Open Source Monitoring

Icinga Team

Munich | Monitoring Workshop

06/13/2012

Agenda

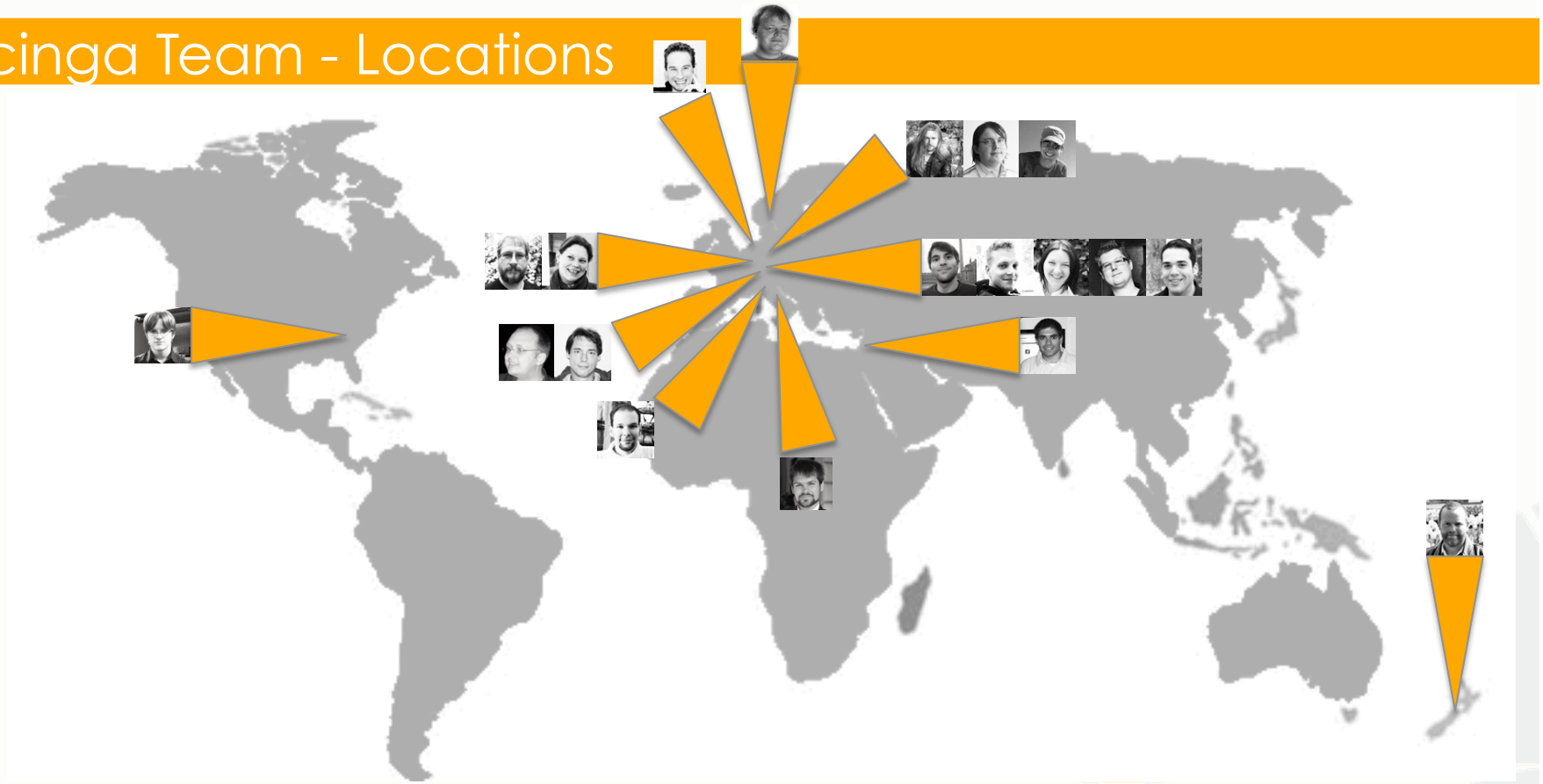
- Introduction
- Tools and Platform
- Icinga vs. Nagios
- Architecture
- New in Icinga
- Current Development
- Live Demo
- What's next
- Roadmap
- Questions & Answers

