

Icinga Einführung

19.11.2012 | Thomas-Krenn.AG

 **NETWAYS**®

10 **JAHRE** 

Philipp Deneu
www.netways.de

KURZVORSTELLUNG

DAS ICINGA PROJEKT

ARCHITEKTUR

ENTERPRISE FEATURES

MONITORING

ADDONS

FRAGEN UND ANTWORTEN

NETWAYS®

KURZVORSTELLUNG

10 **JAHRE** **TK**
SERVER

KURZVORSTELLUNG

- Philipp Deneu
- Senior Consultant / Trainer
- Themengebiete
 - ▶ Open Source Systems Management
 - ▶ Open Source Data Center Solutions



Vorstellung NETWAYS

- Firmengründung 1995
- Open Source seit 1997
- Nagios / Netsaint seit 1999
- GmbH seit 2001

- 36 festangestellte Mitarbeiter

- Spezialisierung in den Bereichen
Open Source Systems Management und
Open Source Datacenter Solutions

NETWAYS Leistungen

OPEN SOURCE

SYSTEMS MANAGEMENT

- Monitoring & Reporting
- Configuration Management
- Service Management
- Knowledge Management
- Backup & Recovery

DATA CENTER

- High Availability & Clustering
- Cloud Computing
- Load Balancing
- Virtualization
- Database Management

MANAGED SERVICES

MONITORING HARDWARE

CONFERENCES

Communityarbeit



www.netways.org

- NETWAYS Addons
- NETWAYS Plugins



www.icinga.org

- Development
- Hosting



www.monitoringexchange.org

- Icinga / Nagios Addons und Plugins
- ~2000 Projekte

NETWAYS Konferenzen



Open Source Monitoring Conference 23. – 24. Oktober 2013

- Veranstalter der Open Source Monitoring Conference
- Teilnehmer: 145 (06) 220 (07) 250 (08) 260 (09) 250(10) 260 (11) 260 (12)
- 2 Tracks mit Vorträgen & Workshops



Open Source Data Center Conference 17. – 18. April 2013

- Veranstalter der Open Source Datacenter Conference
- Teilnehmer:
70 (09) 80 (10) 100 (11) 100 (12)
- 2 Tracks mit Vorträgen & Workshops

NETWAYS Kunden

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Das Projekt Icinga

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Icinga

- Community Fork von Nagios
- Reines Open Source Projekt ohne kommerzielle Komponenten
- Abwärtskompatibel zu Nagios
 - ▶ Plugins
 - ▶ Konfigurationssyntax
 - ▶ AddOns
 - ▶ Datenbankschema (teilweise)

Icinga Statistiken

- Fork von Nagios im April 2009
- Über 199.000 Downloads bis heute
- Unterschiedliche Teams mit eigenem Verantwortungsbereich
 - ▶ Icinga Core
 - ▶ Icinga Web
 - ▶ Icinga Reporting
 - ▶ Icinga Marketing
 - ▶ Icinga Q&A
- ca. 30 "aktive" Mitglieder im Team
 - ▶ dezentralisierte Entwicklung

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Enterprise Features

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Enterprise Webinterface I

- Basiert auf modernen und flexiblen Frameworks
 - ▶ MVC Framework Agavi und Javascript Framework ExtJS
- Transparente Integration von Erweiterungen
 - ▶ Menüintegration
 - ▶ Berechtigungsmodell
- Unabhängige Benutzer- und Gruppenverwaltung
 - ▶ Kontakte und Kontaktgruppen
 - ▶ Host- und Servicegruppen
 - ▶ Customvariablen

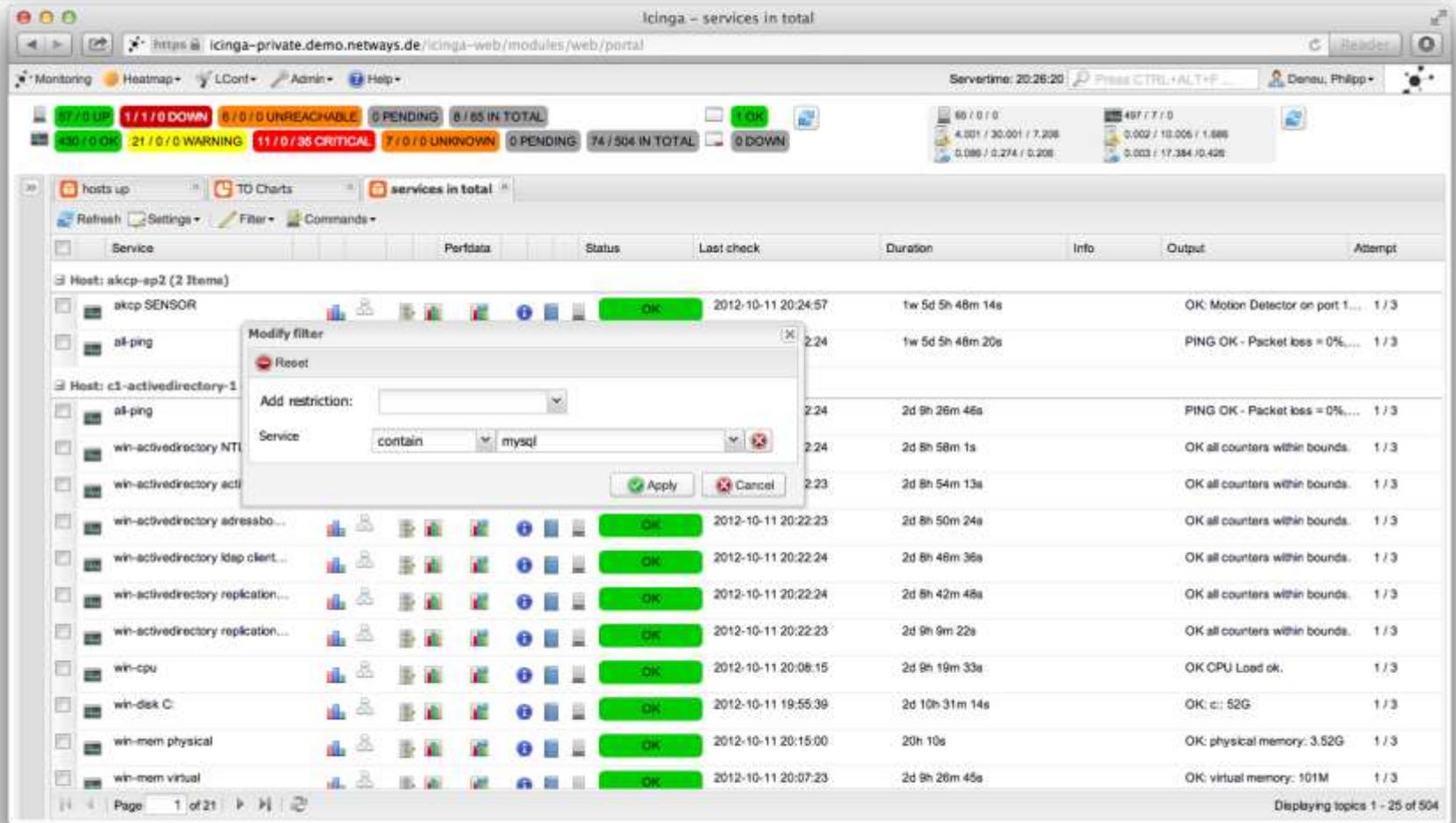
Enterprise Webinterface II

- Leistungsfähige Suche über alle Objekttypen
- Flexibles Filter- und Gruppierungsmodell
- Schneller Zugriff in großen Umgebungen
- Individuelle Konfiguration der Benutzeroberfläche
 - ▶ Erstellung von Dashboard
 - ▶ Konfiguration und Speicherung eigener Sichten (Cronks)
- Mehrsprachigkeit

