

Monitoring počítačové sítě

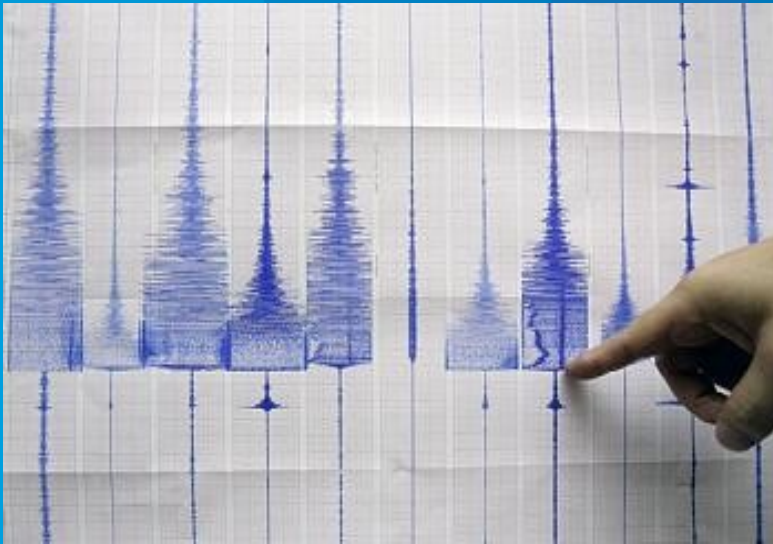
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Proč monitoring?

- Proaktivita
- Historická data



Internet Control Message Protocol



Monitorovací systém

- Konfigurace
 - Popis toho co a jakým způsobem se monitoruje
- Plánovač
 - Je ten, který se stará o to, aby test probíhal v naplánovaných časech
- Úložiště informací
- Modul/plug-in
 - Kus kódu, který umí monitorovat danou vlastnost

Funkce monitorovacího systému

- Informace o aktuálním stavu
- Reporting incidentů
- Evidence historie incidentů
- Plánování odstávek
- Eskalace
- Zobrazování reportů