Introduction

Statistics

- Forked from Nagios in April 2009
- Over 200.000 downloads until now
- Different teams with independent responsibilities
  - Icinga Core
  - Icinga Web
  - Icinga Reporting
  - Icinga Marketing
  - Icinga Q&A
- 25 “active” members on the team

Icinga Team - Locations



Team

Tools and Platform

Icinga Quality, Testing and Community Support

Website and Open Source Ticketing System

Icinga Core

C based source
MySQL, PostgreSQL and Oracle

- IDOUtils
- FUTURE
- NRPE and NSCA

Icinga Web

based on PHP
using Sencha,
Agavi MVC

- Mobile

Icinga Doc

based on
Docbook in
English and
German

Icinga Reports

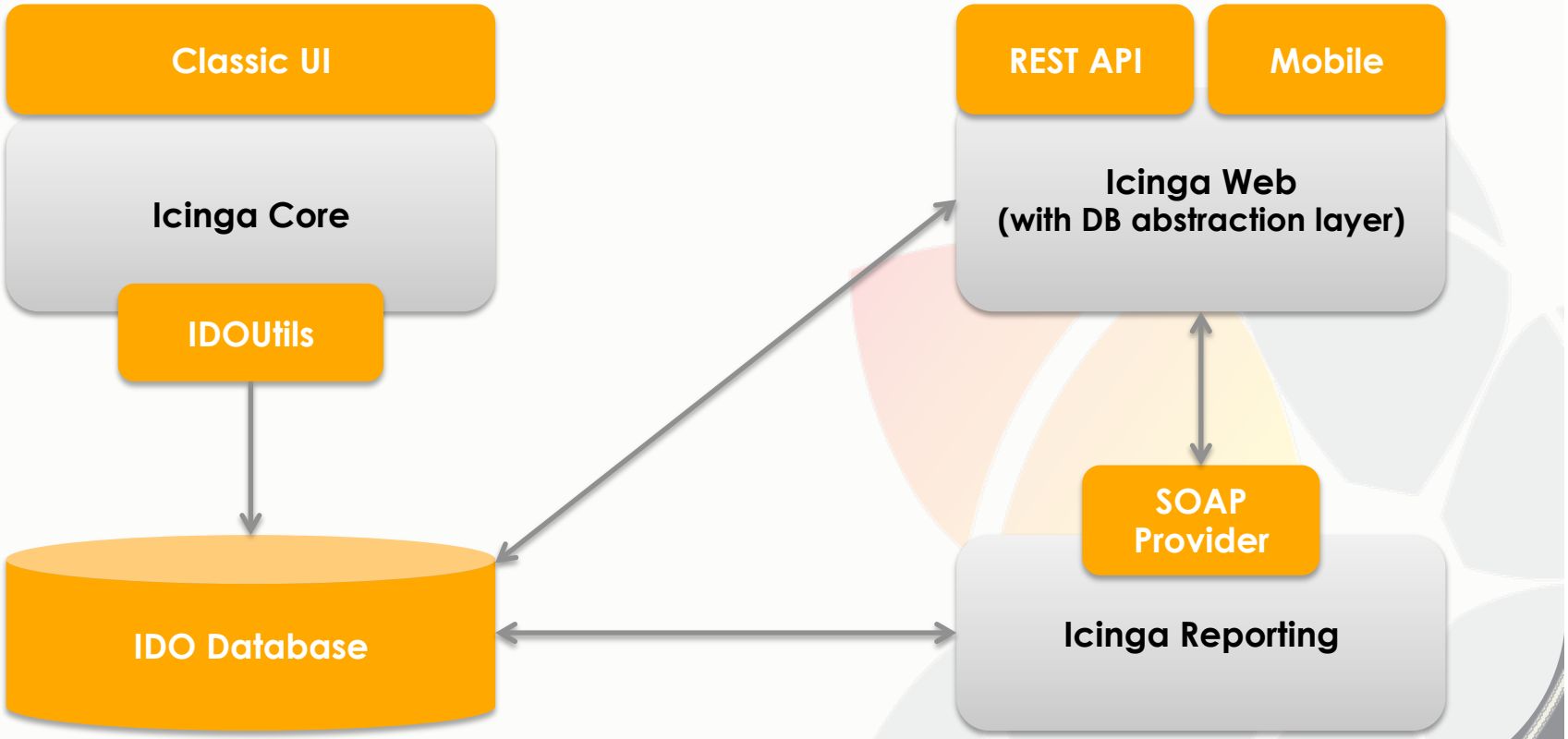
based on
Jasper Reports

Icinga vs. Nagios

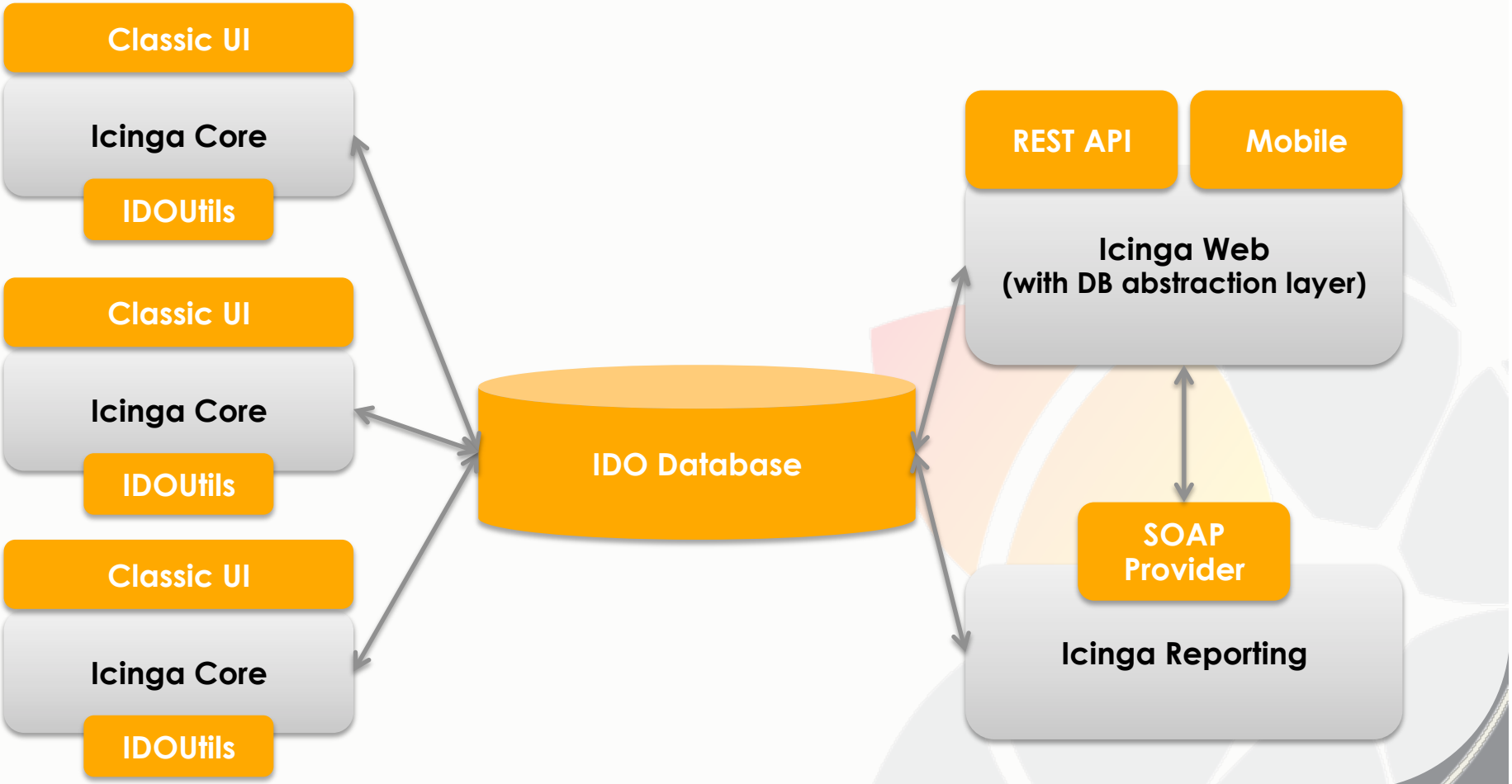
...

