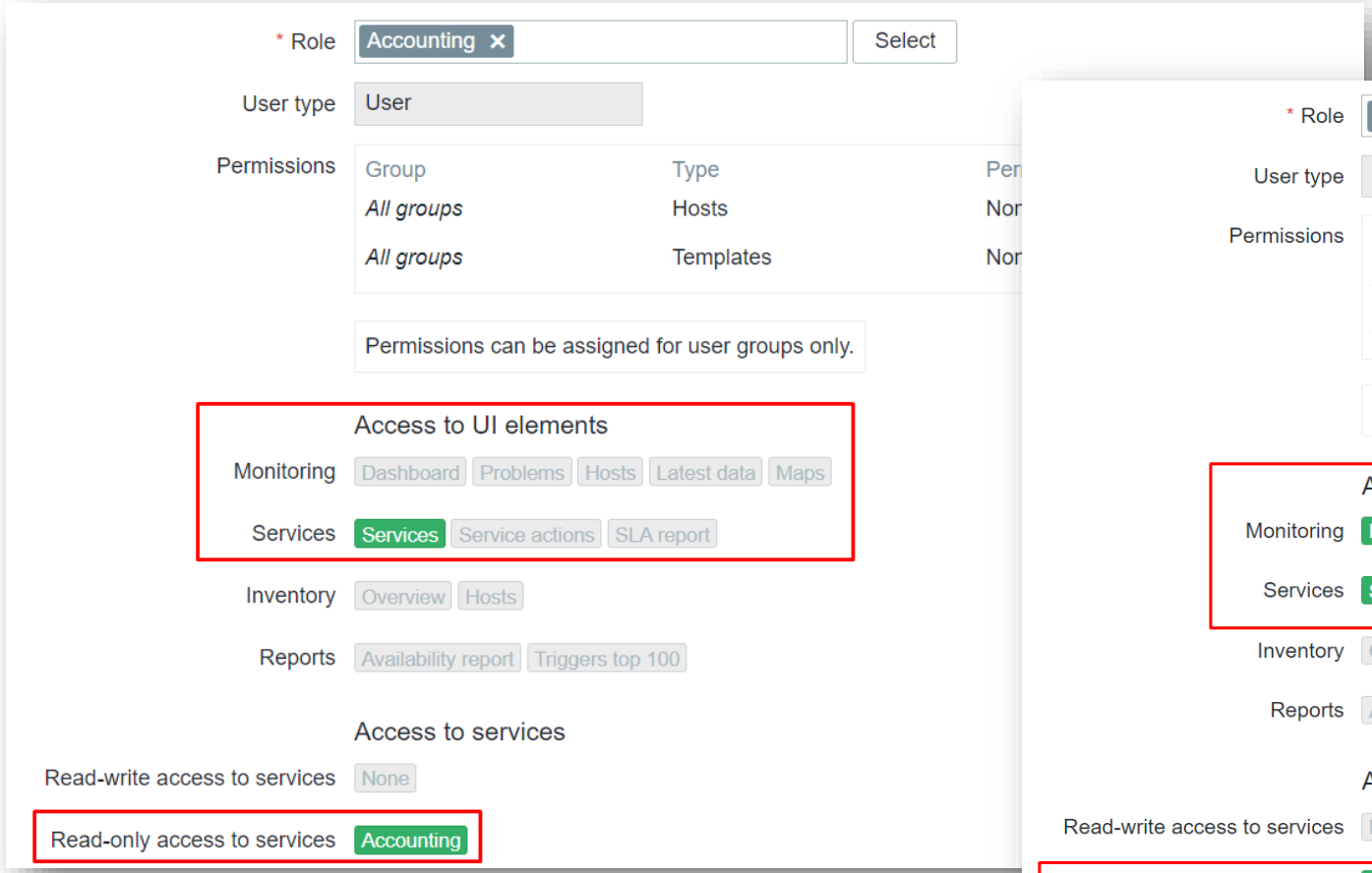
0 Disaster	0 High	0 Average	3 Warning	0 Information	0 Not classified