Icinga-Web



Icinga-Web



The screenshot shows the Icinga-Web interface with a table of services. A 'Modify filter' dialog box is open, showing a 'Service' dropdown set to 'contain' and a search term 'mysql'. The table lists various services across different hosts, including sensors, ping tests, and system metrics.

| Service | Perfdata | Status | Last check | Duration | Info | Output | Attempt |
|------------------------------------|----------|--------|---------------------|------------------|------|----------------------------------|---------|
| Host: akcp-sp2 (2 Items) | | | | | | | |
| akcp SENSOR | | OK | 2012-10-11 20:24:57 | 1w 5d 5h 48m 14s | | OK: Motion Detector on port 1... | 1 / 3 |
| all-ping | | OK | 2:24 | 1w 5d 5h 48m 20s | | PING OK - Packet loss = 0%... | 1 / 3 |
| Host: c3-activedirectory-1 | | | | | | | |
| all-ping | | OK | 2:24 | 2d 9h 26m 46s | | PING OK - Packet loss = 0%... | 1 / 3 |
| win-activedirectory NT... | | OK | 2:24 | 2d 8h 58m 1s | | OK all counters within bounds. | 1 / 3 |
| win-activedirectory acti... | | OK | 2:23 | 2d 8h 54m 13s | | OK all counters within bounds. | 1 / 3 |
| win-activedirectory adressbo... | | OK | 2012-10-11 20:22:23 | 2d 8h 50m 24s | | OK all counters within bounds. | 1 / 3 |
| win-activedirectory ldap clert... | | OK | 2012-10-11 20:22:24 | 2d 8h 48m 36s | | OK all counters within bounds. | 1 / 3 |
| win-activedirectory replication... | | OK | 2012-10-11 20:22:24 | 2d 8h 42m 48s | | OK all counters within bounds. | 1 / 3 |
| win-activedirectory replication... | | OK | 2012-10-11 20:22:23 | 2d 8h 9m 22s | | OK all counters within bounds. | 1 / 3 |
| win-cpu | | OK | 2012-10-11 20:08:15 | 2d 8h 19m 33s | | OK CPU Load ok. | 1 / 3 |
| win-disk C: | | OK | 2012-10-11 19:55:39 | 2d 10h 31m 14s | | OK: c:; 52G | 1 / 3 |
| win-mem physical | | OK | 2012-10-11 20:15:00 | 20h 10s | | OK: physical memory: 3.52G | 1 / 3 |
| win-mem virtual | | OK | 2012-10-11 20:07:23 | 2d 8h 26m 45s | | OK: virtual memory: 101M | 1 / 3 |

Icinga-Web

Icinga - Philipps Portal

https://icinga-private.demo.netways.de/icinga-web/modules/web/portal

hosts up TO Charts services in total Philipps Portal

Unhandled se...

| Service | Status | Output |
|-------------------------|---------|--|
| Host: c1-dns-1 (1 Item) | | |
| k-disk / | WARNING | DISK WARNING - free space: / 10819 MB (18% inode=93%); |
| Host: c1-dns-2 (1 Item) | | |
| k-disk / | WARNING | DISK WARNING - free space: / 10819 MB (18% inode=93%); |
| Host: c1-dns-3 (1 Item) | | |
| k-disk / | WARNING | DISK WARNING - free space: / 10819 MB (18% inode=93%); |
| Host: c1-dns-4 (1 Item) | | |
| k-disk / | WARNING | DISK WARNING - free space: / 10819 MB (18% inode=93%); |

Displaying topics 1 - 25 of 74

Overview

Refresh Settings Filter Default cfg Show groups Don't show filtered subpr

| Name | Hardstate | Host | Service |
|------|-----------|------|---------|
| Mail | OK | | |

EventDB

| Source | Host | Priority | Message | Program |
|----------|---------------|-------------|-------------------------|---------|
| ✓ Syslog | c1-web-3 | ALERT | A testevent, 326080 | cms |
| SNMP | storage-ext | DEBUG | Random event :692732 | test |
| Mail | storage-test | WARNING | Random event :203244 | cms |
| Syslog | firewall-bak | ERROR | A testevent, 560547 | cms |
| SNMP | c1-web-4 | WARNING | A testevent, 705057 | ping |
| ✓ Mail | c1-mysql-4 | INFORMATION | Random event :308568 | cms |
| SNMP | c1-web-1 | ERROR | Random test Event,61276 | test |
| Syslog | c1-web-4 | CRITICAL | Random test Event,25259 | ping |
| Syslog | firewall-bak | ERROR | Random event :532331 | mail |
| SNMP | share-int | INFORMATION | A testevent, 994957 | access |
| SNMP | c1-mysql-2 | NOTICE | A testevent, 455566 | mail |
| SNMP | storage-test | EMERGENCY | A testevent, 680613 | bad |
| Mail | firewall-int | NOTICE | A testevent, 149812 | cms |
| Syslog | c1-web-4 | WARNING | Random event :265616 | test |
| Mail | oracle-test | INFORMATION | Random event :249953 | test |
| SNMP | c1-web-4 | WARNING | A testevent, 386694 | bad |
| Syslog | oracle-test | ALERT | A testevent, 113722 | access |
| Syslog | share-ext | INFORMATION | Random test Event,12975 | test |
| SNMP | firewall-test | ERROR | Random test Event,61394 | cms |
| Mail | firewall-ext | CRITICAL | Random event :43554 | mail |
| SNMP | c1-mysql-3 | EMERGENCY | Random test Event,30348 | mail |
| Syslog | firewall-bak | ALERT | A testevent, 211077 | bad |
| Syslog | c1-web-1 | ERROR | Random test Event 7965 | pin |

Icinga-Web

The screenshot shows the Icinga-Web interface for editing the 'icinga_admin' role. The browser address bar shows the URL: https://icinga-private.demo.netways.de/icinga-web/modules/appkit/admin/groups. The server time is 20:29:36 and the user is logged in as 'Dena, Philipp'.

