

Domen Šetar
IZUM Maribor

Nadzor okolja IT s sistemom Nagios



IZUM – predstavitev

- 7 držav
- 733 (433) vključenih knjižnic
- 9,48 mio (4,4) mio zapisov v vzajemnih bazah
- 30 mio zapisov v lokalnih bazah



IZUM – okolje IT

- strežniki: Proliant, Integrity,
- diskovna polja,
- ohišja s strežniškimi rezinami,
- virtualizacija: VMWare, HP Virtual Machine,
- operacijski sistemi: Windows, Linux, OpenVMS, HP-UX,
- stikala SAN,
- usmerjevalniki in stikala LAN,
- razporejevalniki obremenitve

Potreba po nadzoru

- Javni servis – delovanje 24 x 7.
- Obseg in raznolikost opreme.
- Preventiva – ključni faktor sistema obnove po katastrofi.

Zakaj Nagios?

- cena – brezplačno,
- fleksibilnost,
- posebnosti – OpenVMS,
- enostavno upravljanje,
- podpora – *Nagios Exchange*

Nagios strežnik

- ProLiant DL380G6
 - 16 x CPU
 - 24 GB pomnilnika
 - CentOS 6.3



Nagios - ogrodje

Monitoring

- ▶ Tactical Overview
- ▶ Host Detail
- ▶ Service Detail
- ▶ Hostgroup Overview
- ▶ Servicegroup Overview
- ▶ Status Map
- ▶ Service Problems
- ▶ Host Problems
- ▶ Network Outages
- ▶ Comments
- ▶ Downtime
- ▶ Process Info
- ▶ Performance Info
- ▶ Scheduling Queue

Reporting

- ▶ Trends
- ▶ Availability
- ▶ Alert Histogram
- ▶ Alert History
- ▶ Alert Summary
- ▶ Notifications
- ▶ Event Log

Advanced

- ▶ NAVODILA
- ▶ DCIM
- ▶ THRUK
- ▶ Visualization
- ▶ Performance reports
- ▶ Business Process Intelligence

Configuration

- ▶ View Config

Search ...

Tactical Monitoring Overview
 Last Updated: Thu May 15 15:55:30 CEST 2014
 Updated every 90 seconds
 Nagios® Core™ 3.4.1 - www.nagios.org
 Logged in as domen

Network Outages
0 Outages

Hosts

0 Down	0 Unreachable	212 Up	0 Pending
2 Disabled			

Services

8 Critical	33 Warning	3 Unknown	3495 Ok	5 Pending
7 Unhandled Problems	29 Unhandled Problems	2 Unhandled Problems	385 Disabled	5 Disabled
1 Disabled	1 Acknowledged	1 Disabled		
3 Disabled				

Monitoring Features

Flap Detection	Notifications	Event Handlers	Active Checks	Passive Checks
ENABLED	ENABLED	ENABLED	ENABLED	ENABLED
72 Services Disabled 17 Services Flapping 1 Host Disabled No Hosts Flapping	921 Services Disabled 17 Hosts Disabled	All Services Enabled All Hosts Enabled	395 Services Disabled 2 Hosts Disabled	4 Services Disabled All Hosts Enabled

Monitoring Performance

Service Check Execution Time: 0.00 / 53.46 / 1.751 sec
 Service Check Latency: 0.00 / 11.98 / 1.085 sec
 Host Check Execution Time: 0.02 / 4.10 / 3.766 sec
 Host Check Latency: 0.00 / 8.51 / 3.877 sec
 # Active Host / Service Checks: 210 / 3203
 # Passive Host / Service Checks: 2 / 341

Network Health

Host Health:

Service Health:

Nconf – konfiguracijski vmesnik

hostname	address	monitored by	OS			
ACEst	193.2.126.73	not monitored	Switch	✓	✗	⊕
ACEsc	193.2.126.72	not monitored	Switch	✓	✗	⊕
CLB1	193.2.126.74	Nadzorni center	Switch	✓	✗	⊕
CLB2	193.2.126.75	Nadzorni center	Switch	✓	✗	⊕
GSM vmesnik	10.10.0.6	Nadzorni center	Switch	✓	✗	⊕
scumfv	10.1.0.1	Nadzorni center	Switch	✓	✗	⊕
scumfv1	10.1.0.4	Nadzorni center	Switch	✓	✗	⊕
scumfv2	10.1.0.6	Nadzorni center	Switch	✓	✗	⊕
IZUMvGW	10.10.0.1	Nadzorni center	Switch	✓	✗	⊕
IZUM-mb	193.2.127.252	Nadzorni center	Switch	✓	✗	⊕
IZUM-mb1	193.2.127.245	Nadzorni center	Switch	✓	✗	⊕
IZUM-mb2	193.2.127.246	Nadzorni center	Switch	✓	✗	⊕
pikana	10.2.0.7	Nadzorni center	Switch	✓	✗	⊕
swidnc	193.2.126.201	Nadzorni center	Switch	✓	✗	⊕
swilo	10.1.1.159	Nadzorni center	Switch	✓	✗	⊕
swinra	10.1.0.5	Nadzorni center	Switch	✓	✗	⊕
swipic1	10.1.1.37	Nadzorni center	Switch	✓	✗	⊕
swiron	193.2.126.200	Nadzorni center	Switch	✓	✗	⊕
swipg1	10.1.1.22	Nadzorni center	Switch	✓	✗	⊕
swipg2	10.1.1.23	Nadzorni center	Switch	✓	✗	⊕

- Problem: konfiguriranje testov in ostalih gradnikov Nagiosa.

- Spletni obrazci za definiranje gradnikov Nagios
- pokrivajo več kot 98% vnosov
- Posebne zahteve – ročni vnos

Home

Basic Items

- Show History
- Show Host parent / child view
- Generate Nagios config
- Hosts Show / Add
- Hostgroups Show / Add
- Services Show / Add
- Servicegroups Show / Add

Additional Items

- OS Show / Add
- Contacts Show / Add
- Contactgroups Show / Add
- Checkcommands Show / Add
- Miscocommands Show / Add
- Timeperiods Show / Add

Advanced Items

- Host presets Show / Add
- Host templates Show / Add
- Service templates Show / Add
- Host deps. Show / Add
- Service deps. Show / Add

Nagios servers

- Central monitors Show / Add
- Distrib. collectors Show / Add

Administration

- Edit static config files
- Attributes Show / Add
- Classes Show / Add

Logout

Modify service

service name: check_interface_table_v3t

service enabled: yes

check command: check_interface_table_v3t

assigned to host: swinra

check period: 24x7

Process performance data: 1

notification period: 24x7

available items: Default_collector_server, Default_monitor_server, Default_timeperiod_interval_10, Default_timeperiod_interval_5, Default_timeperiod_interval_5_retry_3, freshness_24h, Timeperiod_interval_1

selected items: lan

contact groups: admins, Andrej, AndrejKo-group, Beno, Bibliografije, BladeCenters, BosljanB, Darjan, db Oracle, db SQL Server

notes: notes URL, action URL: /pnp4nagios/index.php?graph?host=\$HOSTNAME

max check attempts: number of times to retry checking

check interval: number of [min.] between regularly scheduled checks

event_handler: number of [min.] to wait before scheduling a re-check

retry interval: number of [min.] to wait before sending the first notification

first notification delay: number of [min.] to wait before re-notifying a contact

notification interval: do active checking of services

active checking: possible values: w,u,c,r,f,s,[n]

notification options: do nagios checking of services

nagios checking: service template(s) to inherit properties from, responsible group