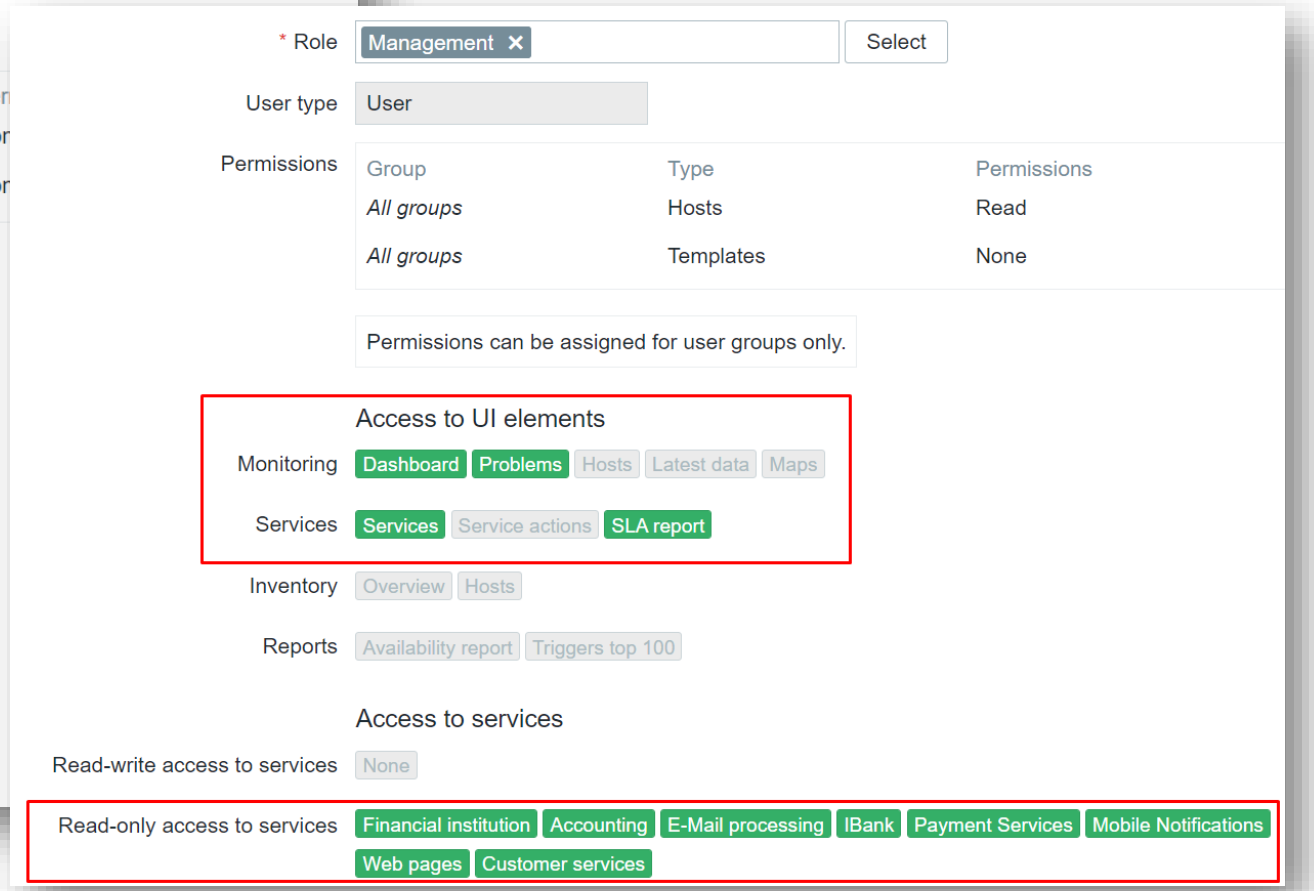
SLA report

Service	SLO	2022-08-14 – 08-20	2022-08-21 – 08-27	2022-08-28 – 09-03	2022-09-04 – 09-10
Accounting	95%	N/A	N/A	N/A	100
E-Mail processing	95%	N/A	N/A	N/A	100
Internal Applications	95%	N/A	N/A	N/A	100
Internal Network	95%	N/A	N/A	N/A	100
Internal Services	95%	N/A	N/A	N/A	100
Microsoft services	95%	N/A	N/A	N/A	100
Payment Services	95%	N/A	N/A	N/A	100
Web pages	95%	N/A	N/A	N/A	100

