

BUSINESS SERVICE – MONITORING AND USE CASES





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BUSINESS SERVICES REFRESHER

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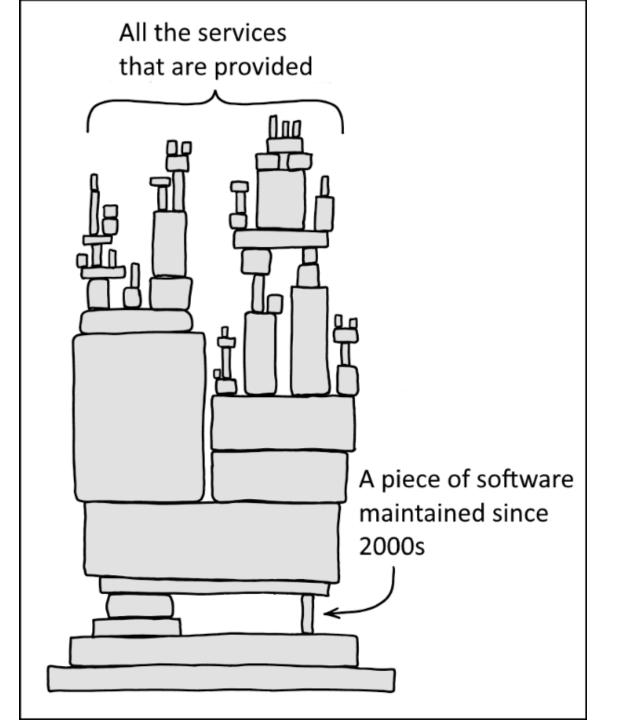
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A QUOTE

- maybe



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

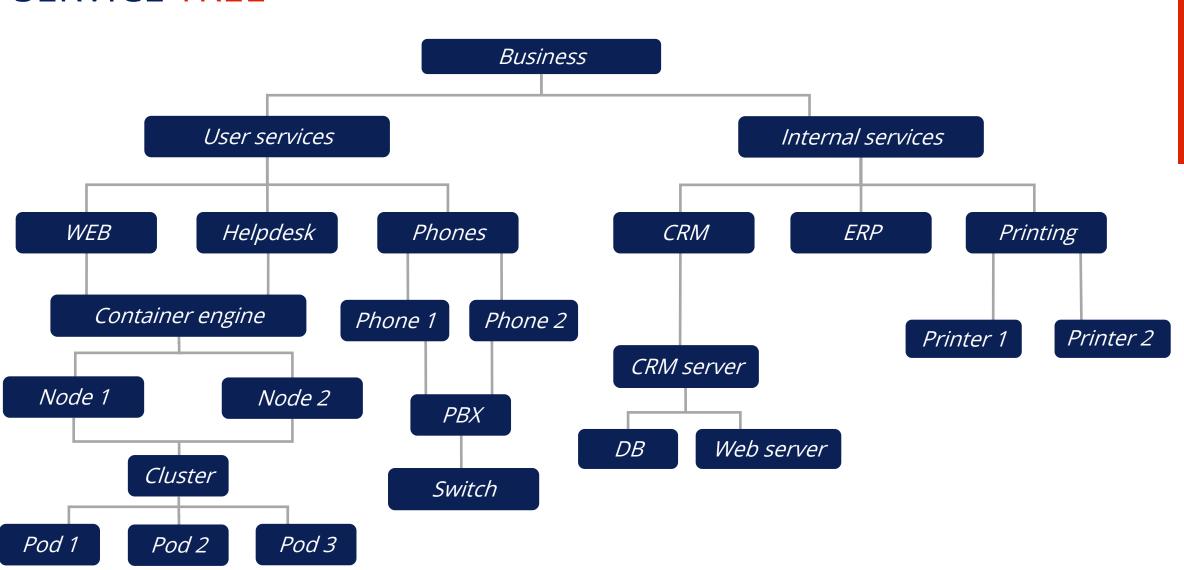


SERVICE DETAILS AND CONFIGURATION

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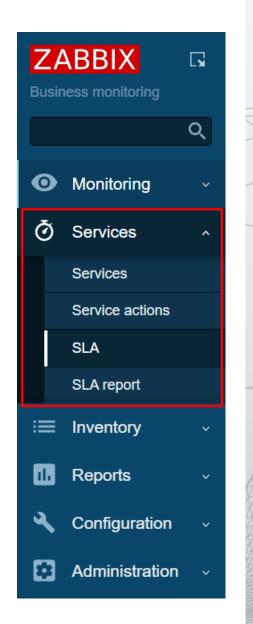