Available roles table:

| ID | Name | Description | active |
|----|--------------|---------------------------|-------------------------------------|
| 4 | guest | Unauthorized Guest | <input checked="" type="checkbox"/> |
| 3 | icinga_admin | Icinga Admin Group | <input checked="" type="checkbox"/> |
| 2 | icinga_user | Icinga Default User Group | <input checked="" type="checkbox"/> |
| 6 | Netzwerk | Netzwerk | <input checked="" type="checkbox"/> |

Edit role configuration:

- General information:**
 - Group name:
 - Description:
 - Disabled:
- Meta information:**
 - Created: 2011-12-21 09:25:46
 - Modified: 2011-12-21 09:31:46
- Credentials:**
 - Define credentials and access rights to this role here
 - | Credential | Description |
|---|--|
| <input type="checkbox"/> appkit.access | Access to login-page (which, actually, means no access) |
| <input type="checkbox"/> icinga.user | Access to icinga |
| <input checked="" type="checkbox"/> appkit.admin.groups | Access to group related data (e.g. share cronks) |
| <input checked="" type="checkbox"/> appkit.admin.users | Access to user related data (provider) |
| <input checked="" type="checkbox"/> appkit.admin | Access to admin panel |
| <input type="checkbox"/> appkit.user.dummy | Basic right for users |
| <input type="checkbox"/> appkit.api.access | Access to web-based api adapter |
| <input type="checkbox"/> icinga.demomode | Hide features like password reset which are not wanted in demo systems |
| <input checked="" type="checkbox"/> icinga.cronk.category.admin | Enables category admin features |
| <input checked="" type="checkbox"/> icinga.cronk.log | Allow user to view icinga-log |
| <input checked="" type="checkbox"/> icinga.control.view | Allow user to view icinga status |
| <input checked="" type="checkbox"/> icinga.control.admin | Allow user to administrate the icinga console |

SLA-Reporting

- SLA Reports basierend auf Jasper Reports
- Multiformat Berichte als PDF, Word, Excel und CSV uvam.
- Automatische Reportversendung
- Reportpackage mit über 20 Basisberichten
- Vollständige Integration in Icinga Web

SLA-Reporting mit Icinga-Web

Icinga - Reporting

https://icinga-private.demo.netways.de/icinga-web/modules/web/portal

Monitoring Heatmap LConf Admin Help Servertime: 20:27:20 Press CTRL+ALT+F Denau, Philipp

97 / 0 UP 1 / 1 / 0 DOWN 6 / 0 / 0 UNREACHABLE 0 PENDING 6 / 85 IN TOTAL 1 OK 66 / 0 / 0 497 / 7 / 0
 430 / 0 OK 21 / 0 / 0 WARNING 11 / 0 / 36 CRITICAL 7 / 0 / 0 UNKNOWN 0 PENDING 74 / 504 IN TOTAL 0 DOWN 4.001 / 30.001 / 7.208 0.002 / 10.006 / 1.686
 0.086 / 0.294 / 0.190 0.003 / 17.384 / 0.420

hosts up TD Charts services in total Reporting
 On-the-fly Repository Scheduling HostTop10ReportInGivenTime

Period: 9/10/12 00:00 - 10/10/12 00:00

ICINGA

Top 10 Host Report

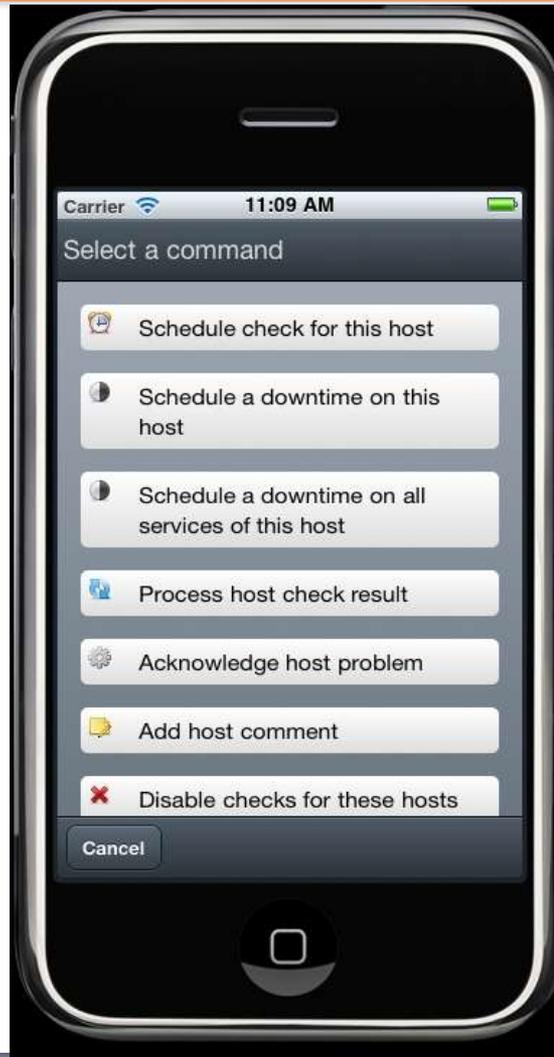
Top 10 hosts with state down

| Host | Count |
|-----------------------|-------|
| c1-exchange-4 | 19 |
| c1-exchange-1 | 18 |
| c2-exchange-3 | 17 |
| c1-exchange-2 | 16 |
| c1-activelirectory-3 | 15 |
| testserver-testserver | 14 |
| c1-exchange-3 | 13 |
| server | 12 |
| tp-procure-switch | 11 |
| c1-windows-4 | 10 |

Top 10 hosts with state unreachable

| Host | Count |
|----------------------|-------|
| c1-switch-windows | 2.95 |
| c3-windows-2 | 2.90 |
| c1-exchange-4 | 2.85 |
| c1-activelirectory-1 | 2.80 |
| c1-windows-1 | 2.75 |
| c1-switch-bean | 2.70 |
| c1-exchange-2 | 2.65 |
| c1-activelirectory-3 | 2.60 |
| c1-windows-4 | 2.55 |
| c1-exchange-3 | 2.50 |

Mobiles Interface



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Monitoring

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Monitoring

- Betriebssystemüberwachung
 - ▶ Linux, Unix, Windows...
 - ▶ Windows via WMI, SNMP oder Client
 - ▶ Linux via SSH, SNMP oder Client
 - ▶ CPU, Disk, Memory, Swap, Prozesse, Dienste etc.
- Hardware
 - ▶ Server, Router, Switches, Firewalls...
 - ▶ ...via SNMP, SSH etc.
 - ▶ Interfaceauslastung, Environment etc.

Monitoring

- Netzdienste
 - ▶ Alle gängigen Netzwerkdienste (DNS, FTP, HTTP, LDAP, SMTP, SSH) durch Simulation von Clientzugriffen
 - ▶ TCP und UDP Ports
- Applikationen
 - ▶ Datenbanken, Messagingsysteme, Verzeichnisdienste
 - ▶ SAP, Exchange, Notes, UC4, MSSQL, Oracle, MySQL, DB2, ActiveDirectory, eDirectory, OpenLDAP uvm.
- Plugindatenbank: www.monitoringexchange.org
- Eigene Skripte: Perl, Bash, JavaScript, PHP, VBS etc.



Erweiterungen für Icinga



Business Process Integration

- Darstellung von logisch zusammenhängenden Objekten
 - ▶ und (&), oder (|) und mindest (min of 3) Operatoren
- Prozessketten abbildbar
 - ▶ MAIL = mailserver & internet & mail-archive
- bessere Sicht für SLA Reporting
 - ▶ Kennzahlen der Businessprozesse

Business Process Integration

The screenshot shows the Icinga web interface for a business process named 'icinga-bp'. The interface includes a navigation menu, a status summary, and a main table of services.

