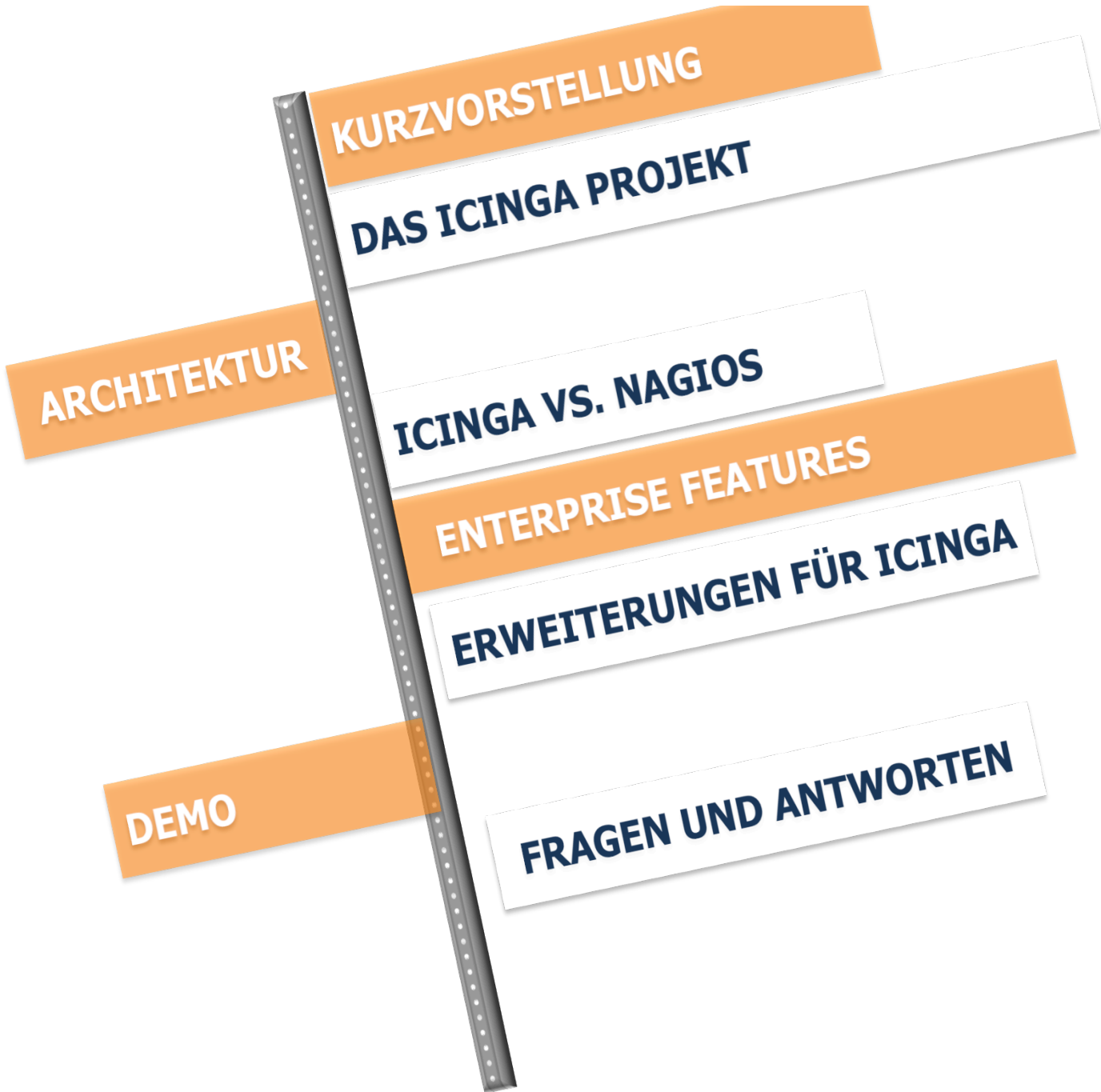


Enterprise Monitoring mit Icinga

06.03.2012 | Open Source Forum





KURZVORSTELLUNG

DAS ICINGA PROJEKT

ARCHITEKTUR

ICINGA VS. NAGIOS

ENTERPRISE FEATURES

ERWEITERUNGEN FÜR ICINGA

DEMO

FRAGEN UND ANTWORTEN



KURZVORSTELLUNG

NETWAYS Expertise

OPEN SOURCE SYSTEMS MANAGEMENT

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

OPEN SOURCE DATA CENTER

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

MANAGED SERVICES

MONITORING HARDWARE

KONFERENZEN

www.netways.de

Community Aktiviäten



www.netways.org

- NETWAYS Addons
- NETWAYS Plugins



www.icinga.org

- Development
- Hosting



www.monitoringexchange.org

- Repository of Icinga / Nagios addons and plugins
- ~2000 projects

NETWAYS Konferenzen



OSDC.de
OPEN SOURCE DATA
CENTER CONFERENCE

Open Source Data Center Conference 25 – 26 April 2012

- 100 Teilnehmer (2011)
- "Agile Infrastructures"
 - ▶ Devops & methods
 - ▶ Databases
 - ▶ Scalability & infrastructure



OPEN SOURCE
MONITORING
CONFERENCE
on Nagios

Open Source Monitoring Conference 17 – 18 Oktober 2012

- 260 Teilnehmer (2011)
- Icinga / Nagios case studies & best practices
- Latest monitoring technologies & addons