Displaying 8 of 8 found

INCLUDING DIFFERENT PERMISSIONS





USERS SEE THE MOST IMPORTANT INFORMATION

ZABBIX

Monitoring

Services

Services

SLA report

Support

Integrations

Help

SLA report

SLA: Customer service SLA × Select

Service: type here to search Select

From: YYYY-MM-DD

To: YYYY-MM-DD

Apply Reset

Service ▲	SLO	2022-09-07	2022-09-08
Accounting	99.8%	100	100
Customer services	99.8%	100	100
E-Mail processing	99.8%	100	100
IBank	99.8%	100	100
Mobile Notifications	99.8%	100	100
Payment Services	99.8%	100	100
Web pages	99.8%	100	100

Contains value

			Created at	Tags
	Accounting 2	OK	2022-09-07	Service: Accounting, Service: Internal
Accounting	Accounting server	OK	2022-09-07	Service: Accounting
Accounting	Accounting software	OK	2022-09-07	Service: Accounting

Support

AND OF COURSE
GET NOTIFIED

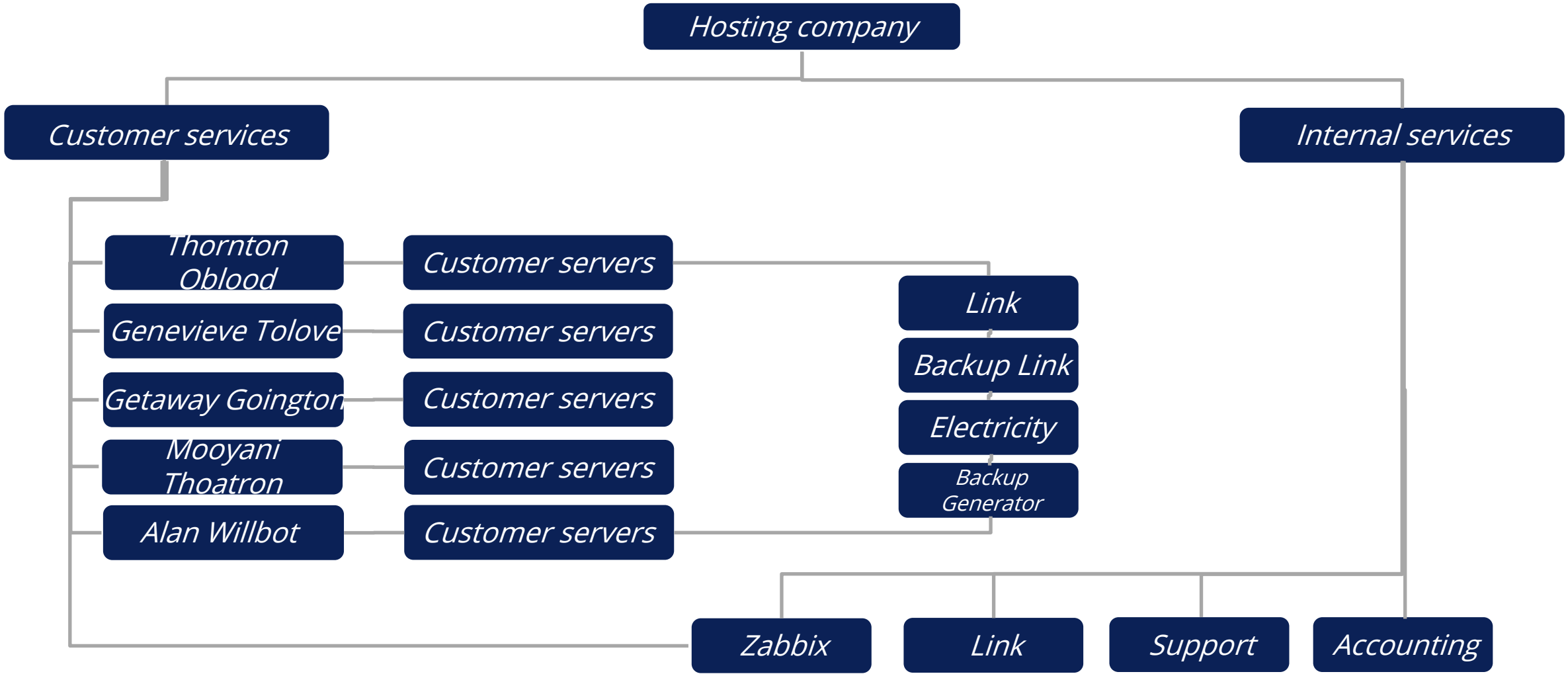
- Notify only directly involved participants