Why

Architecture



Architecture Distributed



Personally

<bernd>

Database performance

- serial database-write-performance slower
  - YES ~ 5% slower
- serial database-read-performance slower
  - YES ~ 15% slower
- random database-read-performance slower
  - NO ~ **900% faster**

Database stability

- Database stable ?
  - **YES**
- Knowledge needed ?
  - **YES**

MySQL Tips

- use InnoDB
- use MySQL 5.5
  - Performance
  - atomic Operations
  - InnoDB-Background-Threads
- disable query cache
- innodb_flush_log_at_trx_commit = 0

Personally

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New in Icinga - Core

- Acknowledgement with expiry time
- Dualstacked IPv6 support
- Extended logging capabilities
- Object configuration for modules
- Notifications for stalked hosts and services
- Handling of perfdata with empty results
- Enhanced performance (e.g. in notification logic)

New in Icinga - Classic UI

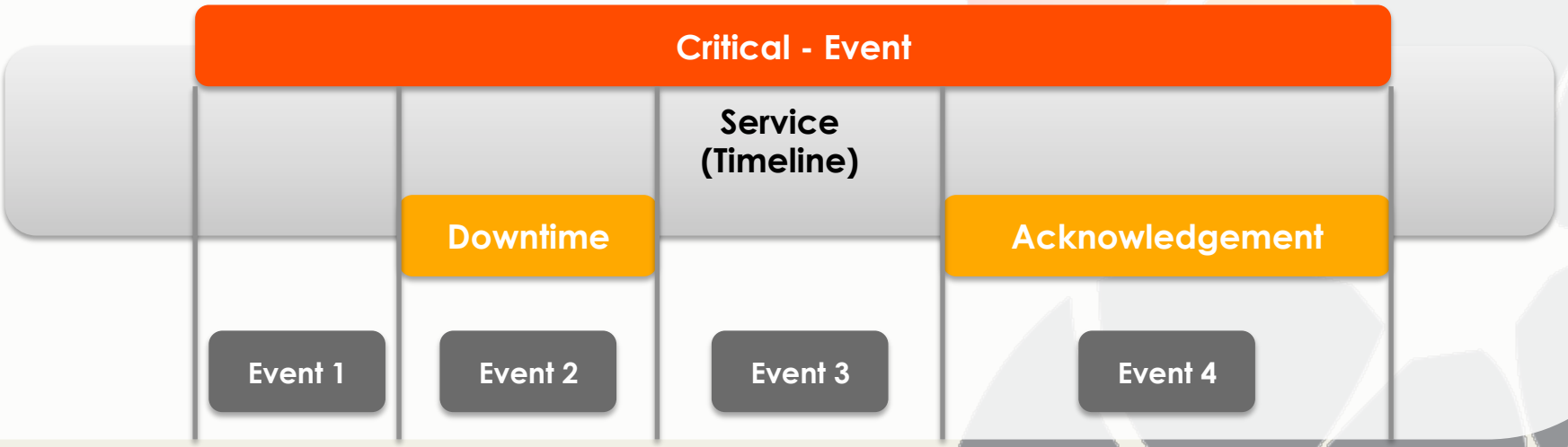
- Acknowledgement of blocking outages
- Advanced RegEx search
- Various improvements in navigation
- Advanced data export
  - JSON
  - CSV
  - XML
- Logfile search supported via webinterface
- Maintenance view for hosts and services in downtime

New in Icinga - IDOUtils

- Optimized check result processing
- Timezone awareness using UTC
- Improved Oracle support
  - CLOBs for outputs
  - Advanced table creation script
- Automatic db-version check
- Various improvements in housekeeping