SERVICE TREE

SERVICES CONFIGURATION

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

*SLA – Service Level Agreement



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SERVICE VIEW AND CREATION

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

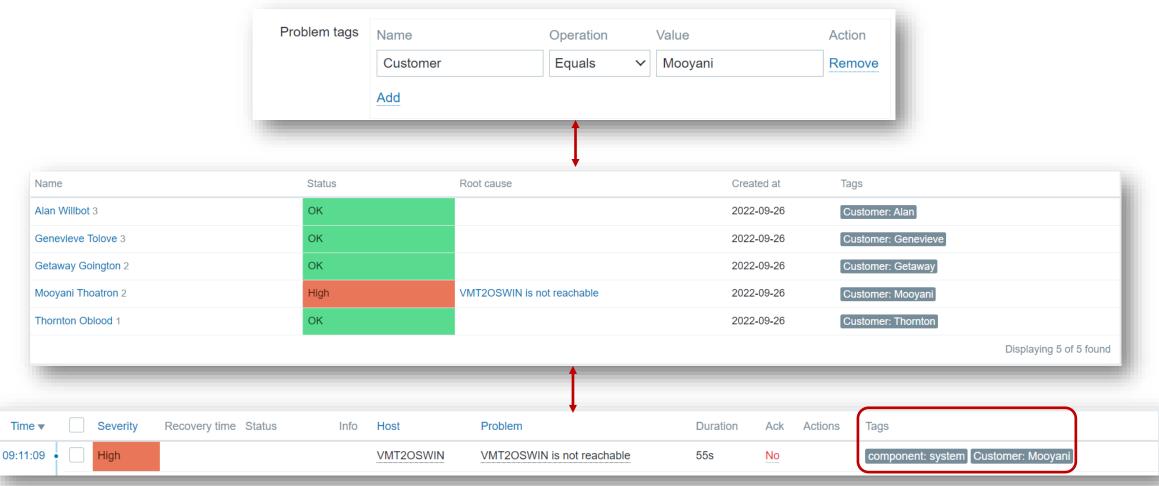
					INIQUE
≡ Services				? Create	service View Edit
All services / Hosting					Info (i) Filter T
Hosting					۷
Parent services:					
Status: OK					
SLA: Overall SLA: 100 2					
Tags: Business					
Name	Status	Root cause	Created at	Tags	
Customers 5	ок		2022-09-26	Customers	+ ∠ ×
Hosting Services 3	ОК		2022-09-26	Hosting: Services	$+ \angle \times$
Infrastructure monitoring services 3	ОК		2022-02-23	zabbix: monitoring	+ ∠ ×
					Displaying 3 of 3 found
0 selected Mass update Delete					Editing

Modo

SERVICE TAGS

⊘ Service has two types of tags:

⊘ The ones that link to problems



SERVICE TAGS

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

actions and Service permissions

Service	Tags 2	Child services		
	Tags	Name	Value	Action
		service	database	Remove
		service	CRM	Remove
		Add		
			ţ	
Name			Conditions	
		ervice failure	O and is a smooth	Unation
Share	d DB se		Service equals Value of tag <i>se</i>	rvice equals databa



SERVICE ACTIONS AND PERMISSIONS

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

ion Operations			
* Name	Monitoring	g service affected	
Type of calculation	And	✓ A and B	
Conditions	Label	Name	Action
	А	Service equals Infrastructure monitoring services	Remove
	В	Tag name equals <i>zabbix</i>	Remove
	Add		

Service permissions - to manage user/customer access

Read-write access to services	None	All	Service list			
Read-only access to services	None	All	Service list			
	Infrastruct	ture m	nonitoring ser	vices 🗙		S
	type here	to sea	arch			
Read-only access to services with tag	zabbix			value		



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

SLA				
SLA Excluded dov	vntimes 1			
* Name	Monitoring SLA			
* SLO	99.8 %			
Reporting period	Daily Weekly	Monthly Quart	erly Annually]
Time zone	(UTC+03:00) Europ	e/Riga	~	
Schedule	24x7 Custom]		
* Effective date	2022-06-22	===		
* Service tags	Name	Operation	Value	Action
	zabbix	Contains	✓ value	Remove
	Add			