Open-source monitorovací systémy

- Nagios – Icinga



- Zenoss



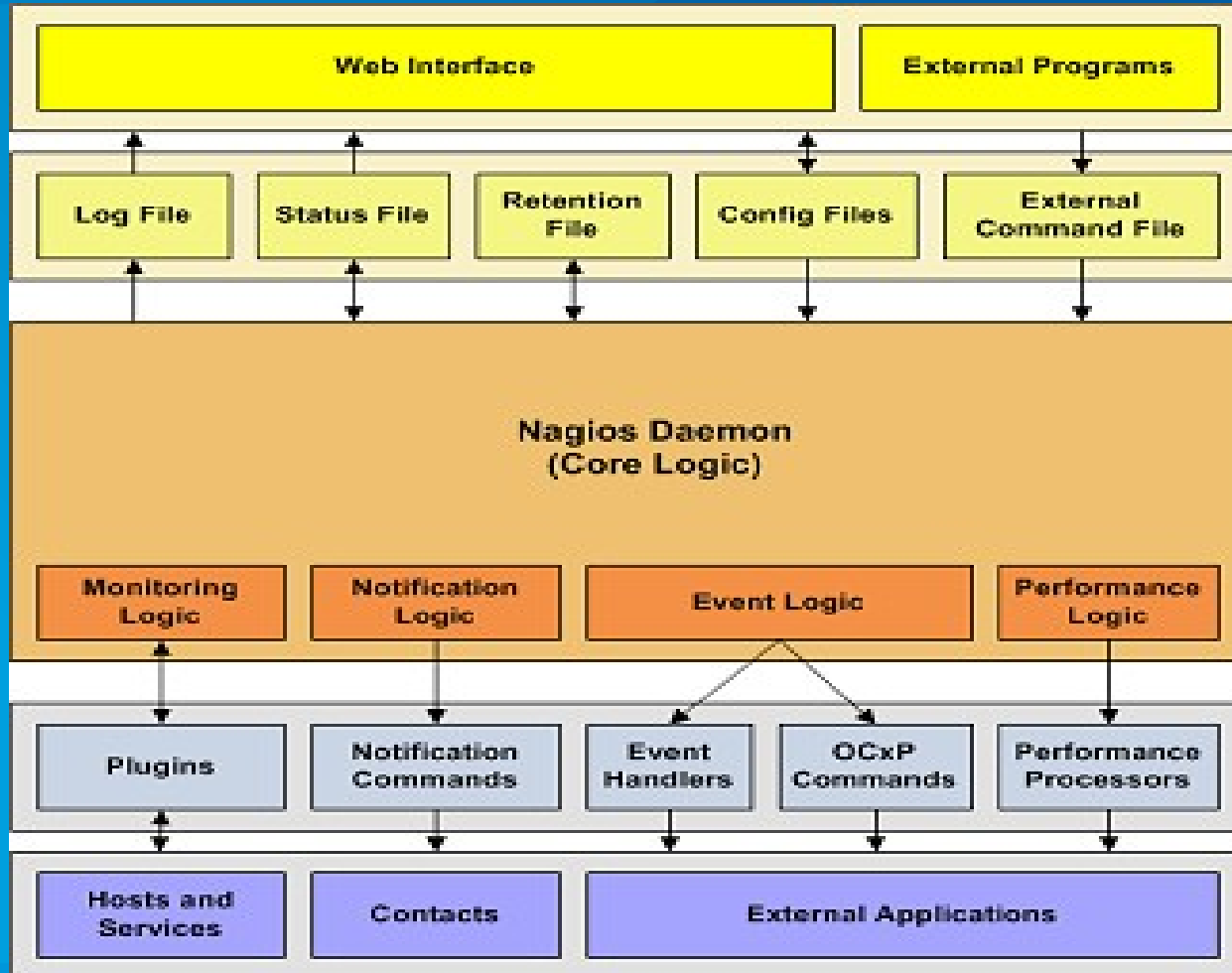
- Zabbix

ZABBIX

OSS systém Nagios

- Vznik v roce 1999, Ethan Galstad
- Stabilní verze 3.2.0
- Dnes spíše komerční
- Nekomerční mutace – Icinga (vznik 2009)
- Používá různé protokoly

Jak funguje Nagios



Ngios Tactical overview

Tactical Monitoring Overview

Last Updated: Sat Mar 6 14:02:33 CET 2010
Updated every 90 seconds
Nagios® Core™ 3.2.0 - www.nagios.org
Logged in as *nagiosadmin*

Monitoring Performance

Service Check Execution Time: 0.02 / 60.01 / 0.451 sec
Service Check Latency: 0.00 / 17.59 / 2.193 sec
Host Check Execution Time: 0.02 / 10.05 / 0.243 sec
Host Check Latency: 0.00 / 12.78 / 2.749 sec
Active Host / Service Checks: 209 / 3646
Passive Host / Service Checks: 11 / 131



Network Outages

3 Outages

3 Blocking Outages

Network Health

Host Health:

Service Health:

Hosts

3 Down

3 Unreachable

214 Up

0 Pending

3 Unhandled Problems

3 Disabled

8 Disabled

Services

68 Critical

82 Warning

2 Unknown

3625 Ok

0 Pending

56 Unhandled Problems

80 Unhandled Problems

2 Unhandled Problems

121 Disabled

7 on Problem Hosts

8 Disabled

Monitoring Features

Flap Detection

Enabled

All Services Enabled
8 Services Flapping
All Hosts Enabled
No Hosts Flapping

Notifications

Enabled

800 Services Disabled
16 Hosts Disabled

Event Handlers

Enabled

All Services Enabled
All Hosts Enabled

Active Checks

Enabled

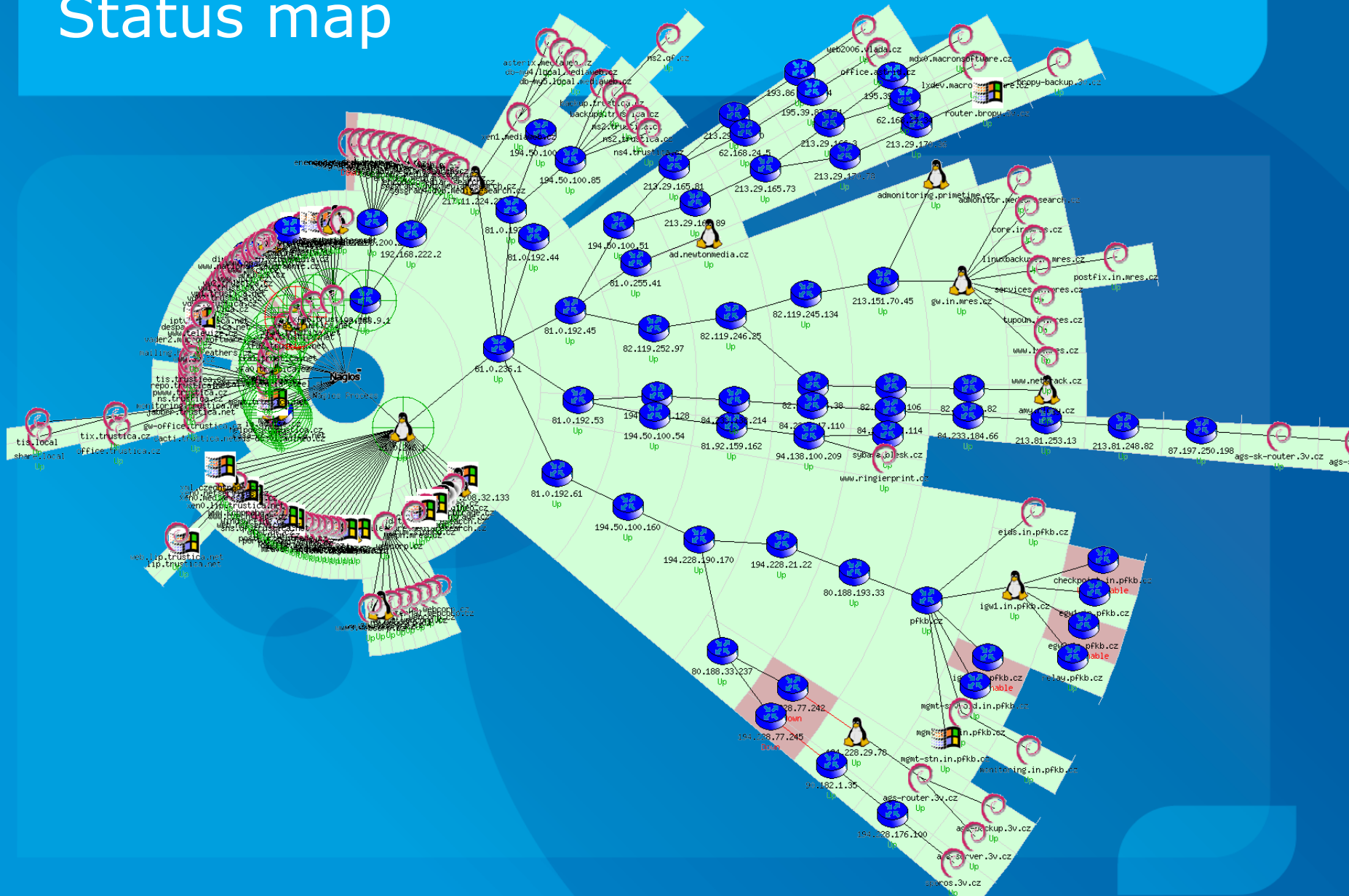
131 Services Disabled
11 Hosts Disabled

Passive Checks

Enabled

All Services Enabled
All Hosts Enabled

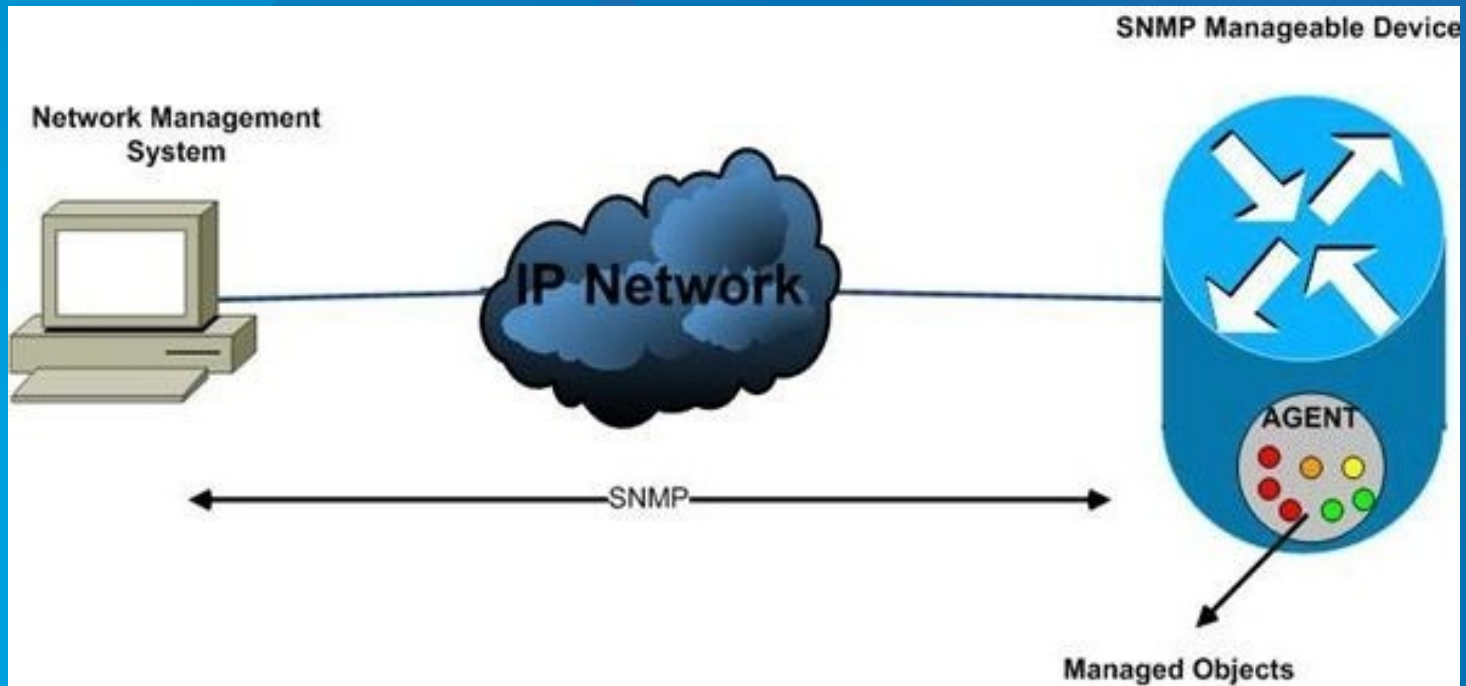
Status map



Nagios plug-in

- Aplikace napsaná v libovolném jazyce
- Nagiosu předává svůj návratový kód
 - 0 – OK
 - 1 – WARNING
 - 2 – CRITICAL
 - 3 – UNKNOWN
- ... a několik řádek výstupu
 - STATUS OK: 53% FREE SPACE

Simple Network Management Protocol



Windows

A fatal exception 0E has occurred at 0028:C0011E36 in UXD UMM(01) + 00010E36. The current application will be terminated.

- * Press any key to terminate the current application.
- * Press CTRL+ALT+DEL again to restart your computer. You will lose any unsaved information in all applications.

Press any key to continue _

Windows

A fatal exception 0E has occurred at 0020:00000000. In the window:
000059F0. The current application will be terminated.

- Press any key to terminate the current application.
- Press CTRL+ALT+DEL to restart your computer. You will lose any unsaved information in all applications.

Press any key to continue -

Zenoss

- Community