New in Icinga - IDOUtils

- SLA Extension
  - Improved event aggregation
  - Extended database model
  - Extended IDO2DB logic
  - Base for future reporting implementation



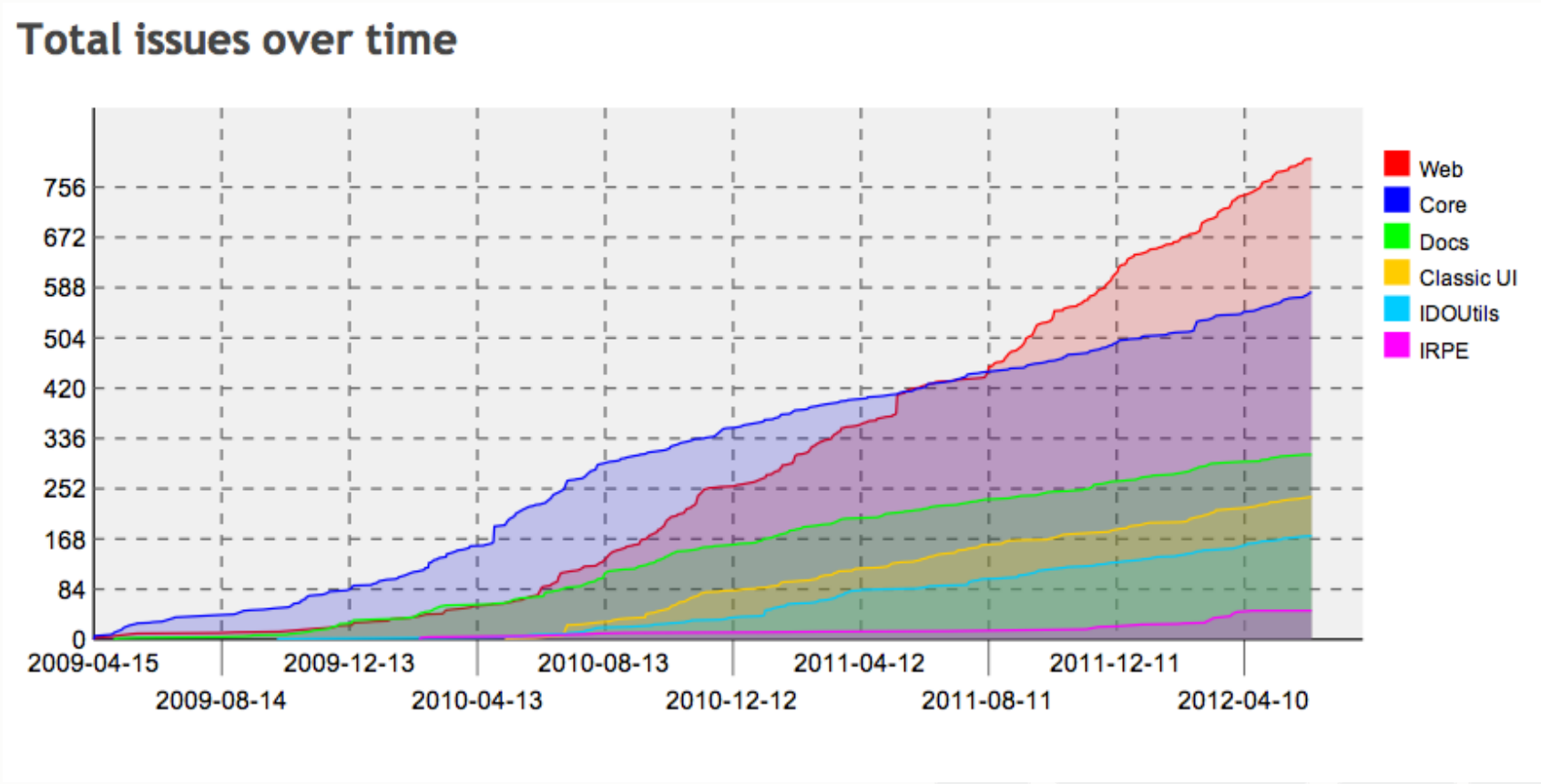
New in Icinga - Documentation

- Documentation
  - Detailed filter doc for CGIs
  - Quickstart for FreeBSD
  - PNP now described as default graphing solution
  - External command specification
- Wiki
  - Installation guides for various platforms
  - Addon documentation- and installations-guides