Osnovni testi



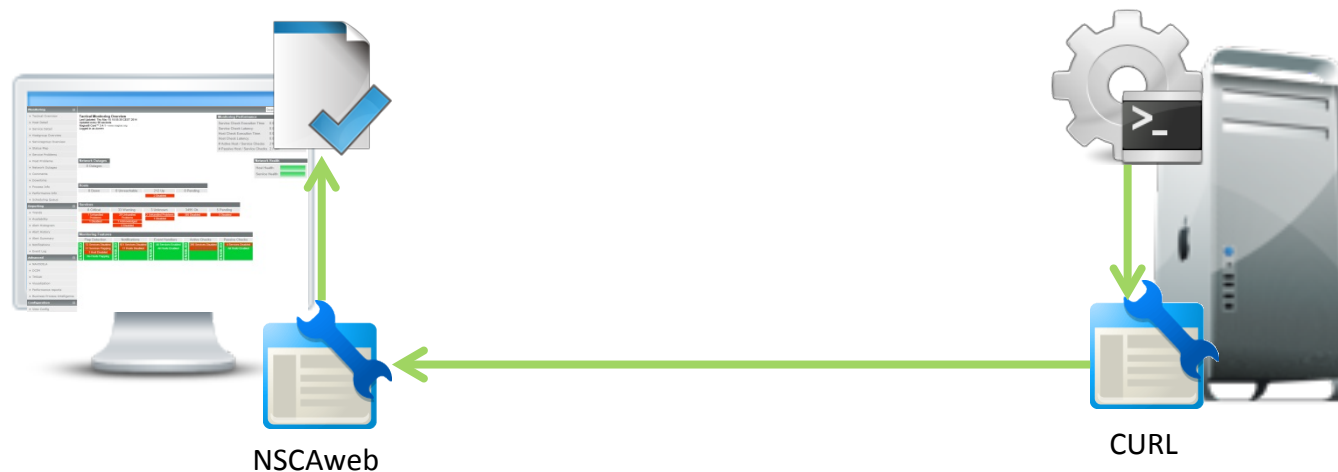
- Problem: zaznavanje naprav v Nagiosu.
- Testne skripte so na strežniku Nagios .
- Mnogo skript v osnovni instalaciji Nagios-a.
- Preverjajo (v glavnem) odzivnost servisov TCP/IP na nadzorovani napravi.
- Dodamo lahko lastne skripte.

Zunanji testi



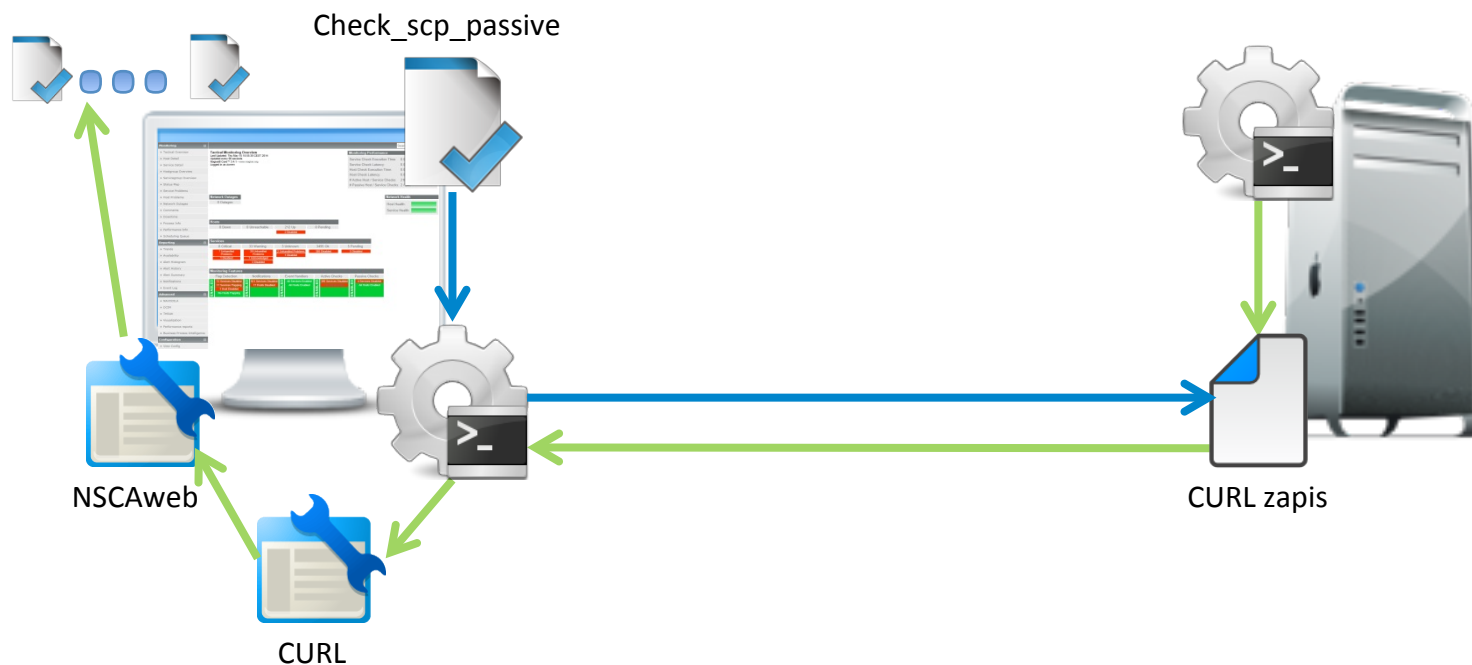
- Problem: posredovanje rezultatov testov, ki tečejo na nadzorovanem strežniku, v Nagios.
- Testne skripte tečejo na nadzorovanem strežniku.
- Na nadzorovanem strežniku je agent NRPE.
- Testne skripte na nadzorovanem strežniku kliče testna skripta check_nrpe na strežniku Nagios.

Pasivni testi



- Problem: posredovanje podatkov o uspešnosti občasnih, periodičnih procesov: dvig strežnika, varovanje podatkov, poslovne obdelave.
- CURL – nadzorovani strežnik posreduje podatke strežniku Nagios.
- NSCAweb – posreduje sprejete podatke v Nagios Core.