- Enterprise



Zenoss Dashboard

The screenshot displays the Zenoss CORE dashboard. At the top left is the Zenoss logo and 'CORE' text. On the top right, there is a search bar, user 'admin', and links for 'Preferences', 'Logout', and 'Help'. Below the header, a navigation sidebar on the left lists 'Main Views' (Dashboard, Event Console, Device List, Networks), 'Classes' (Events, Devices, Services, Processes, Products), and 'Browse By' (Systems, Groups). The main content area features three tables: 'Systems Summary', 'Device Issues', and 'Zenoss Issues'. The 'Systems Summary' table shows various system categories with counts for Critical, Error, Warn, Info, and Debug. The 'Device Issues' table lists specific devices and their issue counts. The 'Zenoss Issues' table shows details for specific issues on devices, including the component and duration in seconds.

Zenoss CORE admin Preferences Logout Help

Last Updated: 2007-06-08 17:49:06

System	Critical	Error	Warn	Info	Debug
/BuildBot	0/1	0/2	0/0	0/0	0/0
/CRM	0/0	0/0	0/0	0/0	0/0
/Development	0/1	0/5	0/0	0/0	0/0
/Email	0/0	0/1	0/0	0/0	0/0
/Financials	0/0	0/0	0/0	0/0	0/0
/HR	0/0	0/0	0/0	0/0	0/0
/Intranet	0/0	0/0	0/0	0/0	0/0
/Management	0/0	1/2	0/0	0/0	0/0
/Network	0/0	0/0	0/0	0/0	0/0
/Services	0/0	0/0	0/0	0/0	0/0
/Testing	0/1	0/0	0/0	0/0	0/3
/Web	0/0	0/0	0/0	0/0	0/0

Name	Acked By	Critical	Error
build.zenoss.loc		0/0	0/1
fc6.zenoss.loc		0/1	0/2
mail.zenoss.com		0/0	0/1
tlide.zenoss.loc		0/0	0/2
zenoss.zenoss.loc	edahl	0/0	1/2
zenoss2.zenoss.loc		0/0	0/2
sunny.zenoss.loc		0/1	0/2
vmw2k.zenoss.loc		0/1	0/0

Device	Component	Seconds
zenoss2.zenoss.loc	zenprocess	9208
zenoss2.zenoss.loc	zenwinmodeler	9141