Status Summary:

- 28 UP, 2 DOWN, 0 UNREACHABLE, 30 IN TOTAL
- 210 OK, 1 WARNING, 3 CRITICAL, 0 UNKNOWN, 214 IN TOTAL

Service Table:

| Name | Hardstate | Host | Service |
|------------------------|-----------|-------------|----------|
| Exchange | OK | | |
| c1exchange1 : net-ping | OK | c1exchange1 | net-ping |
| c1exchange2 : net-ping | CRITICAL | c1exchange2 | net-ping |
| SQL Cluster 2 | OK | | |
| c2-mysql1 : net-ping | OK | c2-mysql1 | net-ping |
| c2-mysql2 : net-ping | OK | c2-mysql2 | net-ping |
| SQL Servers | OK | | |
| SQL Cluster 1 | OK | | |
| c1-mysql1 : net-ping | OK | c1-mysql1 | net-ping |
| c1-mysql2 : net-ping | OK | c1-mysql2 | net-ping |
| SQL Cluster 2 | OK | | |
| c2-mysql1 : net-ping | OK | c2-mysql1 | net-ping |
| c2-mysql2 : net-ping | OK | c2-mysql2 | net-ping |

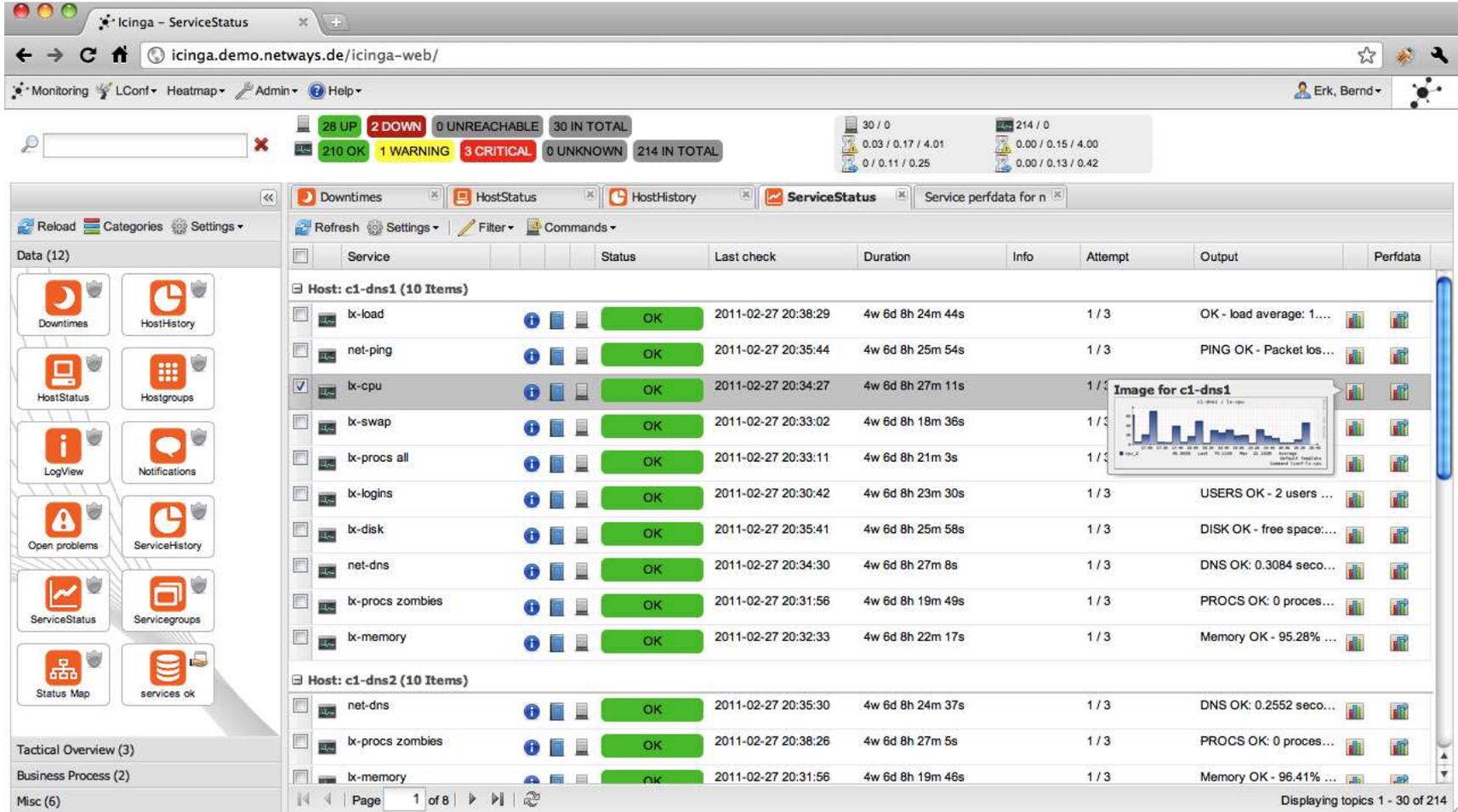
Events for c1exchange2 : net-ping:

| Timestamp | Item | Host | Service | Status | Time... | A... | Output |
|---------------------|----------|---------|----------|----------|-----------|------|----------|
| 2011-02-01 12:19:24 | (1 Item) | c1ex... | net-ping | CRITICAL | 2011-0... | 3 | PING ... |
| 2011-02-01 12:17:24 | (1 Item) | c1ex... | net-ping | CRITICAL | 2011-0... | 2 | PING ... |
| 2011-02-01 12:15:24 | (1 Item) | c1ex... | net-ping | CRITICAL | 2011-0... | 1 | PING ... |
| 2010-11-10 17:37:06 | (1 Item) | c1ex... | net-ping | CRITICAL | 2010-1... | 1 | PING ... |

Business Process Integration

- Darstellung von logisch zusammenhängenden Objekten
 - ▶ und (&), oder (|) und mindest (min of 3) Operatoren
- Prozessketten abbildbar
 - ▶ MAIL = mailserver & internet & mail-archive
- bessere Sicht für SLA Reporting
 - ▶ Kennzahlen der Businessprozesse

PNP - Integration



The screenshot shows the Icinga ServiceStatus web interface. At the top, there are navigation menus and a user profile for 'Erk, Bernd'. A summary bar displays overall system status: 28 UP, 2 DOWN, 0 UNREACHABLE, 30 IN TOTAL; 210 OK, 1 WARNING, 3 CRITICAL, 0 UNKNOWN, 214 IN TOTAL. Below this, there are tabs for Downtimes, HostStatus, HostHistory, and ServiceStatus. The main content area shows a table of services for two hosts, c1-dns1 and c1-dns2. A tooltip for 'Image for c1-dns1' is visible over the 'lx-cpu' service row.