NETWAYS In-house Development



Sonstiges



www.netways.de/jobs



DAS ICINGA PROJEKT

Icinga Team



www.netways.de

Projekt Struktur und Kommunikation



Tools and Platform



Icinga Quality, Testing and Community Support

website and open source ticketing system

Icinga-Core

*C based source
MySQL
PostgreSQL
Oracle*

GIT

Icinga-Web

*based on PHP
using Sencha,
Agavi MVC*

GIT

Icinga-Doc

*based on
Docbook in
english and
german*

GIT

Icinga-Reports

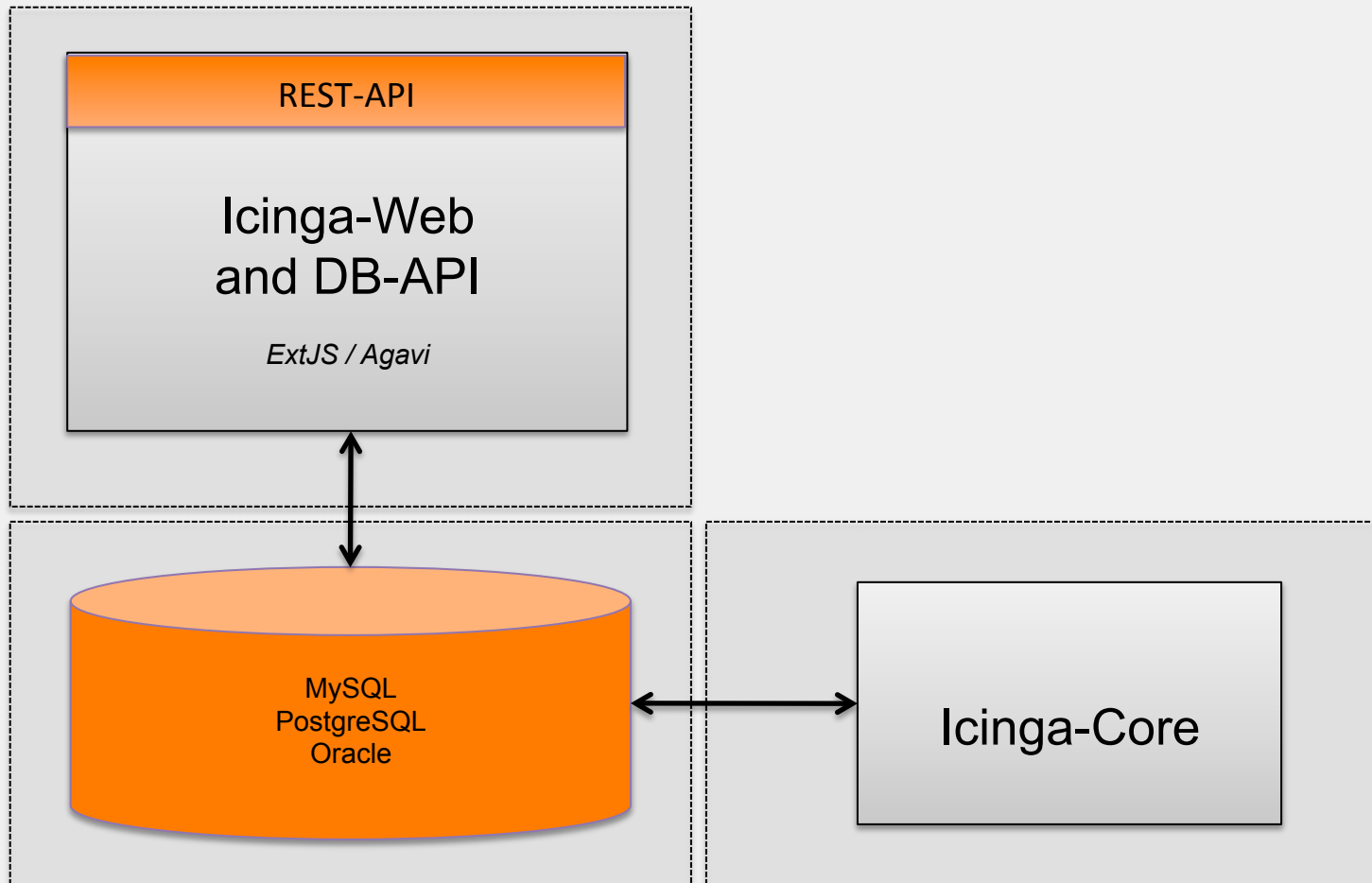
*based on Jasper
- Reporting*

GIT

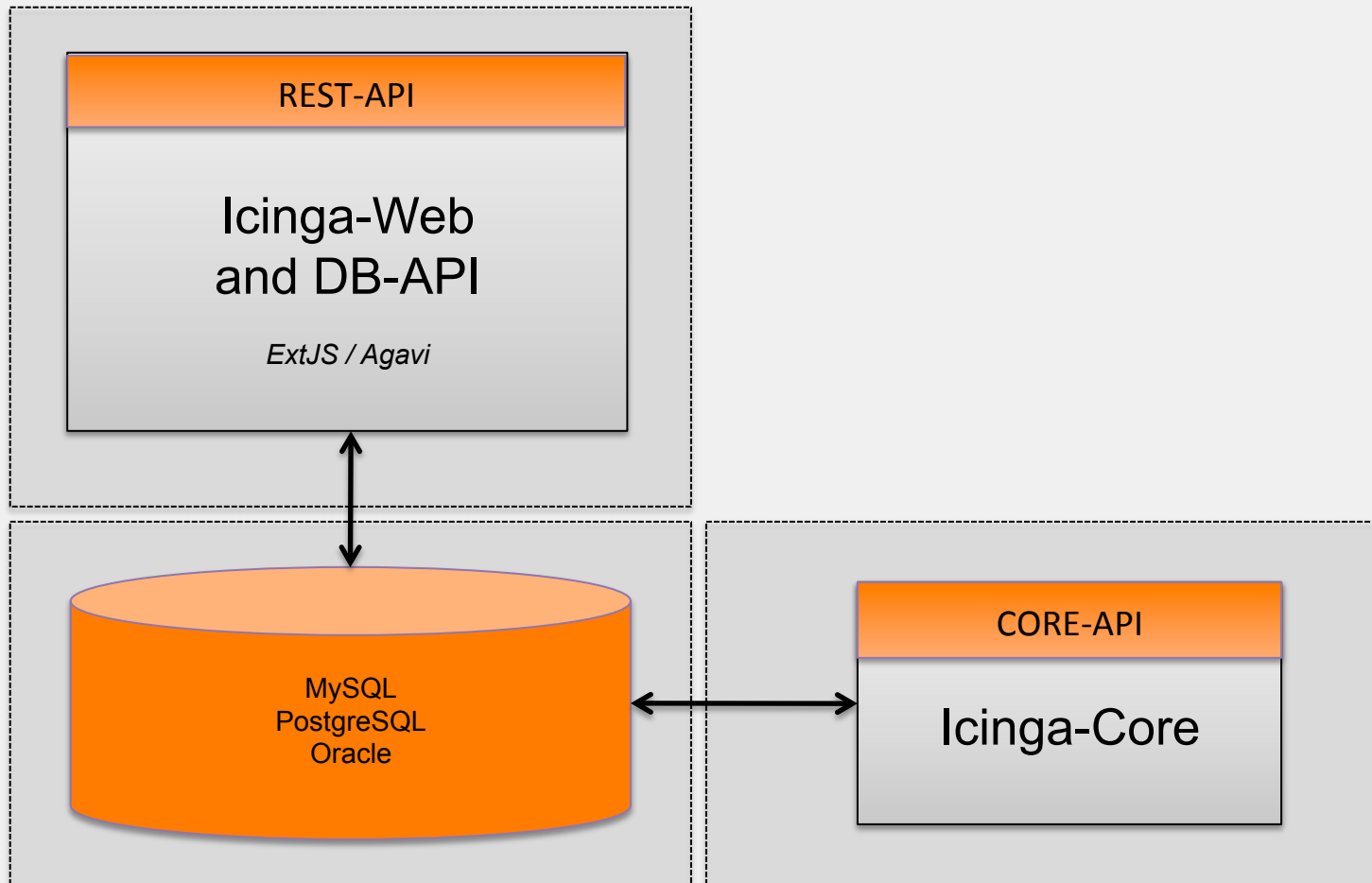


ICINGA - ARCHITEKTUR

Aktuelle Architektur



Zukünftige Architektur





ICINGA VS. NAGIOS

Icinga vs. Nagios

- Optimierter Datenbanksupport für MySQL, PostgreSQL und Oracle
- Modernes, mandantenfähiges Webinterface
- Volle Modulintegration und einheitliches Benutzermodell
- SLA Reporting Lösung auf Basis von Jasper
- Dezentralisierte Projektstruktur
- Dualstack IPv4 und IPv6 Support
- Roadmap



ENTERPRISE FEATURES

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

HTTP Interface

- Abfrage nahezu aller Icinga-Daten mit Hilfe eines REST-Like Interfaces auf Basis von Icinga-Web
- Einheitliches Berechtigungskonzept auf Basis von Authkeys
- Unterstützung verschachtelter UND / ODER Bedingungen
- Support von Order, Group by und Limit
- Datenexport via XML oder JSON
- Kommandoverarbeitung mit Hilfe von PUT