Name ▲	Conditions	Operations
Notify Accounting	Service equals *Licenses* Service equals *Accounting server* Service equals *Accounting software* Service equals *Microsoft services* Service equals *Accounting*	**Send message to user groups:** Zabbix administrators via all media **Send message to user groups:** Accounting via Email
Notify Administrator on shift	Value of tag *Service* contains *Internal*	**Send message to user groups:** Zabbix administrators via Email
Notify customers	Service equals *Customer services* Service equals *Web pages* Service equals *Payment Services* Service equals *IBank*	**Send message to user groups:** Zabbix administrators via all media **Send message to user groups:** Management via SMS
Notify Management	Service name contains *Payment* Service name contains *iBank* Value of tag *Service* equals *Customers*	**Send message to user groups:** Management via all media

03

MANAGED SERVICE PROVIDER USE CASE EXAMPLE

REAL HOSTING SERVICES TREE



ZABBIX SERVICE VIEW

Name	Status	Root cause	Created at	Tags
Hosting 3	OK		2022-09-09	Bussines

Name	Status	Root cause	Created at	Tags
Customers 5	OK		2022-09-09	Customers
Hosting Services 3	OK		2022-09-09	Hosting: Services
Monitoring 4				

Customers

Parent services: Hosting 3

Status: OK

SLA: Customers: 100 ?