| Service | Status | Last check | Duration | Info | Attempt | Output | Perfdata |
|---------------------------------|--------|---------------------|------------------|------|---------|--------------------------|----------|
| Host: c1-dns1 (10 Items) | | | | | | | |
| lx-load | OK | 2011-02-27 20:38:29 | 4w 6d 8h 24m 44s | | 1 / 3 | OK - load average: 1.... | |
| net-ping | OK | 2011-02-27 20:35:44 | 4w 6d 8h 25m 54s | | 1 / 3 | PING OK - Packet los... | |
| lx-cpu | OK | 2011-02-27 20:34:27 | 4w 6d 8h 27m 11s | | 1 / 3 | | |
| lx-swap | OK | 2011-02-27 20:33:02 | 4w 6d 8h 18m 36s | | 1 / 3 | | |
| lx-procs all | OK | 2011-02-27 20:33:11 | 4w 6d 8h 21m 3s | | 1 / 3 | | |
| lx-logins | OK | 2011-02-27 20:30:42 | 4w 6d 8h 23m 30s | | 1 / 3 | USERS OK - 2 users ... | |
| lx-disk | OK | 2011-02-27 20:35:41 | 4w 6d 8h 25m 58s | | 1 / 3 | DISK OK - free space... | |
| net-dns | OK | 2011-02-27 20:34:30 | 4w 6d 8h 27m 8s | | 1 / 3 | DNS OK: 0.3084 seco... | |
| lx-procs zombies | OK | 2011-02-27 20:31:56 | 4w 6d 8h 19m 49s | | 1 / 3 | PROCS OK: 0 proces... | |
| lx-memory | OK | 2011-02-27 20:32:33 | 4w 6d 8h 22m 17s | | 1 / 3 | Memory OK - 95.28% ... | |
| Host: c1-dns2 (10 Items) | | | | | | | |
| net-dns | OK | 2011-02-27 20:35:30 | 4w 6d 8h 24m 37s | | 1 / 3 | DNS OK: 0.2552 seco... | |
| lx-procs zombies | OK | 2011-02-27 20:38:26 | 4w 6d 8h 27m 5s | | 1 / 3 | PROCS OK: 0 proces... | |
| lx-memory | OK | 2011-02-27 20:31:56 | 4w 6d 8h 19m 46s | | 1 / 3 | Memory OK - 96.41% ... | |

PNP - Integration

The screenshot displays the Icinga web interface with the following components:

- Browser Address Bar:** icinga.demo.netways.de/icinga-web/
- Navigation:** Monitoring, LConf, Heatmap, Admin, Help.
- Summary Statistics:**
 - 28 UP, 2 DOWN, 0 UNREACHABLE, 30 IN TOTAL
 - 210 OK, 1 WARNING, 3 CRITICAL, 0 UNKNOWN, 214 IN TOTAL
- Service Details Panel:**
 - Host: c1-dns1 Service: net-ping
 - 4 Hours 27.02.11 15:40 - 27.02.11 19:40
 - Datasource: rta
 - Graph: c1-dns1 / net-ping (rtt)
 - Statistics: 4.2527 Last, 4.6550 Max, 2.7752 Average
 - Command: lconf-net-ping
- Second Graph Panel:**
 - Datasource: pl
 - Graph: c1-dns1 / net-ping (pl)
- Right Sidebar:**
 - Search
 - Actions
 - My basket (empty)
 - Status: Host: c1-dns1, Service: net-ping, Last Check: 27.02.11 19:35
 - Time ranges: 4 Hours, 25 Hours, One Week, One Month, One Year
 - Services: Host Perfdata, ix-cpu, ix-disk, ix-load
- Left Sidebar:**
 - Data (12): Downtimes, HostHistory, HostStatus, Hostgroups, LogView, Notifications, Open problems, ServiceHistory, ServiceStatus, Servicegroups, Status Map, services ok
 - Tactical Overview (3)
 - Business Process (2)
 - Misc (6)

inGraph – Performance Graphing

■ Was ist inGraph?

- ▶ Tool zur automatisierten Darstellung von Messwerten
 - ▶▶ Festplattenauslastung
 - ▶▶ CPU Auslastung
 - ▶▶ ...
- ▶ Darstellung der Werte über zeitlichen Verlauf
 - ▶▶ Kapazitätsplanung
 - ▶▶ Erkennen von Trends
 - ▶▶ Trendanalysen