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

Mobiles Interface





ERWEITERUNGEN FÜR ICINGA

Business Process Integration

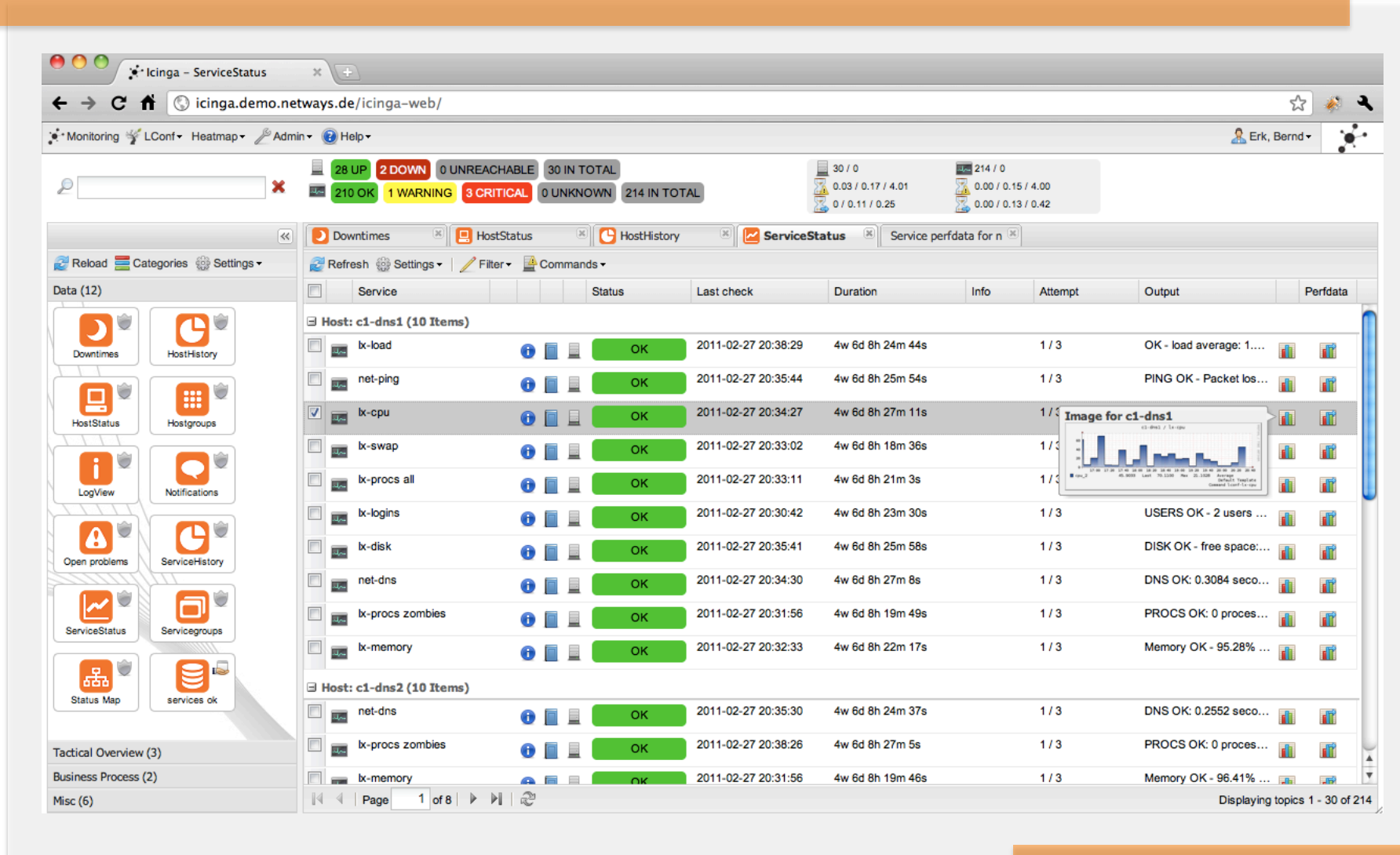


The screenshot shows the Icinga web interface in a browser window. The address bar displays "icinga.demo.netways.de/icinga-web/web/portal". The interface includes a navigation bar with links for Monitoring, LConf, Heatmap, Admin, and Help. A status summary at the top indicates 28 UP, 2 DOWN, 0 UNREACHABLE, and 30 IN TOTAL. The main content area is titled "Overview" and displays a list of services under the "icinga-bp" group. The services are organized into categories: Exchange, SQL Cluster 2, SQL Servers, and SQL Cluster 2. The "c1exchange2 : net-ping" service is highlighted in red, indicating a CRITICAL status. The right sidebar shows "Events for c1exchange2 : net-ping" with a table of recent events.