REAL USE CASES



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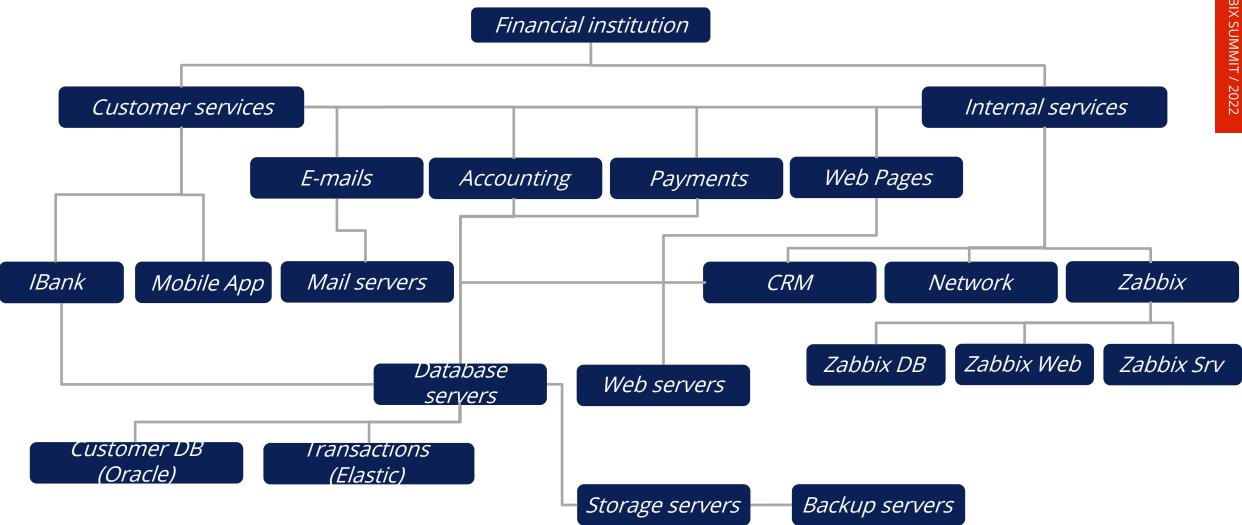
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REAL BUSINESS EXAMPLES

- ⊘ 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	1.0	
Financial institutio	n 15	ОК			2022-09-07	Service: Bank		
	Financial institution							∠
-	Parent services:							
	Status: OK							
	SLA: Every service S Tags: Service: Bank	SLA: 100 😰 Overall SLA: 10						
	ags. Service. Bally							-
	Name	Sta	tus Roo	t cause	Created at	Tags		
	AS/400	ОК			2022-09-07	Service: AS/400	+ 2	_ × _
	Accounting 2	Customer serv	ces					
		Parent services: Fina	ncial institution 15					
	Analytic systems	Status: OK]					
	Backup systems 1	SLA: Cust	tomer service SLA: 100 🔎 🛛	Every service SLA: 100 🙎				
	Customer services 6	Tags: Ser	vice: Customers					
	DB2 4	Name		Status	Root cause		Created at	Tags
	External Git 1	Accounting 2		ОК			2022-09-07	Service: Accounting Service: Customers
	Internal Services 9	_ ~						Service: Internal
	Microsoft services 4	E-Mail processing		ОК			2022-09-07	Service: Customers Service: Internal
	Network infrastructure 1	IBank		ОК			2022-09-07	Service: Customers
	Oracle systems 2	Mobile Notifications		ок			2022-09-07	Service: Customers
	Payment Services	Payment Services		ОК			2022-09-07	Service: Customers Service: Internal Service: Payment
		Web pages 3		ок			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

Service		All services / Financial institution			
	d services 8	Financial institution Parent services: Status:	Service Service Tags 1	Child services 8	? ×
Parent services	Financial institution × type here to search	SLA: Annual Overall SLA: 99.9812 Image: Provide SLA Tags: Service: Bank	Child services	Name Problem tags	Filter Reset
	Name Operation Valu tag Equals Valu	AS/400 Accounting 2		Accounting E-Mail processing Internal Applications Internal Network	Remove Remove Remove Remove
* Sort order (0->999) (Add 0 Most critical of child services	Analytic systems Backup systems 1 Customer services 6		Microsoft services Payment Services Web pages	Remove Remove Remove
Description		DB2 4 External Git 1 Internal Services 8		Zabbix monitoring Add Update	Remove Displaying 8 of 8 found
Created at		Microsoft services 4 Network infrastructure 1 Oracle systems 2 Payment Services	ок ок ок		2022-09-07 2022-09-07 2022-09-07
		Storage 1	ок		2022-09-07
		VMWare 2 Web pages 3	ок		2022-09-07 2022-09-07