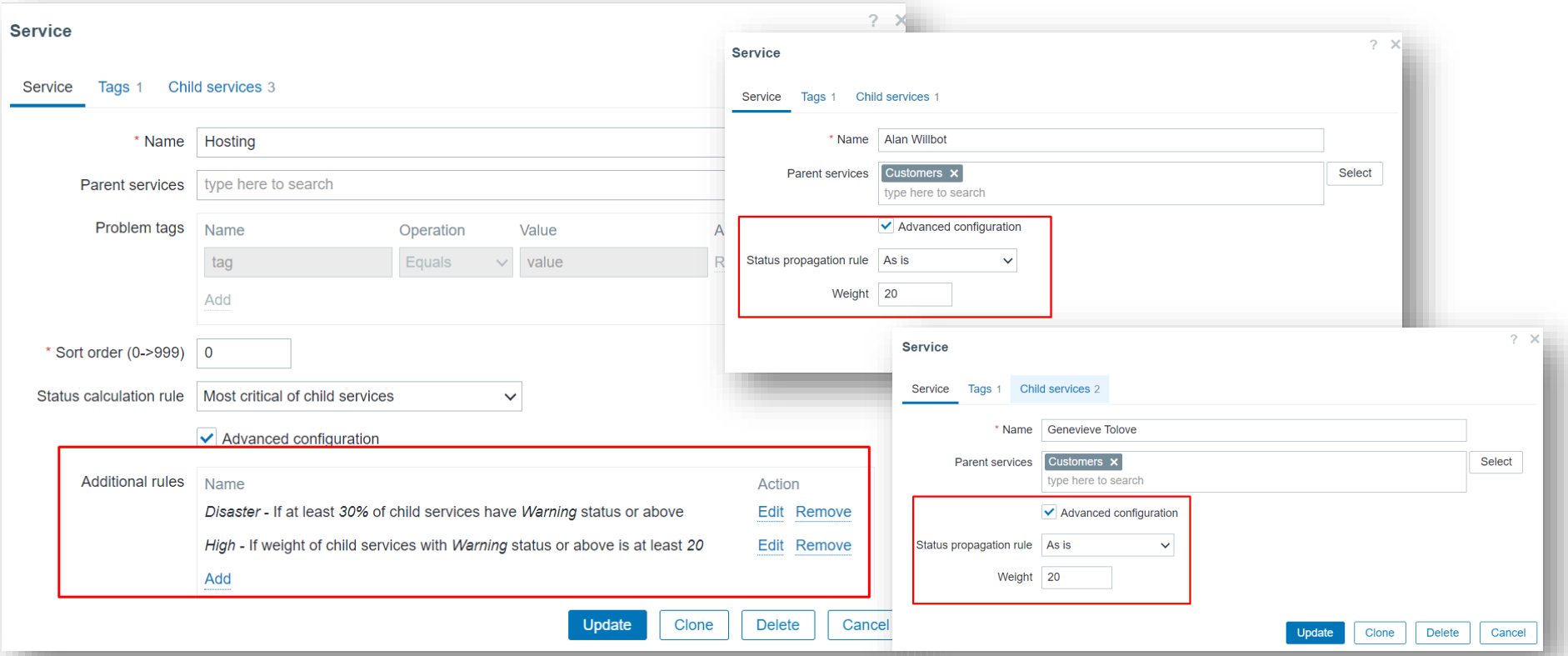
Tags: Customers

Reporting period	SLO	SLI	Uptime	Downtime	Error budget
2022-09-09	99.8%	100	2h 38m 54s	0	19s

Name	Status	Root cause	Created at	Tags
Alan Willbot 1	OK		2022-09-09	Customer: Alan
Genevieve Tolove 2	OK		2022-09-09	Customer: Genevieve
Getaway Goington 1	OK		2022-09-09	Customer: Getaway
Mooyani Thoatron 3	OK		2022-09-09	Customer: Mooyani
Thornton Oblood 2	OK		2022-09-09	Customer: Thornton

SERVICES HIT DIFFERENTLY

- Defining the impact of the hosting service outage



SERVICES HIT DIFFERENTLY

- Defining the impact of the hosting service outage

Service

Service | Tags 1 | Child services 3

* Name: Hosting

Parent services: type here to search

Problem tags

Name	Operation	Value
tag	Equals	value

Add

* Sort order (0->999): 0

☑ Advanced configuration

Additional rules

Name
High - If weight of child services with *Warning* status or above is at least *40*
Disaster - If at least *30%* of child services have *Warning* status or above