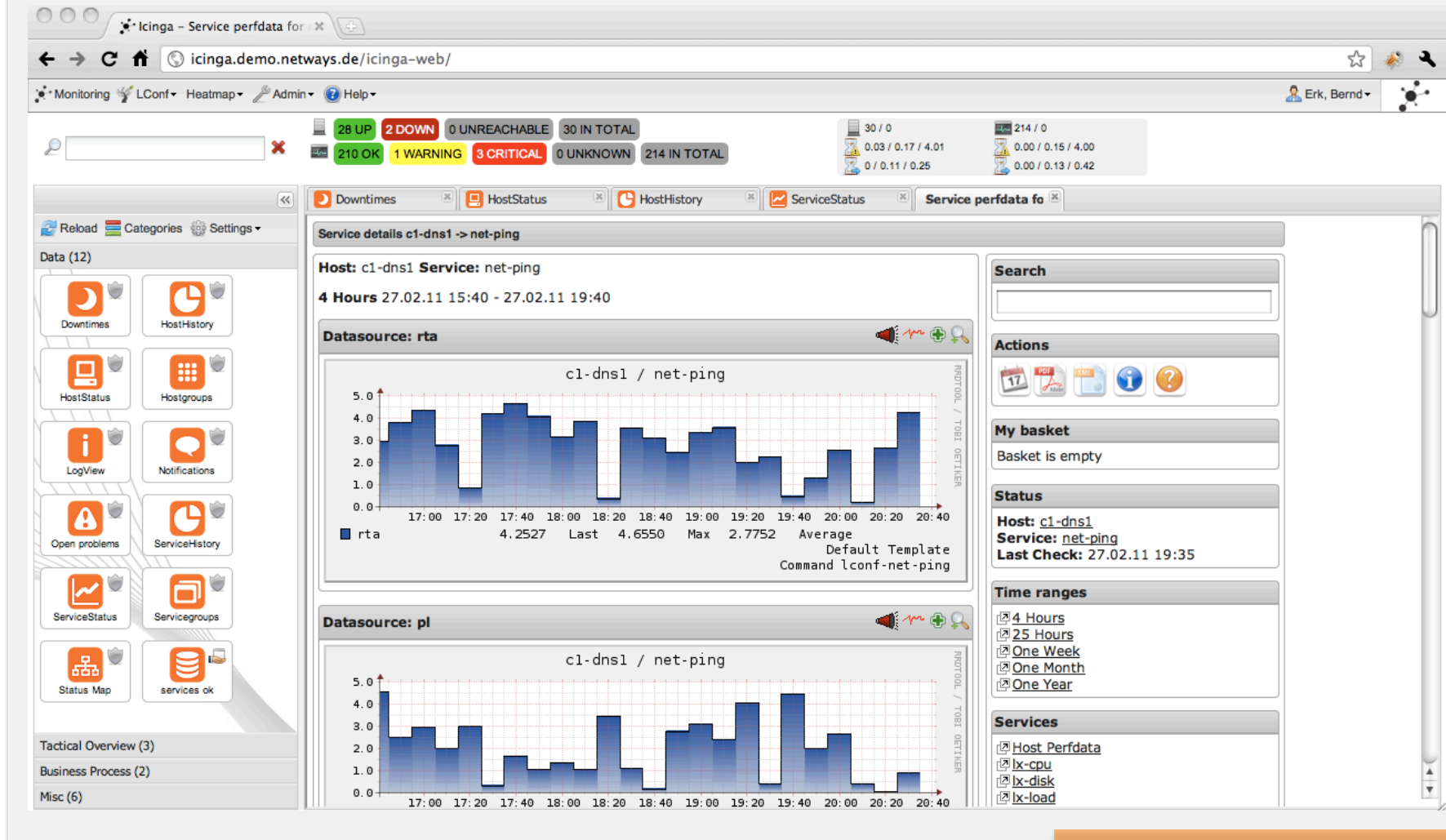
Name	Hardstate	Host	Service
Exchange	OK		
c1exchange1 : net-ping	OK	c1exchange1	net-ping
c1exchange2 : net-ping	CRITICAL	c1exchange2	net-ping
SQL Cluster 2	OK		
c2-mysql1 : net-ping	OK	c2-mysql1	net-ping
c2-mysql2 : net-ping	OK	c2-mysql2	net-ping
SQL Servers	OK		
SQL Cluster 1	OK		
c1-mysql1 : net-ping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