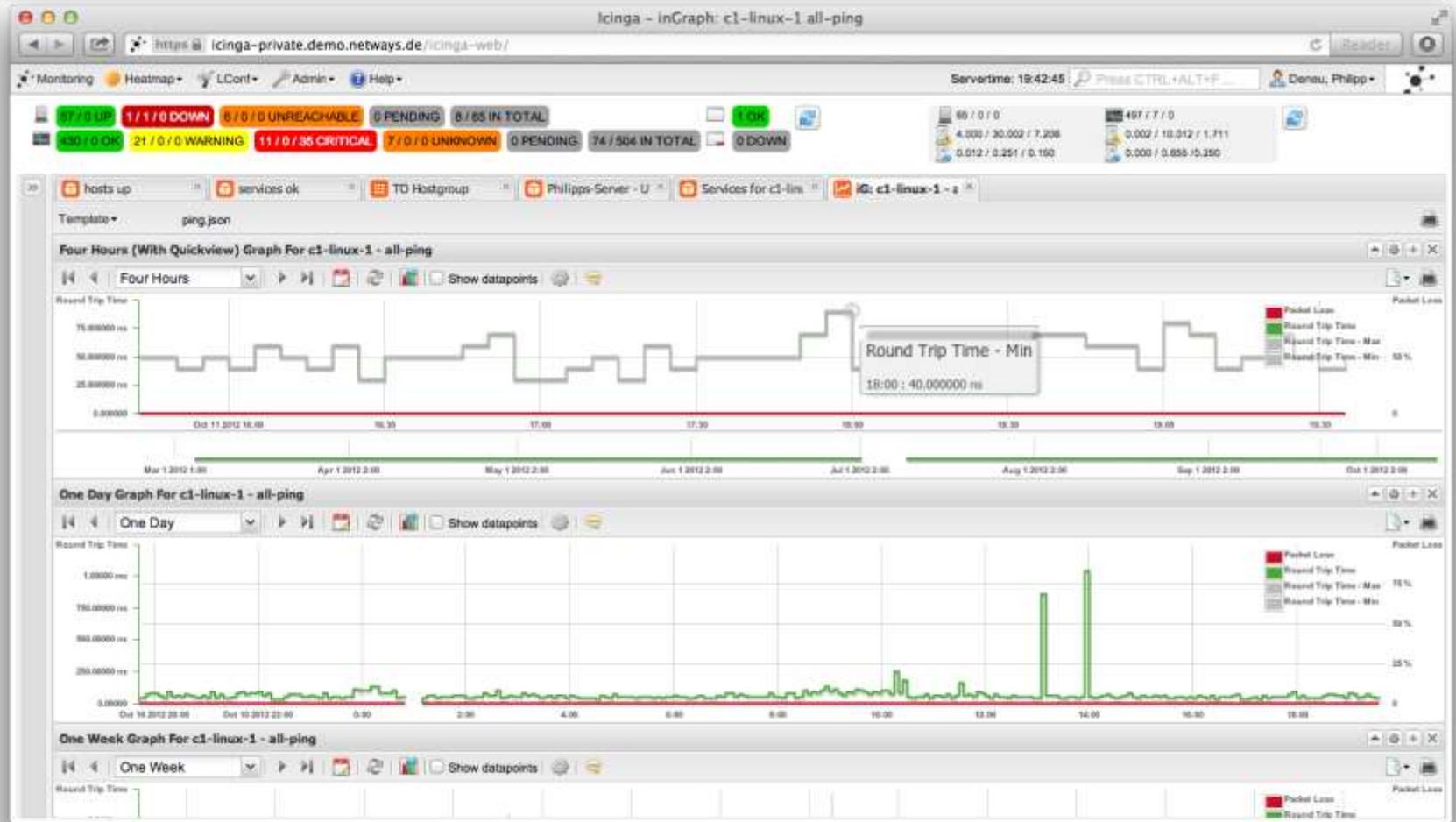
inGraph I

The screenshot displays the Icinga web interface for host 'c1-linux-1'. At the top, a status bar shows overall system health: 97/0 UP, 1/1/0 DOWN, 6/0/0 UNREACHABLE, 0 PENDING, 6/85 IN TOTAL, 1 OK, 430/0 OK, 21/0/0 WARNING, 11/0/35 CRITICAL, 7/0/0 UNKNOWN, 0 PENDING, 74/504 IN TOTAL, and 0 DOWN. The main content area is divided into several sections:

- Hosts List:** A list of services for host 'c1-linux-1' including 'all-ping', 'k-disk /', 'k-load', 'k-pro', 'k-ssh', 'k-sw', and 'k-usc'.
- Performance Graphs:**
 - inGraph: c1-linux-1 tx-load:** A bar chart showing network load (Load1, Load15, Load5) over time from 6:00 to 18:00. The y-axis represents load, ranging from 1.0 to 2.5.
 - inGraph: c1-linux-1 all-ping:** A line chart showing 'Round Trip Time' (ms) and 'Packet Loss' (%) over time. The y-axis for Round Trip Time ranges from 0.00000 to 1.00000 ms. The x-axis shows time from 22:00 on Oct 18, 2012, to 18:00.
- Service Status Table:** A table on the right side of the interface showing the status of various services.

| Service | Status |
|------------------|--------------------|
| ket... | 1/3 |
| G... | 3/3 |
| age... | 1/3 |
| 17 ... | 1/3 |
| 2w 6d 8h 5m 37s | SSH OK - OpenS... |
| 6d 9h 50m 22s | SWAP OK - 100%... |
| 34w 3d 4h 8m 30s | USERS OK - 0 us... |