Pasivno-aktivni testi

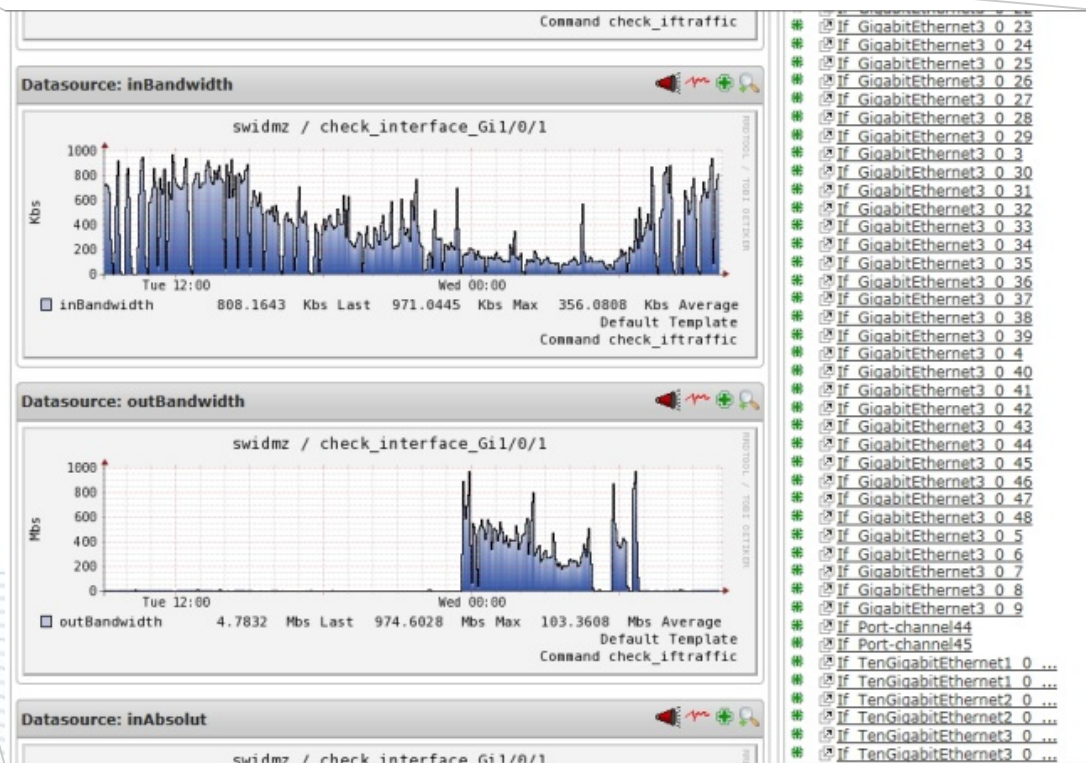


- Problem: pasivni testi iz zunanjega omrežja – požarni zid.
- Nadzorovani strežnik: rezultati se zapisujejo v datoteko.
- Nagios strežnik: testna skripta periodično bere datoteko in posreduje podatke v NSCAweb.

Grafična predstavitev podatkov

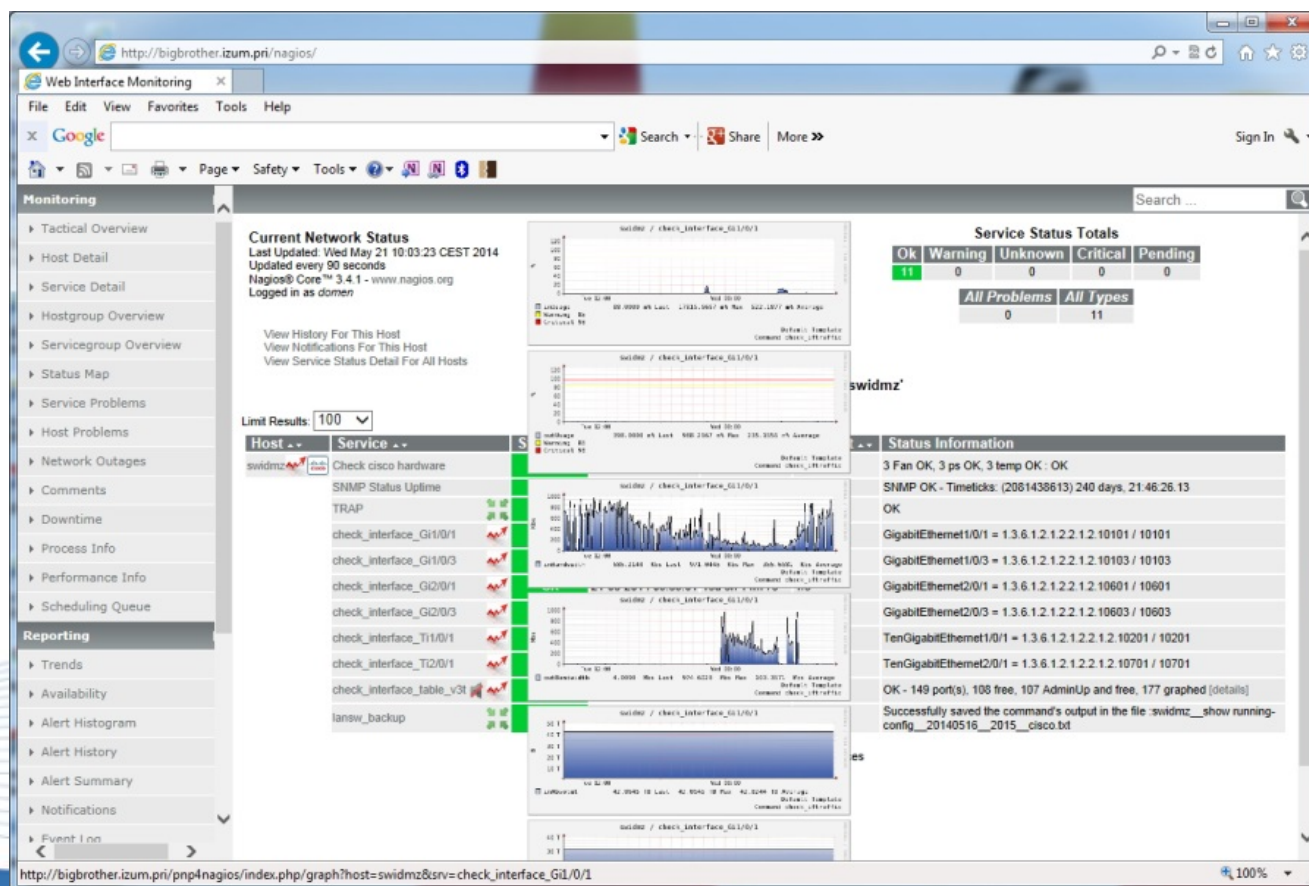
Host	Service	Status	Last Check	Duration	Attempt	Status Information
swidmz	Check cisco hardware	OK	21-05-2014 10:03:14	83d 21h 2m 57s	1/3	3 Fan OK, 3 ps OK, 3 temp OK : OK
	SNMP Status Uptime	OK	21-05-2014 10:04:19	83d 21h 3m 44s	1/3	SNMP OK - Timeticks: (2081468623) 240 days, 21-51:26.23
	TRAP	OK	08-03-2013 08:38:05	439d 0h 28m 19s	1/3	OK
	check_interface_Gi1/0/1	OK	21-05-2014 10:03:22	13d 3h 22m 6s	1/3	GigabitEthernet1/0/1 = 1.3.6.1.2.1.2.2.1.2.10101 / 10101

- Problem: grafična predstavitev podatkov iz testov.
- PNP4Nagios.
- Poljubni številčni podatek.
- Pogled v različnih časovnih intervalih.
- ZOOM za lažjo analizo.