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

PNP - Integration



PNP - Integration



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 in a browser window. The address bar displays `icinga.demo.netways.de/icinga-web/lconf/`. The interface includes a navigation menu on the left, a central properties table, and a right-hand sidebar with actions and connections.

DIT

- LConf
 - dc=demo,dc=netways,dc=de
 - LConf(4)
 - 1_INBOX(3)
 - Examples(9)
 - example-alias
 - example-command
 - example-contact
 - example-contactgroup
 - example-host
 - example-hostgroup
 - example-service
 - example-structural-object
 - example-timeperiod
 - IcingaConfig(2)
 - BaseConfiguration(5)
 - commands(4)
 - contactgroups(1)
 - contacts(1)
 - hostgroups(3)
 - timeperiods(3)
 - Monitored Environment(5)
 - Templates(2)
 - MyLinuxTemplate(8)
 - MyWindowsTemplate(3)
 - users(3)
 - admin
 - lconf
 - lconf-read

Properties

Property	Value
cn	example-command
lconfcommandline	\$USER1\$/check_users -w 50 -c 100
objectclass	lconfCommand
dn	cn=example-command,ou=Examples,ou=LConf,dc=demo,dc=netways,dc=de

Actions

Connections

- LConf
localhost:389

Search keyword

Buttons: Add property, Remove properties, Save Changes

Filters

EventDB – Verarbeitung von Traps und Logs

- Verarbeitung passiver Events und Messages
 - ▶ Syslog Anbindung über Syslog-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