Add

Update | Clone

Service

Service | Tags 1 | Child services 5

* Name: Customers

Parent services: Hosting ✕ type here to search | Select

Problem tags

Name	Operation	Value	Action
tag	Equals	value	Remove

Add

* Sort order (0->999): 0

☑ Advanced configuration

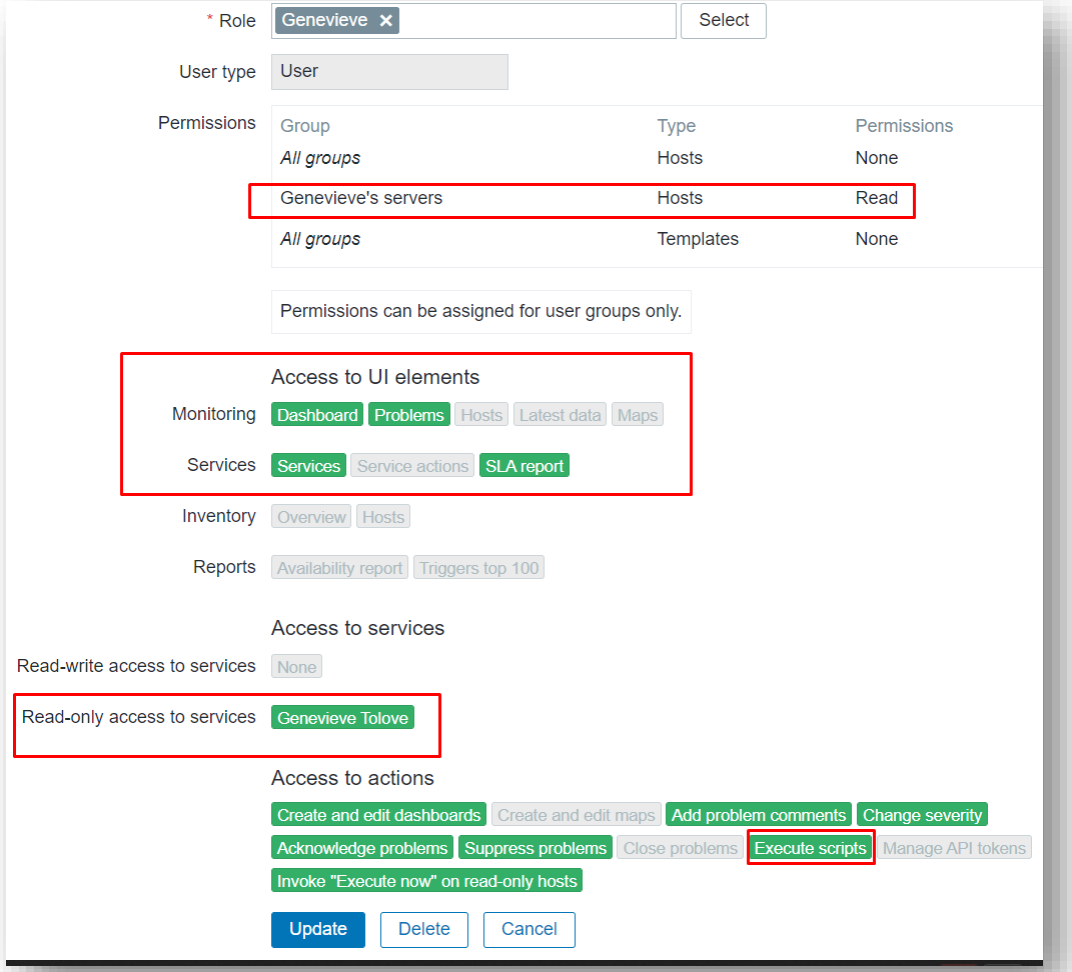
Additional rules

Name	Action
Warning - If at least *20%* of child services have *Average* status or above	Edit Remove
High - If at least *50%* of child services have *Warning* status or above	Edit Remove
Disaster - If at least *70%* of child services have *Warning* status or above	Edit Remove