SERVICES HIT DIFFERENTLY

Defining the impact of the service outage

Service Tags 1 Chi	Id services 15					Service						? X	X
* Name	Financial institution					Service	Tags 1 Child s	services					
Parent services	type here to search				Select		* Name	IBank					
Problem tags	Name	Operation Equals	Value value	Action Remove			Parent services	Customer services × type here to search				Select	
	Add						Problem tags	Name	Operation	Value	Action		
* Sort order (0->999)	0							Environment Type	Equals V	Production iBank	Remove		
Created at	2022-09-07							Add					
	 Advanced configuration 					* Sc	ort order (0->999)						
	Name Information - If at least 7% of	of child services ha	ve Warning status or above	Act e Edi	ion it Remove	Status ca	alculation rule 📋	Most critical of child services	S	~			
	<i>Warning</i> - If at least 15% of <i>Disaster</i> - If weight of child s	child services have	e Warning status or above	Ed	t Remove			2022-09-07					
	Add							 Advanced configuration 					129137
atus propagation rule	As is 🗸 🗸						Additional rules	Name Add		Action			And a
Weight	0					Status	propagation rule	Increase by]				
			Update	one Dele	ete Canc	el	Weight	1 2 3 4 5 50					

TO SLO AND BEYOND

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

					SLA				
					SLA Excluded dow	vntimes			
					* Name	Customer service SLA			
					* SLO	99.8 %			
					Reporting period	Daily Weekly Mon	thly Quarterly Ann	nually	
					Time zone	(UTC+03:00) Europe/Riga		\checkmark	
					Schedule	24x7 Custom			
				_	* Effective date	2022-09-07			
_	Name 🔺	SLO	Effective date	Reporting p	* Service tags	Name	Operation Valu	e Action	Status
_	Accounting SLA Annual Customer service SLA	90% 99.8%	2022-09-07	Daily		Service	Equals V Cu	stomers Remove	Enabled
_	Annual Overall SLA	99.8%	2022-09-07	Annually		Add	2 101	ou report	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 2	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

ervice 🔺	SLO				2022		
inancial 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	Service	SLO		2022-09-05	2022-09-06	2022-09-07	2022-09-08
Payment Services	Accounting	99.8%		100	100	100	100
Web pages	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							Accounting server	Exchange server	Acco	unting server	
Service		SLO	2022-09-07 2022-09-07	2022-09-00	2022-09-09	2022-09-11	2022-09-08 11:46:41	2022-09-08 11:46:41			08 11:46:41
Accounting		99.8%			I/A N//		Up (1)‡	Up (1)‡		Up	(1)
Customer services		99.8%	100 10	00 N	I/A N/A	A N/A					(-)
E-Mail processing		99.8%	100 1	00 N	I/A N//	A N/A					
Bank		99.8%	100 10	00 N	I/A N//	A N/A	iBank Response code	iBank response Time	Faile	d transactions	
Mobile Notifications		99.8%	100 1	00 N	I/A N//	A N/A	2022-09-08 11:46:19	2022-09-08 11:46:19		2022-09-0	08 11:46:22
Payment Services		99.8%	100 10	00 N	I/A N//	A N/A	2022-03-00 11.40.13	2022-03-00 11.40.13		2022-03-0	0 11.40.22
Web pages		99.8%	100 1	00 N	I/A N//	A N/A	200	216.65ms			n
Problems by severity	y						SLA report				
							Service	2022-08-14 - 08-28	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
0	0	0	3		0	0	Internal Applications	95% N/A	N/A	N/A	100
Disaster	High	Average	Warning	1	Information	Not classified	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 for