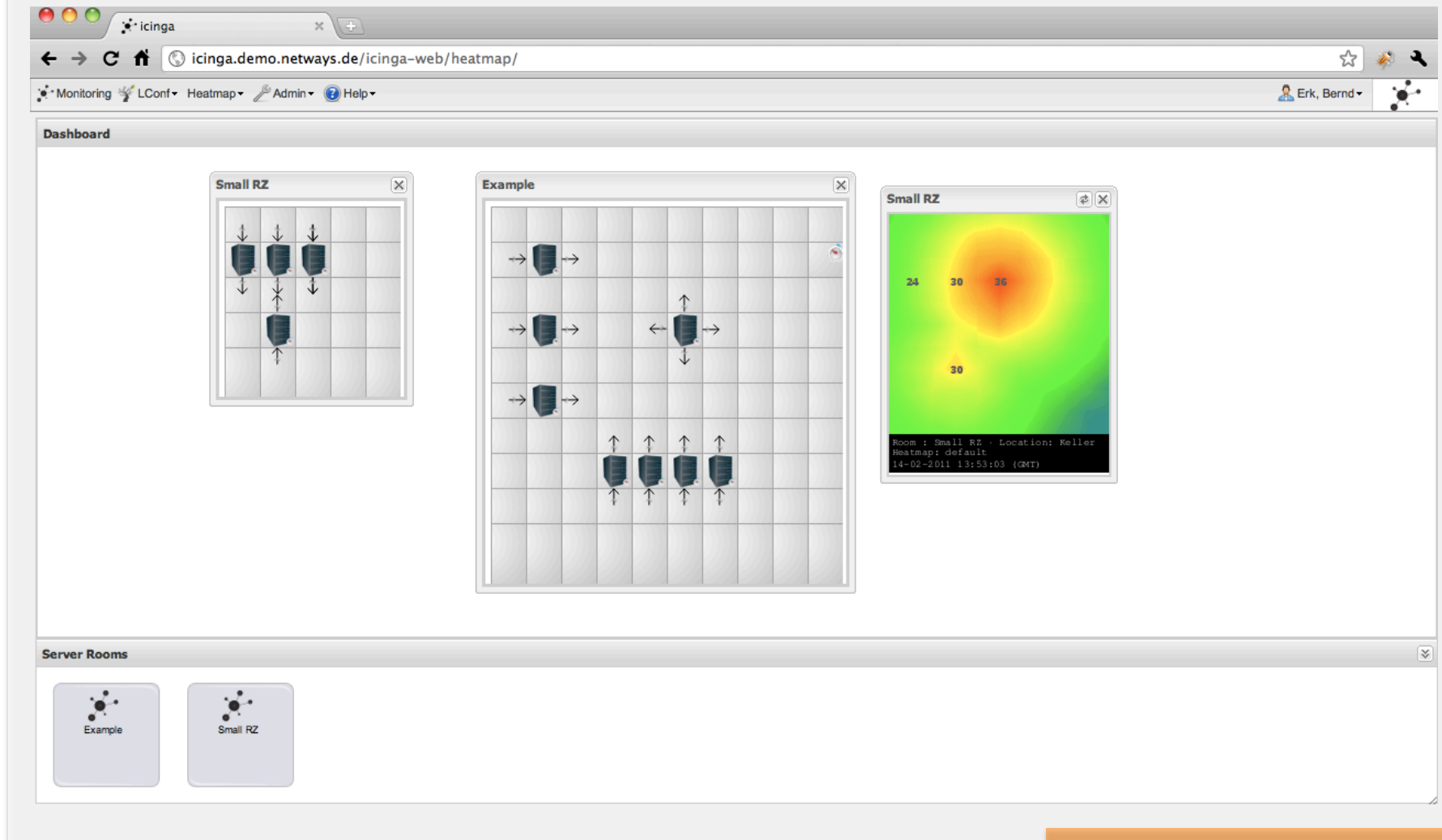


Screenshot of the Icinga - EventDB web interface. The browser address bar shows `icinga.demo.netways.de/icinga-web/`. The interface includes a top navigation bar with links for Monitoring, LConf, Heatmap, Admin, and Help. A status summary at the top displays metrics: 28 UP, 2 DOWN, 0 UNREACHABLE, 30 IN TOTAL, 210 OK, 1 WARNING, 3 CRITICAL, 0 UNKNOWN, 214 IN TOTAL. The main content area shows a list of events under the 'EventDB' tab. The left sidebar contains various monitoring tools like Downtimes, HostHistory, HostStatus, Hostgroups, LogView, Notifications, Open problems, ServiceHistory, ServiceStatus, Servicegroups, Status Map, and services ok. The event list table has columns for Ack, Type, Host, Priority, Message, Program, Facility, and Created.

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

Page 1 of 440. Displaying events 1 - 25 of 11000.

Heatmap – Temperaturvisualisierung





DEMO



ROADMAP

Roadmap

- Releases für 2012

- ▶ 1.7 – 15.05.2012

- ▶ 1.8 – 04.07.2012



FRAGEN UND ANTWORTEN



Question & Answer

NETWAYS GmbH

Deutschherrnstrasse 15-19
90429 Nürnberg

Tel: +49 911 92885-0

Fax: +49 911 92885-77

Email: info@netways.de

Twitter: twitter.com/netways

Blog: blog.netways.de