Update | Clone | Delete | Cancel

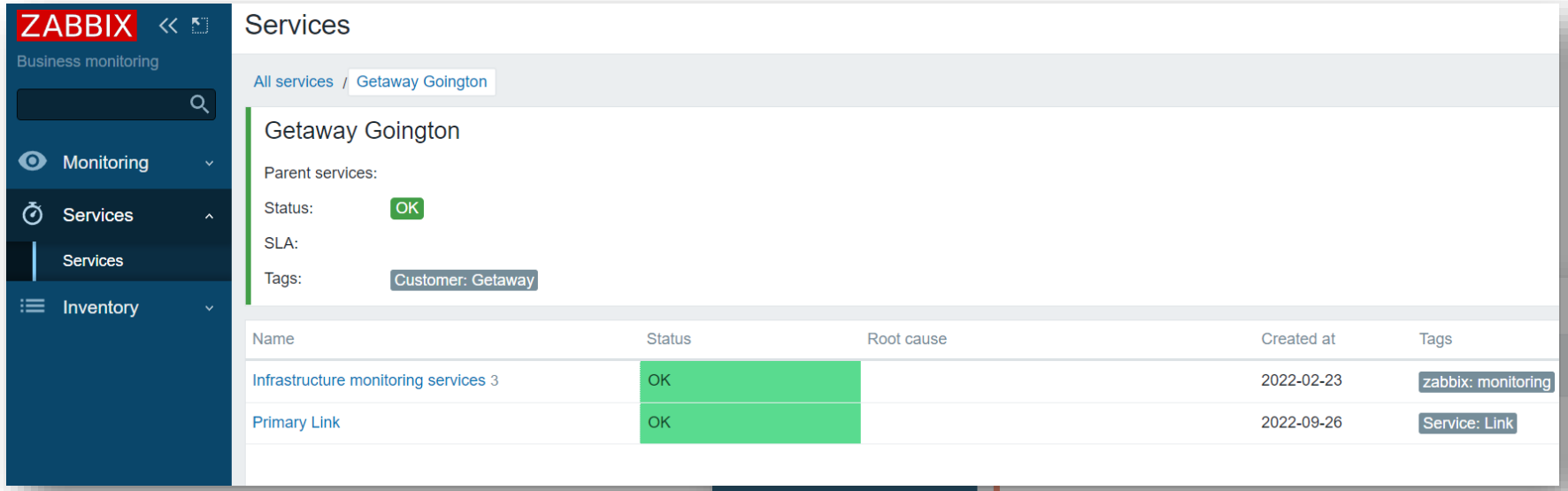
INFORM EACH CUSTOMER INDIVIDUALLY

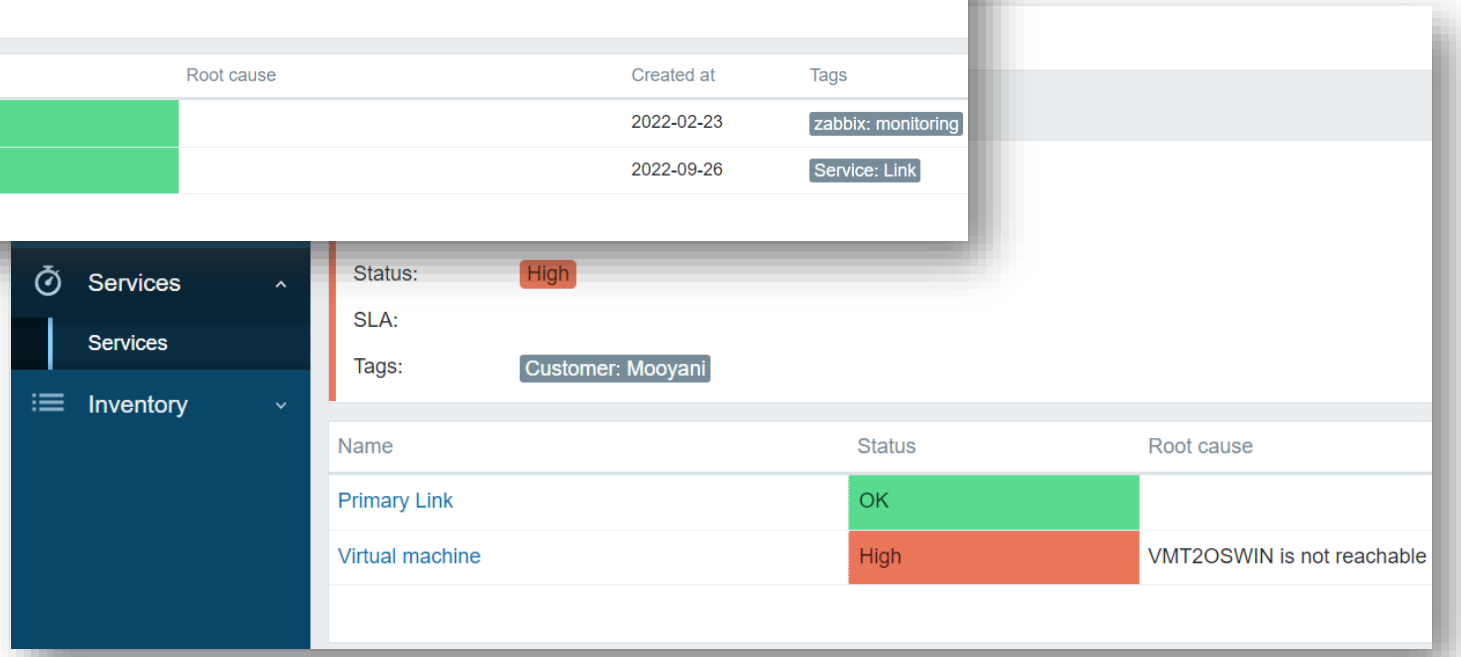
- Each customer will have their own overview or even some control