Grafična predstavitev podatkov – predogled

- Problem: hiter pregled grafično predstavljenih podatkov.
- „action URL“ parameter v definiciji testa (tudi Nconf)



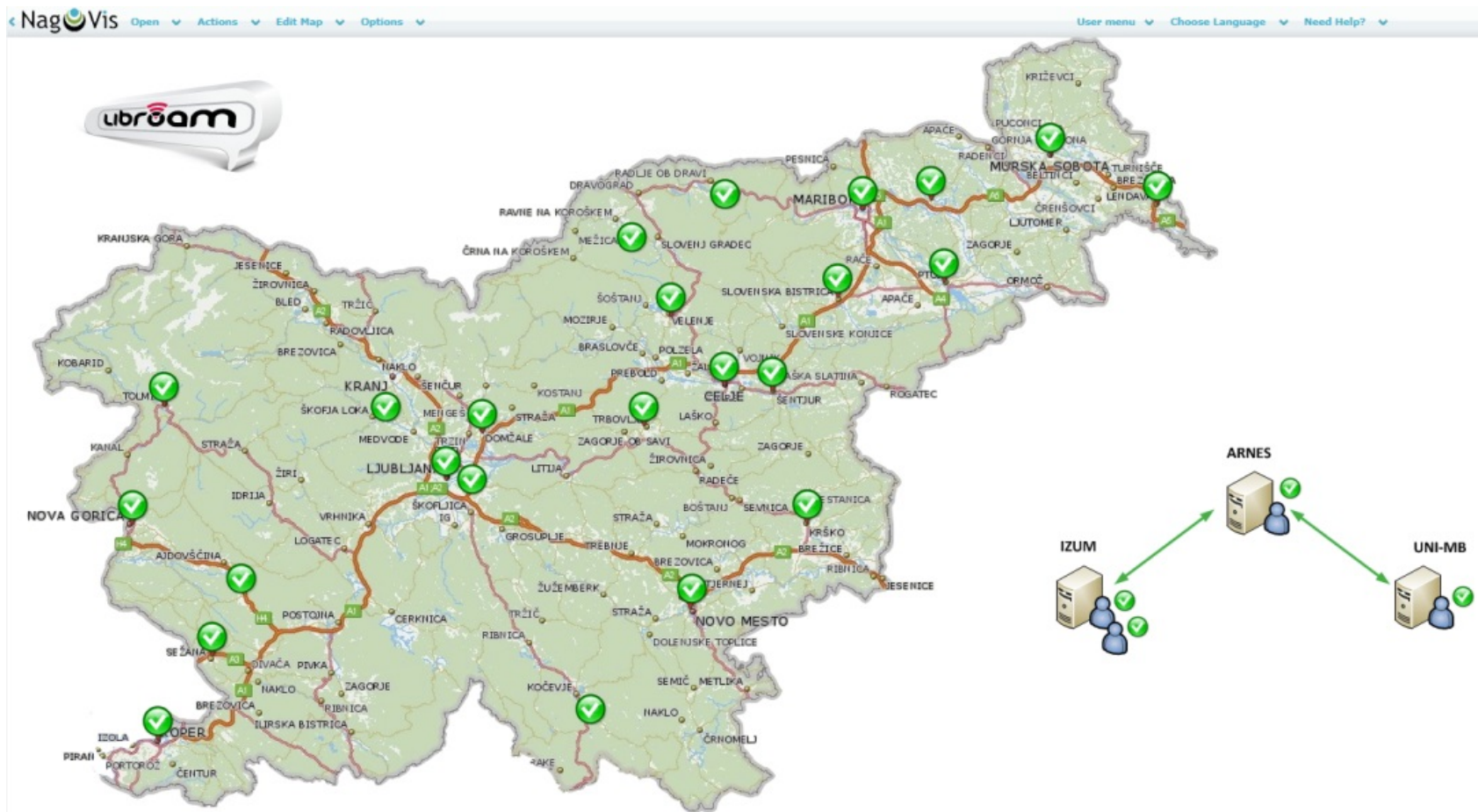
Vizualizacija

- Problem: „slika pove več kot sto besed“
- NagVis – modul za grafični prikaz testov.
- Lučke (statuse testov) lepimo na poljubno ozadje.

Vizualizacija – „reklamni“ pogled



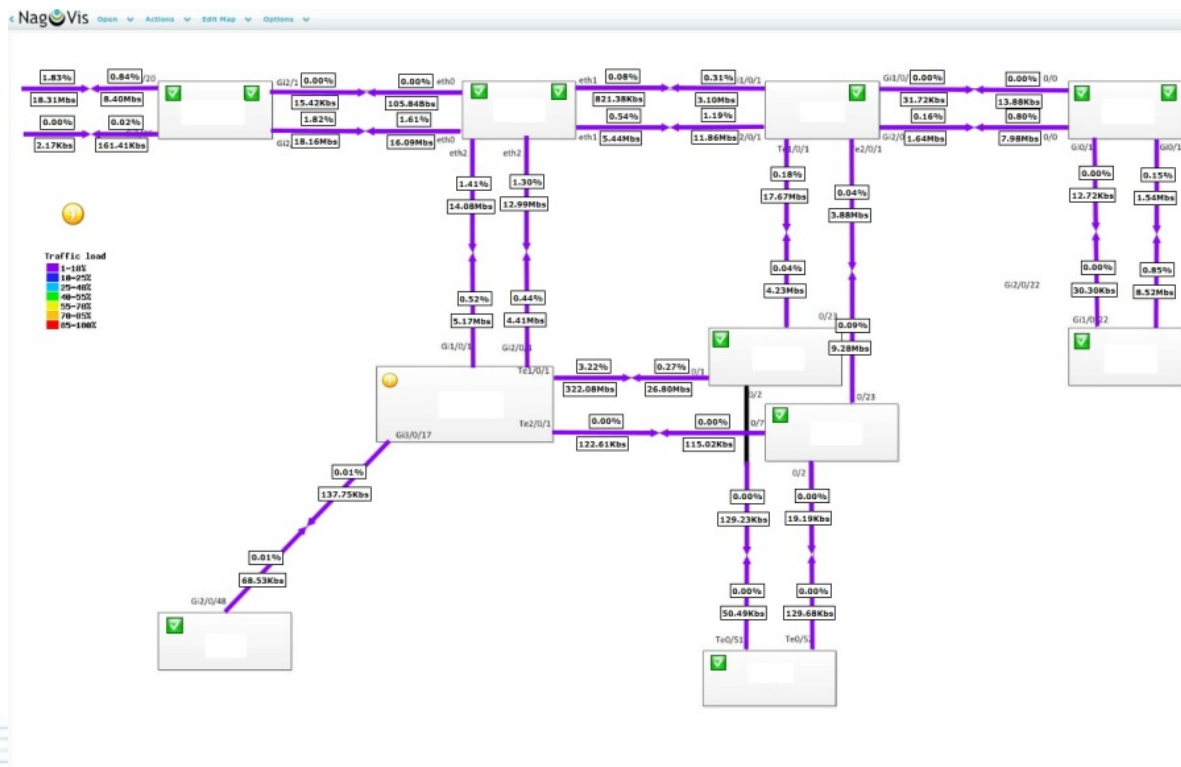
Vizualizacija – geografski pogled



Vizualizacija – „WeatherMap“

- Problem: dinamični podatki o prometu na mrežnih napravah v vizualiziranem okolju.