inGraph II

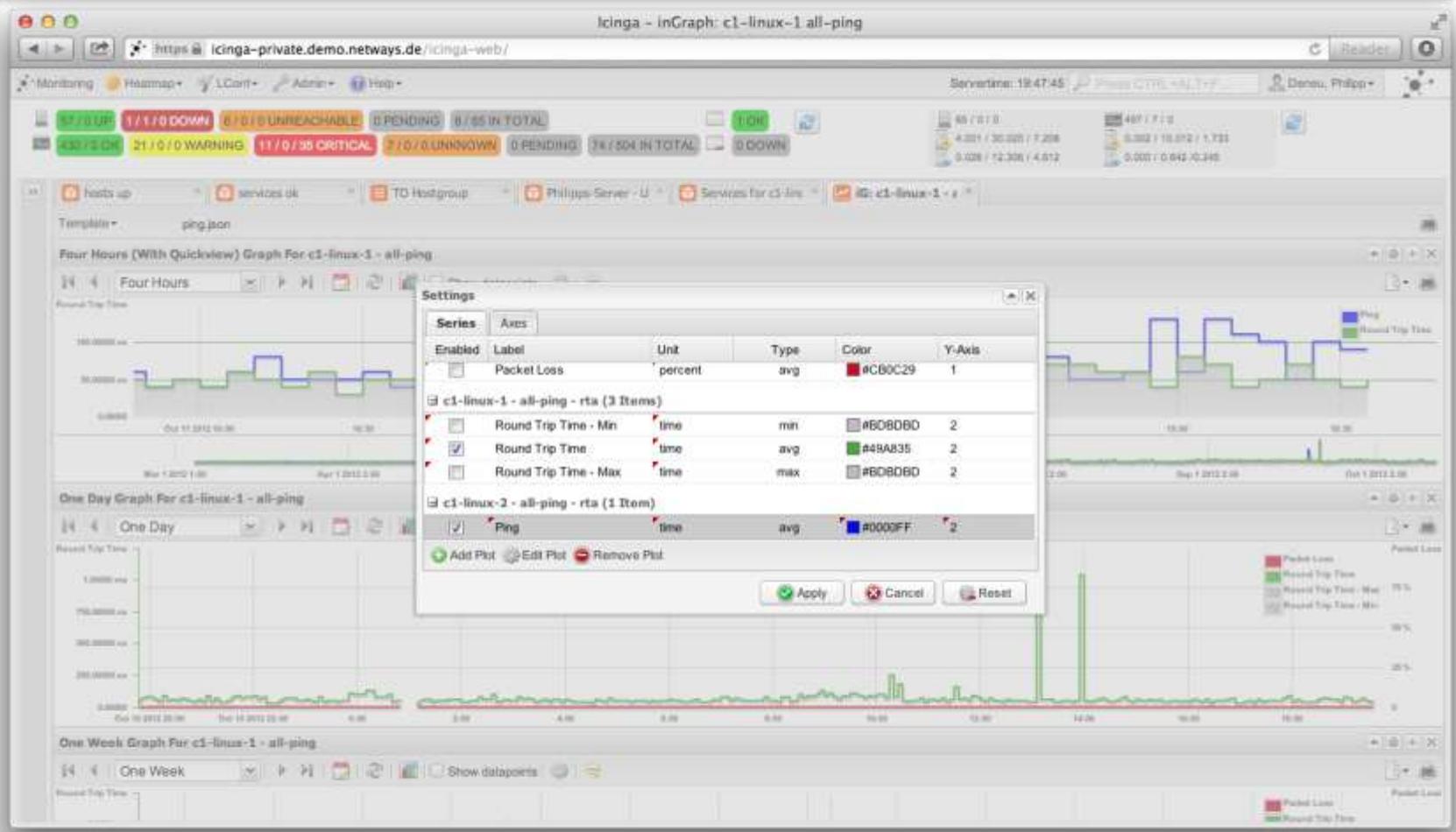


inGraph III

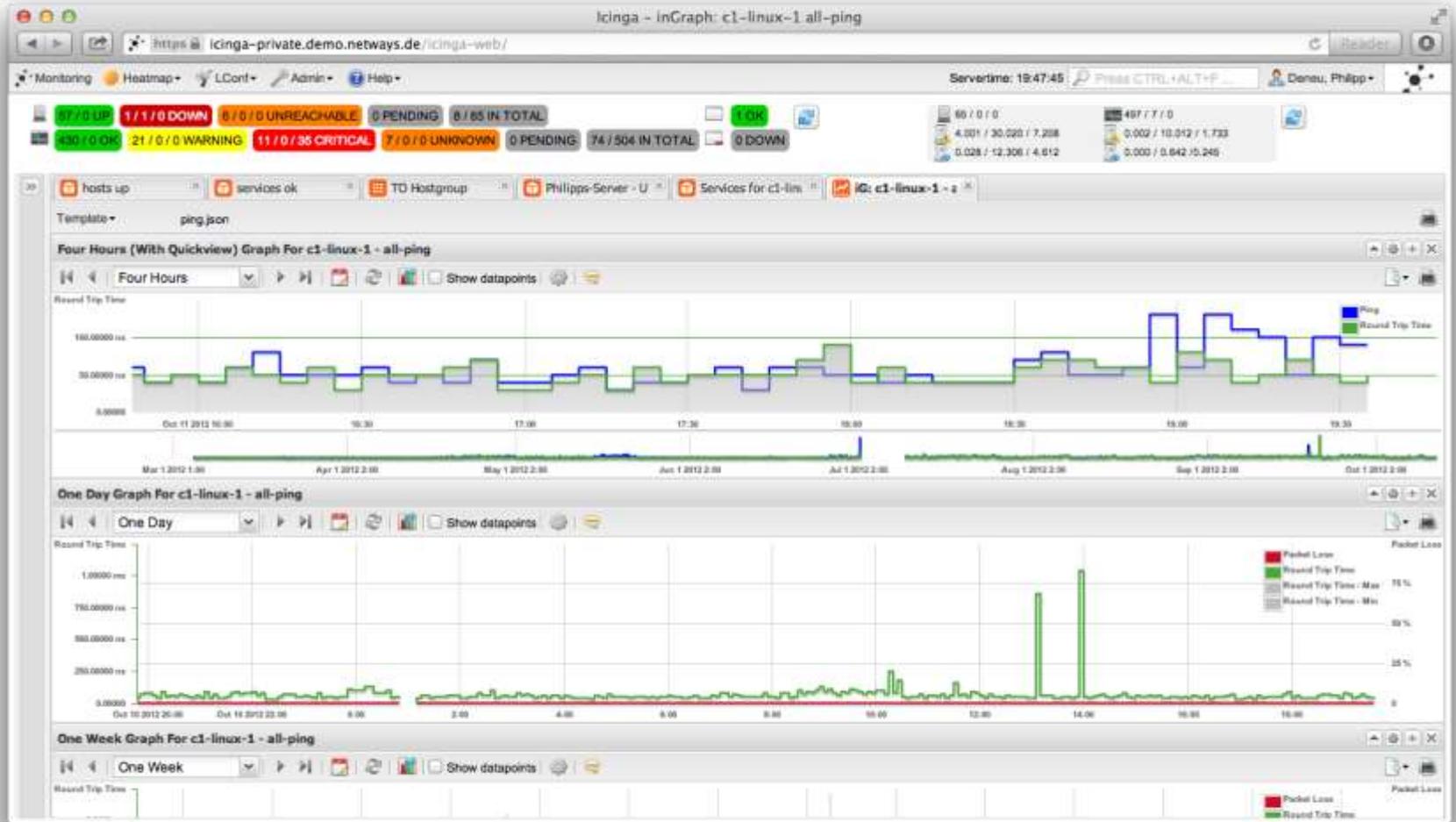
The screenshot displays the inGraph III monitoring interface for a host named 'c1-linux-1'. The top navigation bar includes the URL 'https://icinga-private.demo.netways.de/icinga-web/' and the title 'Icinga - inGraph: c1-linux-1 all-ping'. Below the navigation, there are summary statistics for 'UP', 'DOWN', and 'UNREACHABLE' states, along with 'OK', 'WARNING', and 'CRITICAL' counts. The main area features several time-series graphs: 'Four Hours (Web Quickview) Graph For c1-linux-1 - all-ping', 'One Day Graph For c1-linux-1 - all-ping', and 'One Week Graph For c1-linux-1 - all-ping'. A 'Settings' dialog box is open, showing a list of available services and hosts for the 'Add Plot' function. The 'Host' field is empty, and the 'Service' dropdown is set to 'all-ping'. The 'Type' dropdown is set to 'Round Trip Time'. The 'Add Plot' button is highlighted.

inGraph IV

NETWAYS®



inGraph V



LConf – LDAP basierte Konfiguration

- Icinga/Nagios Konfiguration basierend auf LDAP
- Flexible Hierarchien und Zugriffsmodelle
- Support für Benutzer- und Gruppenberechtigungen
- Bearbeitung über nativen LDAP-Client
- Support für verteilte Umgebungen und Synchronisation
- Integriertes Icinga-Web Modul

LConf – LDAP basierte Konfiguration

The screenshot shows the Icinga LConf web interface. The left pane displays a hierarchical tree structure under 'NETWAYS LDAP'. The right pane shows a 'Properties' table for the selected node.

| Property | Value |
|-----------------|---|
| objectclass | extensibleObject |
| objectclass | alias |
| aliasobjectname | ou=Application Database MySQL,ou=Templates,ou=LConf,dc=demo,dc=netways,dc=de |
| ou | Application Database MySQL |
| dn | ou=Application Database MySQL,ou=Linux Hosts,ou=Company 2,ou=all-instances,dc=demo,dc=netways,dc=de |

A context menu is open over the tree, listing actions such as 'Create new node on same level', 'Remove only this node', and 'Jump to alias target'.

LConf – LDAP basierte Konfiguration



The screenshot shows the Icinga web interface at <https://icinga-private.demo.netways.de/icinga-web/modules/lconf/>. The main area displays a tree view of LDAP entries under 'NETWAYS LDAP'. A 'Create new entry' dialog is open, showing a list of entry types to create:

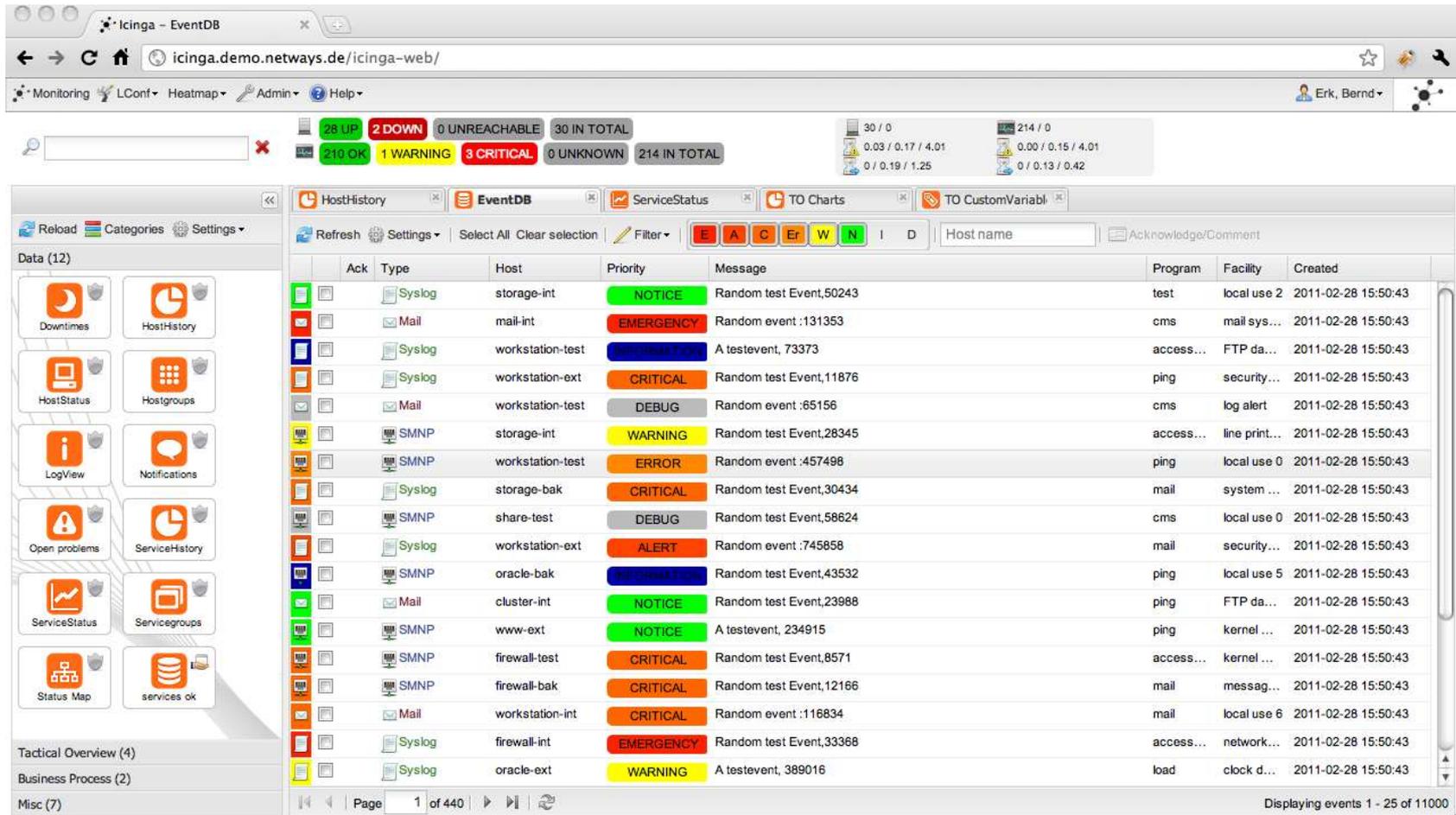
- Create a command
- Create a contact
- Create a contactgroup
- Create a host
- Create a hostgroup
- Create a hostescalation
- Create a service
- Create a servicegroup

The dialog also includes an 'Entry description' field and a 'Next >' button. The background interface shows a search bar and buttons for 'Add property', 'Remove properties', and 'Save Changes'.

EventDB – Verarbeitung von Traps und Logs

- Verarbeitung passiver Events und Messages
 - ▶ Syslog Anbindung über Sylog-NG und Rsyslog
 - ▶ SNMP-Trap Verarbeitung unter Verwendung SNMPTT
 - ▶ Email-Schnittstelle
- Natives Webinterface für Icinga und Nagios
- Integriertes Webinterface für Icinga-Web
- Verwaltung komplexer Filter und Suchregeln
- Plugin zur Überwachung von Events und Messages

EventDB – Verarbeitung von Traps und Logs



The screenshot shows the Icinga EventDB web interface. At the top, there are status indicators for various components: 28 UP, 2 DOWN, 0 UNREACHABLE, 30 IN TOTAL, 210 OK, 1 WARNING, 3 CRITICAL, 0 UNKNOWN, 214 IN TOTAL. Below this, there are several tabs: HostHistory, EventDB (selected), ServiceStatus, TO Charts, and TO CustomVariabl. The main content area displays a table of events with the following columns: Ack, Type, Host, Priority, Message, Program, Facility, and Created. The events are sorted by priority, with the highest priority (EMERGENCY) at the top.

| Ack | Type | Host | Priority | Message | Program | Facility | Created |
|--------------------------|--------|------------------|-----------|-------------------------|-----------|---------------|---------------------|
| <input type="checkbox"/> | Syslog | storage-int | NOTICE | Random test Event,50243 | test | local use 2 | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Mail | mail-int | EMERGENCY | Random event :131353 | cms | mail sys... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Syslog | workstation-test | WARNING | A testevent, 73373 | access... | FTP da... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Syslog | workstation-ext | CRITICAL | Random test Event,11876 | ping | security... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Mail | workstation-test | DEBUG | Random event :65156 | cms | log alert | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | storage-int | WARNING | Random test Event,28345 | access... | line print... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | workstation-test | ERROR | Random event :457498 | ping | local use 0 | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Syslog | storage-bak | CRITICAL | Random test Event,30434 | mail | system ... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | share-test | DEBUG | Random test Event,58624 | cms | local use 0 | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Syslog | workstation-ext | ALERT | Random event :745858 | mail | security... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | oracle-bak | WARNING | Random test Event,43532 | ping | local use 5 | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Mail | cluster-int | NOTICE | Random test Event,23988 | ping | FTP da... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | www-ext | NOTICE | A testevent, 234915 | ping | kernel ... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | firewall-test | CRITICAL | Random test Event,8571 | access... | kernel ... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | SNMP | firewall-bak | CRITICAL | Random test Event,12166 | mail | messag... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Mail | workstation-int | CRITICAL | Random event :116834 | mail | local use 6 | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Syslog | firewall-int | EMERGENCY | Random test Event,33368 | access... | network... | 2011-02-28 15:50:43 |
| <input type="checkbox"/> | Syslog | oracle-ext | WARNING | A testevent, 389016 | load | clock d... | 2011-02-28 15:50:43 |

At the bottom of the interface, there are navigation controls: Page 1 of 440, and a status indicator: Displaying events 1 - 25 of 11000.

Heatmap – Temperaturvisualisierung

- Darstellung von "thermografischen" Rechenzentren
- Visualisierung nach Hitzezonen
- Beachtung von Luftströmen

Heatmap – Temperaturvisualisierung

The screenshot shows the Icinga web interface for a heatmap. The browser address bar is `icinga.demo.netways.de/icinga-web/heatmap/`. The navigation menu includes Monitoring, LConf, Heatmap, Admin, and Help. The user is identified as Erk, Bernd.

The main content area is titled "Dashboard" and contains three panels:

- Small RZ**: A 3x3 grid with server icons and arrows indicating airflow directions.
- Example**: A larger 6x6 grid with server icons and arrows indicating airflow directions.
- Small RZ**: A heatmap visualization of the "Small RZ" grid. The color scale ranges from green (cooler) to red (warmer). Temperature values are displayed on the heatmap: 24, 30, 30, and 30. Below the heatmap, the following text is shown:
Room : Small RZ - Location: Keller
Heatmap: default
14-02-2011 13:53:03 (GMT)

At the bottom, the "Server Rooms" section contains two buttons: "Example" and "Small RZ".

Unsere Leistungen im Überblick

- Workshops & Consulting zur Implementierung vor Ort
- Betrieb
 - ▶ Komplette Monitoringsysteme
 - ▶ Satellitensysteme
- Entwicklungsleistungen
 - ▶ Plugins
 - ▶ Systemintegration
- Schulungen
 - ▶ Standardisierte Schulungsmodule
 - ▶ Individuell vor Ort
- Support
 - ▶ Standardverträge
 - ▶ Individuelle Supportkonzepte
- Konferenzen



Fragen und Antworten





Fragen und Antworten

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