INFORM EACH CUSTOMER INDIVIDUALLY

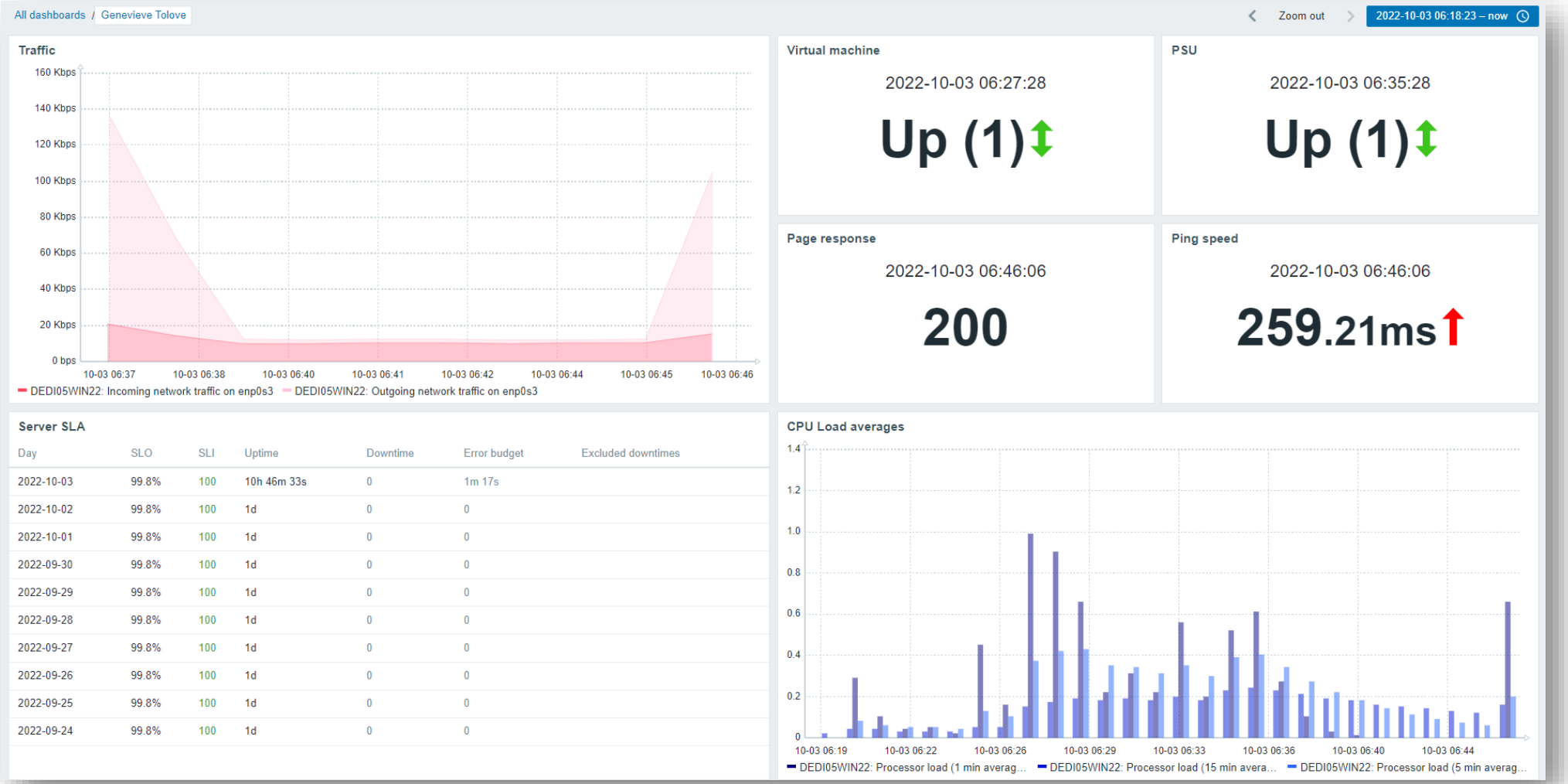
- Each customer will have their own overview or even some control





WITH PERSONALIZED DASHBOARDS

- Each customer will have their own overview or even some control



AND OF COURSE
NOTIFY OR EVEN RESOLVE

- Notify only directly involved participants or even resolve their issues

Name | Status: Any | Enabled | Disabled

Apply | Reset

Name ▲	Conditions	Operations	Status
Availability issues with Alan services	Value of tag *Customer* equals *Alan*	**Send message to users:** Alan (Alan Willbots) via all media **Send message to user groups:** Zabbix administrators via all media	Enabled
Availability issues with Genevieve services	Value of tag *Customer* equals *Genevieve*	**Send message to users:** Genevieve (Genevieve Tolove) via all media **Send message to user groups:** Zabbix administrators via all media	Enabled
Availability issues with Getaway services	Value of tag *Customer* equals *Getaway*	**Send message to users:** Getaway (Getaway Goington) via all media **Send message to user groups:** Zabbix administrators via all media **Run script "Automatic Reboot" on Zabbix server**	Enabled

USE BUSINESS SERVICE MONITORING

- Use full power of Zabbix
- Monitor your business performance
- Be informed on service state in real-time
- Provide customers with critical information about their business and services

10TH ZABBIX SUMMIT 2022

THANK YOU!