- WeatherMap – funkcionalnost v NagVis-u
- Nagios test `check_iftraffic64.pl`
- NagVis: Add line – line type



Poslovni pogled

- Problem: od česa je odvisno delovanje poslovnih procesov oz. servisov?
- Modul BPI.
- Drevesna struktura.
- Definicija odvisnosti testov v veji.

Essential group members are denoted with: **

High Priority

- Ok LIBROAM 0 problem(s) brezicno internetno omrežje Edit Delete
- Ok COBISS/OPAC infrastruktura 0 problem(s) OPAC - infrastrukturni pogled Edit Delete
- Ok Bibliografije 0 problem(s) Edit Delete
- Ok SICRIS 0 problem(s) SICRIS Edit Delete
- Ok Spletne strani IZUM 0 problem(s) Spletne strani IZUM-SI, COBISS-SI, COBISS-NET Edit Delete
- Ok Tuje baze podatkov 0 problem(s) Tuje baze podatkov Edit Delete
- Ok Metaiskalnik 0 problem(s) Metaiskalnik Edit Delete
- Ok Knjiznico nadomestilo 0 problem(s) Knjiznico nadomestilo Edit Delete
- Ok Najbolj brane knjige 0 problem(s) Najbolj brane knjige Edit Delete
- Ok Casopis OZ 0 problem(s) Casopis OZ Edit Delete
- Ok Portal izobrazevanje 0 problem(s) Edit Delete
- Ok Spletno ucenje 0 problem(s) Spletno ucenje Edit Delete
- Ok Tecaji, licence, izpiti 0 problem(s) Tecaji, licence, izpiti Edit Delete
- Ok Referencni servis Vprasaaj knjiznicarja 0 problem(s) Referencni servis Vprasaaj knjiznicarja Edit Delete
- Ok E-prirocniki 0 problem(s) E-prirocniki Edit Delete
- Ok COBISS2 0 problem(s) COBISS2 Edit Delete
- Ok COBISS3 0 problem(s) COBISS3 Edit Delete
- Ok Spletne strani knjiznic 0 problem(s) Spletne strani knjiznic Edit Delete
- Ok mCOBISS 0 problem(s) Edit Delete

Medium Priority

- Ok Oracle Databases 0 problem(s) Oracle Databases Edit Delete
- Critical OpenVMS backup 2 problem(s) Edit Delete
- Ok Dosegljivost omrežja IZUM 0 problem(s) Edit Delete
- Ok Kontrola aplikativnih procedur 0 problem(s) Edit Delete
- Ok COBISS/OPAC 0 problem(s) COBISS/OPAC - funkcionalni pogled Edit Delete
 - Ok** OPAC infrastruktura web na ELINKS 0 problem(s) Edit Delete
 - Ok IZUMW4 check_opac_cobias4_elinks HTTP OK: HTTP/1.1 200 OK - 18432 bytes in 1.533 second response time
 - Ok IZUMW5 check_opac_cobias5_elinks HTTP OK: HTTP/1.1 200 OK - 17339 bytes in 2.296 second response time
 - Ok IZUMW6 check_opac_cobias6_elinks HTTP OK: HTTP/1.1 200 OK - 17354 bytes in 1.837 second response time
 - Ok** OPAC infrastruktura web na COBIB 0 problem(s) Edit Delete
 - Ok IZUMW5 check_opac_cobias5_cobib HTTP OK: HTTP/1.1 200 OK - 12937 bytes in 1.521 second response time
 - Ok IZUMW4 check_opac_cobias4_cobib HTTP OK: HTTP/1.1 200 OK - 13415 bytes in 1.028 second response time
 - Ok IZUMW6 check_opac_cobias6_cobib HTTP OK: HTTP/1.1 200 OK - 12937 bytes in 1.080 second response time
 - Ok** OPAC infrastruktura web na lokalne baze 0 problem(s) Edit Delete
 - Ok OPAC infrastruktura web na COBISS 0 problem(s) Edit Delete
 - Ok IZUMW4 check_opac_cobias4_cobis HTTP OK: HTTP/1.1 200 OK - 35217 bytes in 2.240 second response time
 - Ok IZUMW5 check_opac_cobias5_cobis HTTP OK: HTTP/1.1 200 OK - 34212 bytes in 2.641 second response time
 - Ok IZUMW6 check_opac_cobias6_cobis HTTP OK: HTTP/1.1 200 OK - 34229 bytes in 2.673 second response time
 - Ok OPAC infrastruktura web na LJGW 0 problem(s) Edit Delete
 - Ok IZUMW4 check_opac_cobias4_ljgw HTTP OK: HTTP/1.1 200 OK - 18172 bytes in 1.188 second response time
 - Ok IZUMW5 check_opac_cobias5_ljgw HTTP OK: HTTP/1.1 200 OK - 17668 bytes in 2.104 second response time
 - Ok IZUMW6 check_opac_cobias6_ljgw HTTP OK: HTTP/1.1 200 OK - 17663 bytes in 1.831 second response time

Low Priority

 - Ok Backup konfiguracij 0 problem(s) backup konfiguracij opreme Edit Delete

Končni testi – E2E

- Problem: kako uporabniki vidijo naše storitve?
- Končni testi.
- http in ssh seje.
- Testi iz zunanjega omrežja.
- check_http
- WebInject
- Selenium + check_selenium

Service Status Details For Host 'E2E'