INCLUDING DIFFERENT PERMISSIONS

* Role	Accounting ×		Select								
User type	User					* Role	Management ×		Select		
Permissions	Group All groups	Type Hosts		Per Nor		User type	User				
	All groups	Templates		Nor		Permissions	Group All groups	Type Hosts		Permissions Read	
	Permissions can be assigned	for user groups only.					All groups	Templates		None	
	Access to UI elements					Permissions can be assigned for user groups only.					
Monitoring	Dashboard Problems Hosts	Dashboard Problems Hosts Latest data Maps]		Access to UI elements				
Services	Services Service actions SLA	report				Monitoring	Dashboard Problems Hosts	Latest data Maps			
Inventory	Overview Hosts					Services	Services Service actions SI	LA report			
Reports	Availability report Triggers top	100				Inventory	Overview Hosts		-		
	Access to services					Reports	Availability report Triggers to	p 100			
Read-write access to services	None						Access to services				
Read-only access to services	Accounting				Read-write acce	ess to services	None				
					Read-only acce	ess to services	Financial institution Accountin		IBank Payr	ment Services Mobile Notifications	

USERS SEE THE MOST IMPORTANT INFORMATION

Z	ABBIX « 🔊	SLA report									
	٩										
0	Monitoring ~			SLA	Customer service SLA ×	Select	From	YYYY-MM-DD			
Ō	Services ^			Service	type here to search	Select	То	YYYY-MM-DD			
	Services				Ap	Reset					
	SLA report					70			80		
						2022-09-07			2022-09-08		
		Service ▲	SLO 99.8%			100			100		
		Accounting Customer services	99.8%			100			100		_
		E-Mail processing	99.8%			100			100		
		IBank	99.8%			100			100	Contains ~	value
ភ	Support	Mobile Notifications	99.8%			100			100		
2	Integrations	Payment Services	99.8%			100			100		
	Help	Web pages	99.8%			100			100	Created at	Togo
·	Пор			_	Accounting 2	ОК	_		_	Created at 2022-09-07	Tags Service: Accounting
					Accounting 2	OK				2022-03-07	Service: Internal
				Accountin	Accounting server	ОК				2022-09-07	Service: Accounting
				Accountin	Accounting software	ОК				2022-09-07	Service: Accounting
		⊖ Support									

AND OF COURSE GET NOTIFIED

⊘ Notify only directly involved participants

Name ▲	Conditions	Operations
Notify Accounting	Service equals <i>Licenses</i> Service equals <i>Accounting server</i> Service equals <i>Accounting software</i> Service equals <i>Microsoft services</i> Service equals <i>Accounting</i>	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 <i>Customer services</i> Service equals <i>Web pages</i> Service equals <i>Payment Services</i> Service equals <i>IBank</i>	Send message to user groups: Zabbix administrators via all media Send message to user groups: Management via SMS
Notify Management	Service name contains <i>Payment</i> Service name contains <i>iBank</i> Value of tag <i>Service</i> equals <i>Customers</i>	Send message to user groups: Management via all media