Host	Service	Status	Last Check	Duration	Attempt	Status Information
E2E	Bibliografje	OK	21-05-2014 11:40:01	0d 1h 39m 15s	1/3	W: OK, All tests OK in 12.965 sec
	CNS	OK	21-05-2014 11:48:59	326d 3h 14m 59s	1/3	Ok
	COBISS.OPAC service page	OK	21-05-2014 11:48:18	14d 8h 37m 16s	1/3	W: OK, All tests OK in 0.196 sec
	COBISS.AL LogCobissAgent	OK	21-05-2014 11:44:54	12d 8h 47m 13s	1/3	W: OK, All tests OK in 1.408 sec
	COBISS.BG LogCobissAgent	OK	21-05-2014 11:44:54	7d 14h 36m 14s	1/3	W: OK, All tests OK in 1.262 sec
	COBISS.SH LogCobissAgent	OK	21-05-2014 11:48:47	0d 9h 33m 31s	1/3	W: OK, All tests OK in 4.905 sec
	COBISS.CG LogCobissAgent	OK	21-05-2014 11:44:54	2d 9h 46m 50s	1/3	W: OK, All tests OK in 4.486 sec
	COBISS.MK LogCobissAgent	OK	21-05-2014 11:44:49	0d 0h 44m 27s	1/3	W: OK, All tests OK in 5.714 sec
	COBISS.NET domaca stran	OK	21-05-2014 11:49:02	1d 14h 43m 53s	1/3	W: OK, All tests OK in 0.157 sec
	COBISS.RS LogCobissAgent	OK	21-05-2014 11:44:01	2d 8h 47m 51s	1/3	W: OK, All tests OK in 1.365 sec
	COBISS.SI LogCobissAgent	OK	21-05-2014 11:44:54	1d 11h 27m 37s	1/3	W: OK, All tests OK in 12.206 sec
	COBISS.SI Z39.50	OK	21-05-2014 11:49:02	3d 17h 58m 39s	1/3	W: OK, All tests OK in 1.768 sec
	COBISS.SI domaca stran	OK	21-05-2014 11:44:54	27d 8h 46m 14s	1/3	W: OK, All tests OK in 0.363 sec
	COBISS.SR LogCobissAgent	OK	21-05-2014 11:49:47	0d 9h 43m 31s	1/3	W: OK, All tests OK in 5.957 sec
	COBISS2 iskanje COBISS	OK	21-05-2014 11:39:17	0d 8h 40m 13s	1/3	Ok: Login COBISSYST, Host COBISS.IZUM.SI, User NAGIOS, Local 2 hit(s) LastError
	COBISS2 iskanje LJGW	OK	21-05-2014 11:39:54	1d 8h 8m 10s	1/3	Ok: Login COBISSYST, Host LJGW.IZUM.SI, User NAGIOS, Local 0 hit(s) LastError
	Casopis OZ - dinamična postavitev	OK	21-05-2014 11:44:54	5d 4h 17m 53s	1/3	W: OK, All tests OK in 0.305 sec
	Casopis OZ - statična postavitev	OK	21-05-2014 11:44:54	75d 21h 26m 59s	1/3	W: OK, All tests OK in 0.287 sec
	E-mail sprejem oddaja	OK	21-05-2014 11:44:54	55d 14h 34m 5s	1/5	Ok, [mail log]
	E-pisrocnik	OK	21-05-2014 11:43:19	1d 14h 42m 53s	1/3	W: OK, All tests OK in 0.268 sec
	EZproxy Slovenja	OK	21-05-2014 11:44:54	30d 15h 8m 22s	1/3	HTTP OK: HTTP/1.1 200 OK - 868 bytes in 0.056 second response time
	EZproxy Slovenja via Selenium	OK	21-05-2014 11:44:24	58d 15h 33m 17s	1/3	OK: Processes completed after 7.748 of page loading.
	IZUM.SI domaca stran	OK	21-05-2014 11:44:54	56d 12h 26m 11s	1/3	W: OK, All tests OK in 0.204 sec
	Internet Connectivity	OK	21-05-2014 11:44:08	53d 22h 45m 46s	1/3	OK
	Knjižnično nadomestilo	OK	21-05-2014 11:48:18	2d 14h 0m 12s	1/3	W: OK, All tests OK in 0.203 sec
	LogC3Agent ALL [C3RAZVOJ]	OK	21-05-2014 11:47:35	0d 1h 28m 44s	1/3	OK: ReportTime(21.5.2014 11:23:39) is 24min old (max:75min) C2_MonitorAgent on C3RAZVOJ is Running OK: IZUMC3(31) IZUMC3-1(36) IZUMC3-2(42) IZUMC3-3(55) IZUMC3-4(52) IZUMC3-5(53) IZUMC3-6(54) IZUMC3-7(55) IZUMC3-8(56) IZUMC3-9(57) IZUMC3-10(58) IZUMC3-11(59) IZUMC3-12(60) IZUMC3-13(61) IZUMC3-14(62) IZUMC3-15(63) IZUMC3-16(64) IZUMC3-17(65) IZUMC3-18(66) IZUMC3-19(67) IZUMC3-20(68) IZUMC3-21(69) IZUMC3-22(70) IZUMC3-23(71) IZUMC3-24(72) IZUMC3-25(73) IZUMC3-26(74) IZUMC3-27(75) IZUMC3-28(76) IZUMC3-29(77) IZUMC3-30(78) IZUMC3-31(79) IZUMC3-32(80) IZUMC3-33(81) IZUMC3-34(82) IZUMC3-35(83) IZUMC3-36(84) IZUMC3-37(85) IZUMC3-38(86) IZUMC3-39(87) IZUMC3-40(88) IZUMC3-41(89) IZUMC3-42(90) IZUMC3-43(91) IZUMC3-44(92) IZUMC3-45(93) IZUMC3-46(94) IZUMC3-47(95) IZUMC3-48(96) IZUMC3-49(97) IZUMC3-50(98) IZUMC3-51(99) IZUMC3-52(100)
	LogC3Agent [C3RAZVOJ]	OK	21-05-2014 11:48:39	0d 12h 44m 30s	1/3	OK: v3_mak (IZUMC3) OK, v3_ukm (IZUMC3) OK, v3_mki (IZUMC3-1) OK, v3_sikmb (IZUMC3-1) OK, v3_sikpt (IZUMC3-5) OK, v3_sikkm (IZUMC3-6) OK, v3_pek1 (IZUMC3-6) OK, v3_skkf (IZUMC3-7) OK, v3_skkp (IZUMC3-7) OK, v3_skkq (IZUMC3-8) OK, v3_skkd (IZUMC3-9) OK, v3_skkf (IZUMC3-10) OK, v3_skkp (IZUMC3-11) OK, v3_skkq (IZUMC3-12) OK, v3_skkd (IZUMC3-13) OK, v3_skkp (IZUMC3-14) OK, v3_skkq (IZUMC3-15) OK, v3_skkd (IZUMC3-16) OK, v3_skkp (IZUMC3-17) OK, v3_skkq (IZUMC3-18) OK, v3_skkd (IZUMC3-19) OK, v3_skkp (IZUMC3-20) OK, v3_skkq (IZUMC3-21) OK, v3_skkd (IZUMC3-22) OK, v3_skkp (IZUMC3-23) OK, v3_skkq (IZUMC3-24) OK, v3_skkd (IZUMC3-25) OK, v3_skkp (IZUMC3-26) OK, v3_skkq (IZUMC3-27) OK, v3_skkd (IZUMC3-28) OK, v3_skkp (IZUMC3-29) OK, v3_skkq (IZUMC3-30) OK, v3_skkd (IZUMC3-31) OK, v3_skkp (IZUMC3-32) OK, v3_skkq (IZUMC3-33) OK, v3_skkd (IZUMC3-34) OK, v3_skkp (IZUMC3-35) OK, v3_skkq (IZUMC3-36) OK, v3_skkd (IZUMC3-37) OK, v3_skkp (IZUMC3-38) OK, v3_skkq (IZUMC3-39) OK, v3_skkd (IZUMC3-40) OK, v3_skkp (IZUMC3-41) OK, v3_skkq (IZUMC3-42) OK, v3_skkd (IZUMC3-43) OK, v3_skkp (IZUMC3-44) OK, v3_skkq (IZUMC3-45) OK, v3_skkd (IZUMC3-46) OK, v3_skkp (IZUMC3-47) OK, v3_skkq (IZUMC3-48) OK, v3_skkd (IZUMC3-49) OK, v3_skkp (IZUMC3-50) OK, v3_skkq (IZUMC3-51) OK, v3_skkd (IZUMC3-52) OK, v3_skkp (IZUMC3-53) OK, v3_skkq (IZUMC3-54) OK, v3_skkd (IZUMC3-55) OK, v3_skkp (IZUMC3-56) OK, v3_skkq (IZUMC3-57) OK, v3_skkd (IZUMC3-58) OK, v3_skkp (IZUMC3-59) OK, v3_skkq (IZUMC3-60) OK, v3_skkd (IZUMC3-61) OK, v3_skkp (IZUMC3-62) OK, v3_skkq (IZUMC3-63) OK, v3_skkd (IZUMC3-64) OK, v3_skkp (IZUMC3-65) OK, v3_skkq (IZUMC3-66) OK, v3_skkd (IZUMC3-67) OK, v3_skkp (IZUMC3-68) OK, v3_skkq (IZUMC3-69) OK, v3_skkd (IZUMC3-70) OK, v3_skkp (IZUMC3-71) OK, v3_skkq (IZUMC3-72) OK, v3_skkd (IZUMC3-73) OK, v3_skkp (IZUMC3-74) OK, v3_skkq (IZUMC3-75) OK, v3_skkd (IZUMC3-76) OK, v3_skkp (IZUMC3-77) OK, v3_skkq (IZUMC3-78) OK, v3_skkd (IZUMC3-79) OK, v3_skkp (IZUMC3-80) OK, v3_skkq (IZUMC3-81) OK, v3_skkd (IZUMC3-82) OK, v3_skkp (IZUMC3-83) OK, v3_skkq (IZUMC3-84) OK, v3_skkd (IZUMC3-85) OK, v3_skkp (IZUMC3-86) OK, v3_skkq (IZUMC3-87) OK, v3_skkd (IZUMC3-88) OK, v3_skkp (IZUMC3-89) OK, v3_skkq (IZUMC3-90) OK, v3_skkd (IZUMC3-91) OK, v3_skkp (IZUMC3-92) OK, v3_skkq (IZUMC3-93) OK, v3_skkd (IZUMC3-94) OK, v3_skkp (IZUMC3-95) OK, v3_skkq (IZUMC3-96) OK, v3_skkd (IZUMC3-97) OK, v3_skkp (IZUMC3-98) OK, v3_skkq (IZUMC3-99) OK, v3_skkd (IZUMC3-100) OK
	Mail4kili Web access	OK	21-05-2014 11:44:01	2d 15h 45m 15s	1/3	W: OK, All tests OK in 0.697 sec
	Metatrakirnik	OK	21-05-2014 11:41:18	0d 5h 29m 12s	1/3	W: OK, All tests OK in 1.604 sec
	Najbolj brane knjige	OK	21-05-2014 11:44:54	2d 14h 2m 8s	1/3	W: OK, All tests OK in 0.657 sec
	Portal izobrazevanje	OK	21-05-2014 11:43:19	1d 14h 42m 53s	1/3	W: OK, All tests OK in 0.235 sec
	Referenčni servis Vprašaj knjižničarja - e-pošta	OK	21-05-2014 11:44:54	75d 21h 26m 59s	1/3	W: OK, All tests OK in 0.264 sec
	Referenčni servis Vprašaj knjižničarja - klepat	OK	21-05-2014 11:44:54	75d 21h 26m 59s	1/3	W: OK, All tests OK in 0.26 sec
	SICRIS	OK	21-05-2014 11:44:54	2d 0h 27m 11s	1/3	W: OK, All tests OK in 0.695 sec
	Splošno učenje	OK	21-05-2014 11:43:19	1d 14h 42m 53s	1/3	W: OK, All tests OK in 0.307 sec
	Tečaj Science izpit	OK	21-05-2014 11:43:19	1d 14h 42m 53s	1/3	W: OK, All tests OK in 0.271 sec
	Tuje baze podatkov	OK	21-05-2014 11:44:54	64d 21h 52m 59s	1/3	W: OK, All tests OK in 0.275 sec
	mCOBISS iskanje	OK	21-05-2014 01:50:05	58d 2h 20m 9s	1/3	Test mCOBISS search: OK

- Vmesnik za dostop do podatkov Nagios z mnogimi dodatnimi funkcijami.

- Povezuje več strežnikov Nagios.
- Zaznamki (bookmarks).
- Poročila SLA.
- Panoramski pogled.
- Vmesnik za tablice in pametne telefone.
- ...

General

- ▶ Home
- ▶ Documentation
- ▶ Panorama View

Current Status

- ▶ Tactical Overview
- ▶ Map
- ▶ Hosts
- ▶ Services
- ▶ Host Groups
 - ▶ Summary (Grid)
- ▶ Service Groups
 - ▶ Summary (Grid)
- ▶ Mine Map
- ▶ Problems
 - ▶ Services (Unhandled)
 - ▶ Hosts (Unhandled)
 - ▶ Network Outages

Reports

- ▶ Availability
- ▶ Trends
- ▶ Alerts
 - ▶ History (Summary)
- ▶ Notifications
- ▶ Event Log
- ▶ Business Process
- ▶ Reporting

System

- ▶ Comments
- ▶ Downtimes

Thruk

Thruk Monitoring Webinterface
Version 1.82~2
February 21, 2014
[Check for updates](#)

[Read what's new in Thruk](#)

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Thruk catalyst Web Framework github SOCIAL CODING

Thruk – panoramski pogled

The screenshot displays a comprehensive Nagios monitoring dashboard. On the left, the 'Server Status' window provides a snapshot of system metrics:

Type	Value	Graph
CPU		
User	7.35%	
Nice	0.00%	
System	1.90%	
Wait IO	1.25%	
Load		
load 1	3.04	
load 5	1.82	
load 15	1.65	
Memory		
total	24018MB	
free	1722MB	
used	2567MB	
buffers	316MB	
cached	19413MB	

The central 'Nagvis Maps' window shows a network topology with nodes and links. A detailed view of a service is shown below the map:

Service (Last state refresh: 2014-05-21 14:06:06)

Host Name	SANSW9 [SANSW9]
Service Name	check_SANSW9_SANSW11_connection
Summary State	OK
Summary Output	FC port 0/14 = 1.3.6.1.2.1.2.2.1.2.1073741838 / 1073741838
Last Check	2014-05-21 14:01:01
Next Check	2014-05-21 14:06:01
Last State Change	2014-01-22 15:53:10

The bottom-left 'PNPGraph' window shows a bar chart for 'swidmz / check_interface_G1/0/1' with the following statistics:

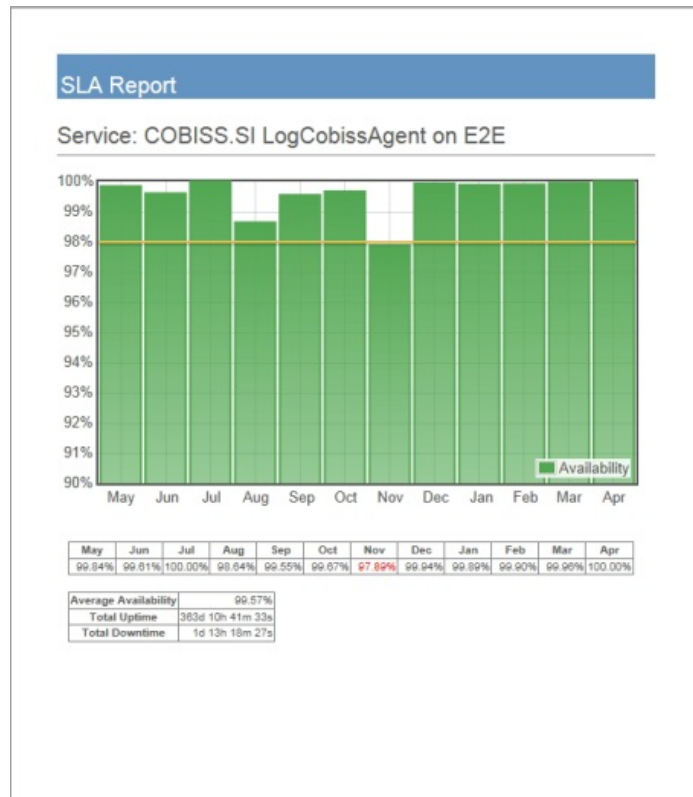
inBandwidth	147.7595	Mbs Last	
942.3264	Mbs Max	560.8031	Mbs Average