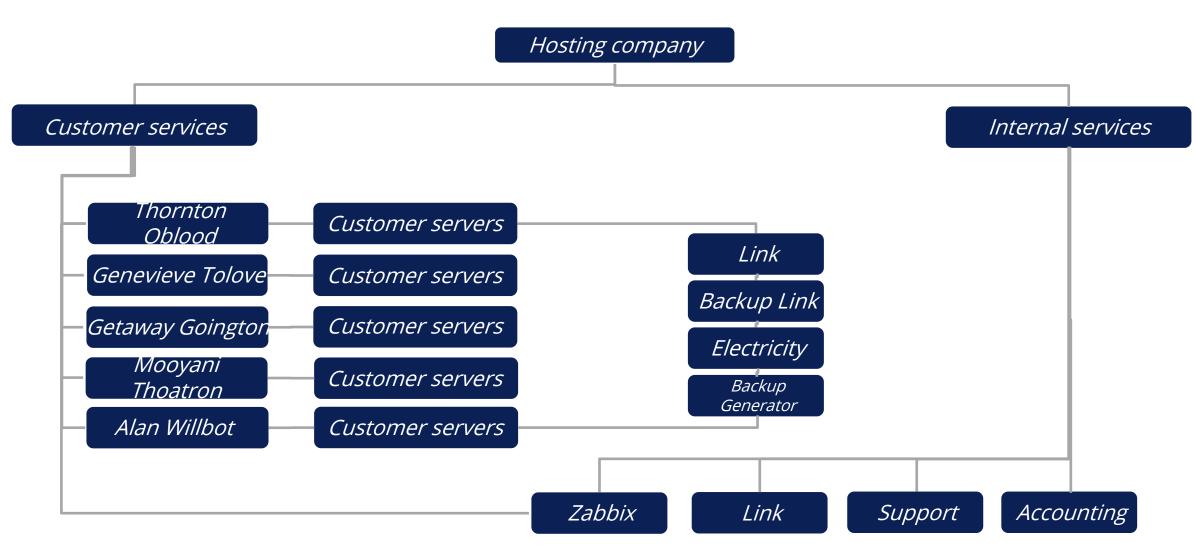


MANAGED SERVICE PROVIDER USE CASE EXAMPLE

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REAL HOSTING SERVICES TREE



ZABBIX SERVICE VIEW

Name				Status		Root cause			Created at	Tags		
Hosting 3	Name			ОК	Status		Root caus	e	2022-09-09	Bussines Created at	Tags	1
	Custom	ers 5			ОК					2022-09-09	Customers	
	Hosting	Servi	ices 3		ОК					2022-09-09	Hosting: Services	5
	Monitori	ing 4	Customers Parent services:									
			Status: SLA: Tags:	OK Customers: 100 2 Customers	Reporting pe	riod SLO SLI	Uptime	Downtime Error budget				
			Name		2022-09-09	99.8% 100	2h 38m 54	s 0 19s		Created at	t Tags	
			Alan Willbot 1			ок				2022-09-0	9 Custor	mer: Alan
			Genevieve Tolove	2		ОК				2022-09-0	9 Custor	mer: Genevieve
			Getaway Goingtor	ו 1		ок				2022-09-0	9 Custor	mer: Getaway
			Mooyani Thoatron	3		ок				2022-09-0	9 Custor	mer: Mooyani
			Thornton Oblood 2	2		ок				2022-09-0	9 Custor	mer: Thornton

SERVICES HIT DIFFERENTLY

O Defining the impact of the hosting service outage

Service	ice			? ×								
					Service					? X		
Service Tags 1 Chil	d services 3				Service Tags 1 Child services 1							
* Name	Hosting				* Name	e Alan	Willbot]		
Parent services	type here to search	e here to search			Parent services	Parent services Customers × type here to search			Select			
Problem tags	Name	Operation	Value	A		✓ A	dvanced configuration	7				
	tag	Equals 🗸 🗸	value	R	Status propagation rule	e As is	~					
	Add				Weight	t 20						
* Sort order (0->999)	0					s	ervice					?
Status calculation rule	Most critical of child services	s 🗸			-		Service Tags 1 Child	d services 2				
	 Advanced configuration 						* Name	Genevieve Tolove				
Additional rules	Name				Action		Parent services	Customers × type here to search				Select
	Disaster - If at least 30% of	child services have	Warning status or above		Edit Remove			Advanced configuration]			
	High - If weight of child serve	ices with <i>Warning</i> s	atatus or above is at least 20)	Edit Remove		Status propagation rule	As is 🗸				
	Add						Weight	20				
			Update Clor	ne	Delete Can	ncel						
									Upda	ate Clone	Delete	Cancel

SERVICES HIT DIFFERENTLY

O Defining the impact of the hosting service outage

Service				?	×						
Service Tags 1 Chil	d services 3			Service							?
* Name	Hosting			Service Tags 1	child services	5					
Parent services	type here to search			* Nan	e Custome	Customers					
Problem tags	Name	Operation	Value	Parent service		Hosting ×					
	tag	Equals 🗸	value		type here	e to search					
	Add			Problem tag	s Name		Operation	Value	Action		
* Sort order (0->999)	0				tag		Equals v	value	Remov	/e	
	 Advanced configuration 				Add						
Additional rules	Name			* Sort order (0->99	9) 0						
	High - If weight of child serve	ices with Warning	status or above is at least 40		🗸 Advan	nced configuration					
	Disaster - If at least 30% of	child services have	e <i>Warning</i> status or above	Additional rule	s Name				4	Action	
	Add				Warning	- If at least 20% of	child services hav	ve Average status or a	bove E	Edit Rem	iove
			Update	e	High - If a	at least 50% of child	d services have V	<i>Varning</i> status or abov	re E	Edit Rem	iove
					Disaster	- If at least 70% of	child services hav	ve <i>Warnina</i> status or a	bove E	Edit Rem	iove
								Update	Clone	Delete	Cano

INFORM EACH CUSTOMER INDIVIDUALLY

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

	* Role	Genevieve ×	Select						
	User type	User							
	Permissions	Group	уре	Permissions					
		All groups	losts	None					
	[Genevieve's servers	losts	Read					
		All groups	emplates	None					
		Permissions can be assigned for user groups on	ly.						
		Access to UI elements							
	Monitoring	Dashboard Problems Hosts Latest data Maps							
	Services	Services Service actions SLA report							
	Inventory	Overview Hosts							
	Reports	Availability report Triggers top 100							
		Access to services							
Read-write a	ccess to services	None							
Read-only a	ccess to services	Genevieve Tolove							
		Access to actions							
		Create and edit dashboards Create and edit maps	Add problem comme	nts Change severity					
			problems Execute s	Manage API tokens					
		Invoke "Execute now" on read-only hosts		I					
		Update Delete Cancel							



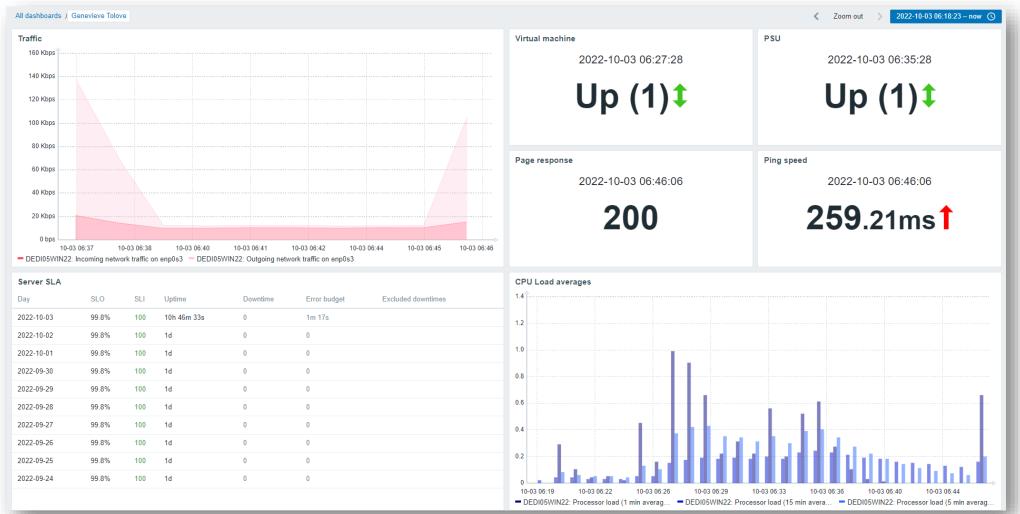
INFORM EACH CUSTOMER INDIVIDUALLY

Each customer will have their own overview or even some control

ZABBIX « 🗈	Services						
Business monitoring	All services / Getaway Goington						
	Getaway Goington						
Monitoring ~	Parent services:						
👌 Services 🛛 ^	Status: OK						
Services	SLA: Tags: Customer: Getaway						
≔ Inventory -	ousioner. Octaway						
	Name	Status	Root cause		Created at	Tags	
	Infrastructure monitoring services 3	ОК			2022-02-23	zabbix: monitoring	
	Primary Link	ок			2022-09-26	Service: Link	
		 Šervice 	es ^	Status:	High		
				SLA:			
		Services		Tags:	Customer: Mooyani		
		i≡ Invento	ory ~				
				Name		Status	Root cause
				Primary Link		ОК	
				Virtual machine		High	VMT2OSWIN is not reachable

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 <i>Customer</i> equals <i>Alan</i>	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

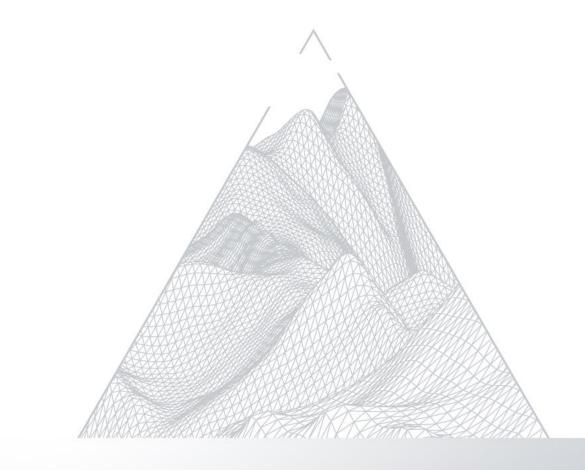
- ⊘ Use full power of Zabbix
- Monitor your business performance
- Be informed on service state in real-time
- Provide customers with critical information about their business and services





THANK YOU!

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