The right-hand side of the dashboard features a 'Service' table listing various monitored services and their status:

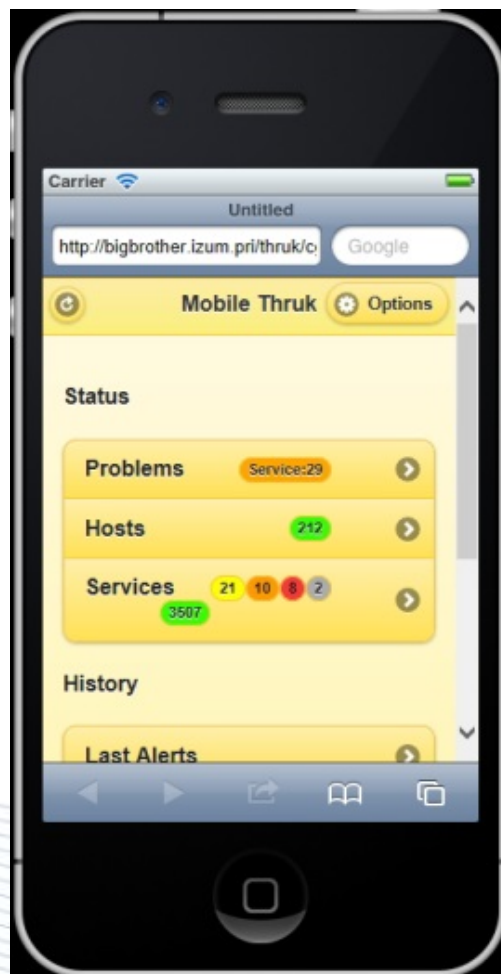
Service	Icons	Status
Bibliografije		OK
CNS		OK
COBISS OPAC service p		OK
COBISS.AL LogCobissA		OK
COBISS.BG LogCobissA		OK
COBISS.BH LogCobissA		OK
COBISS.CG LogCobissA		OK
COBISS.MK LogCobissA		OK
COBISS.NET domaca str		OK
COBISS.RS LogCobissA		OK
COBISS.SI LogCobissA		OK
COBISS.SI Z39.50		OK
COBISS.SI domaca strai		OK
COBISS.SR LogCobissA		OK
COBISS2 iskanje COBISI		OK
COBISS2 iskanje LJGV		OK
Casopis OZ - dinamicna		OK
Casopis OZ - staticka pc		OK
E-mail sprejem oddaja		OK
E-priročniki		OK
EZproxy Slovenija		OK
EZproxy Slovenija via St		OK
IZUM.SI domaca stran		OK
Internet Connectivity		OK
Knjižnicno nadomestilo		OK
LogC3Agent ALL [C3RA		OK

Thruk – poročilo SLA

- Generiranje prilagojenega poročila SLA.
- Možnost periodičnega proženja.
- Možnost pošiljanja preko e-pošte.



Thruk – mobilni vmesnik



Nagios & IPv6

- Nagios deluje tudi preko IPv6.

Service Status Details For Service Group 'IPv6+test'

Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
nadzorV6	EDI_ping6	OK	21-05-2014 12:00:39	3d 5h 0m 23s	1/3	PING OK - Packet loss = 0%, RTA = 1.08 ms
	MCOBISS_PUSH_ping6	OK	21-05-2014 12:03:04	13d 4h 2m 10s	1/3	PING OK - Packet loss = 0%, RTA = 1.40 ms
	MOBIZUM_ping6	OK	21-05-2014 12:03:04	1d 21h 30m 6s	1/3	PING OK - Packet loss = 0%, RTA = 1.26 ms
	NS1_ping6	OK	21-05-2014 12:03:04	45d 3h 25m 29s	1/3	PING OK - Packet loss = 0%, RTA = 2.75 ms
	NS2_ping6	OK	21-05-2014 12:03:04	25d 12h 40m 34s	1/3	PING OK - Packet loss = 0%, RTA = 0.82 ms
	ORACLE1_ping6	OK	21-05-2014 12:03:04	26d 3h 34m 38s	1/3	PING OK - Packet loss = 0%, RTA = 0.61 ms
	ORACLE2_ping6	OK	21-05-2014 12:03:04	26d 3h 37m 20s	1/3	PING OK - Packet loss = 0%, RTA = 2.29 ms
	SERVISNESTRANI_ping6	OK	21-05-2014 12:03:04	62d 11h 20m 22s	1/3	PING OK - Packet loss = 0%, RTA = 1.85 ms
	SPLET04_ping6	OK	21-05-2014 12:03:04	71d 11h 19m 14s	1/3	PING OK - Packet loss = 0%, RTA = 1.04 ms
	WEB4SIK_ping6	OK	21-05-2014 12:03:04	34d 11h 24m 25s	1/3	PING OK - Packet loss = 0%, RTA = 2.00 ms
	WWW.IZUM.SI_ping6	OK	21-05-2014 12:03:04	25d 12h 41m 4s	1/3	PING OK - Packet loss = 0%, RTA = 0.71 ms

Results 1 - 11 of 11 Matching Services

Varnostne kopije konfiguracij

- Nagios lahko uporabimo tudi za periodično shranjevanje konfiguracij naprav v omrežju: stikala SAN, usmerjevalniki in stikala LAN, diskovna polja, ...

Service State Information

Current Status:	OK (for 15d 21h 48m 49s)
Status Information:	Successfully saved the command's output in the file :swilo__show running-config__20140516__2016__cisco.txt
Performance Data:	
Current Attempt:	1/3 (HARD state)
Last Check Time:	16-05-2014 20:16:08
Check Type:	PASSIVE
Check Latency / Duration:	N/A / 0.000 seconds
Next Scheduled Check:	N/A
Last State Change:	05-05-2014 14:20:57
Last Notification:	N/A (notification 0)
Is This Service Flapping?	NO (0.00% state change)
In Scheduled Downtime?	NO
Last Update:	21-05-2014 12:09:46 (0d 0h 0m 0s ago)
Active Checks:	DISABLED
Passive Checks:	ENABLED
Obsessing:	ENABLED
Notifications:	ENABLED
Event Handler:	ENABLED
Flap Detection:	ENABLED

Nagios – trenutna raba

- 212 nadzorovanih naprav,
- 3548 definiranih testov,
- ~ 35 izvedenih testov vsako minuto,
- 27 nadzorovanih zunanjih lokacij

Nagios – pridobitve

- Osrednje organiziran in upravljan nadzor.
- Hitra zaznava težav.
- Pomoč pri lokalizaciji problema.
- Preventivna aktivnost.
- Zgodovinski podatki za analizo in načrtovanje.
- Poročila o delovanju in dostopnosti.

Nagios – težave

- Prava mera in organizacija testov.
- Dobra organizacija obveščanja.
- Ozaveščanje sodelavcev o koristnosti uporabe Nagiosa.

Hvala za pozornost!