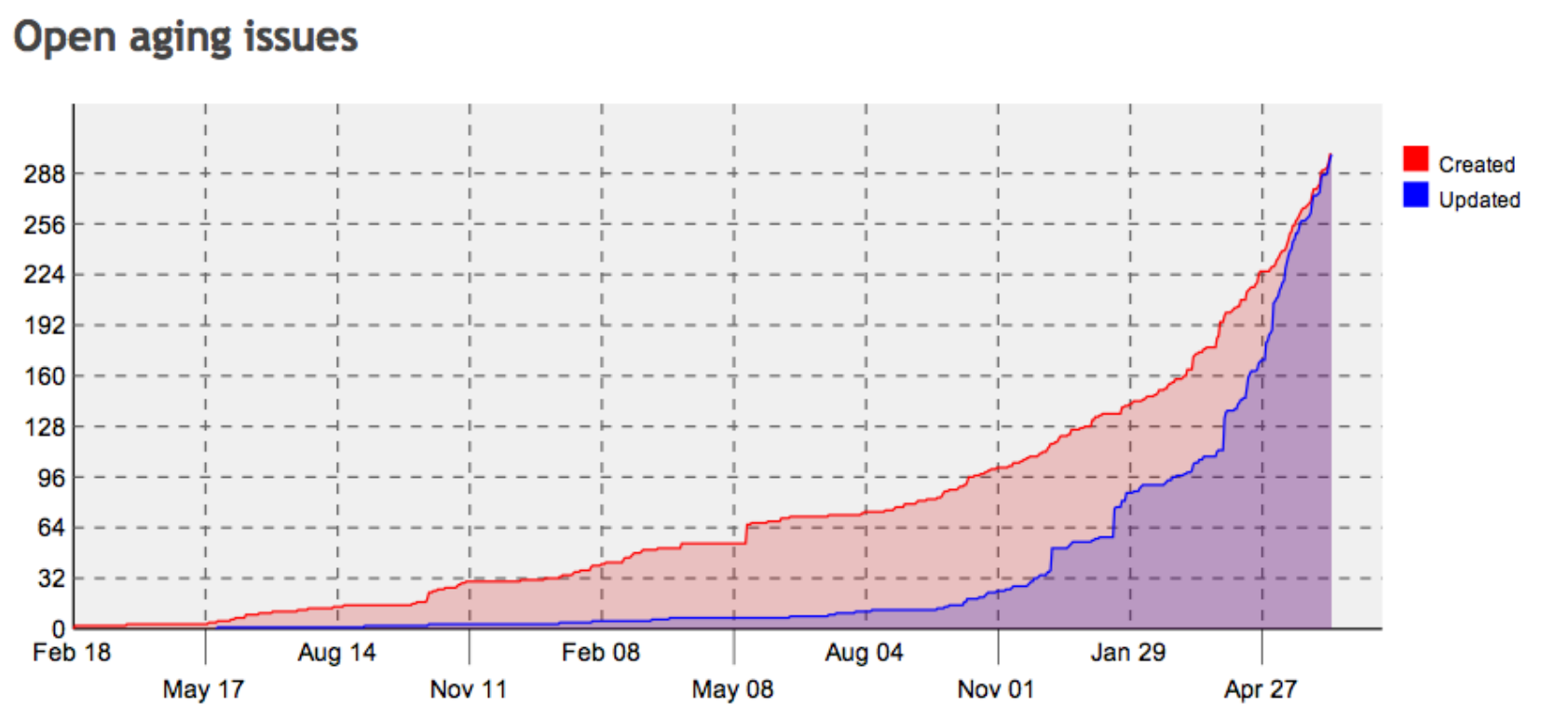
New in Icinga - Web

- Reporting integration
  - Execute reports in Icinga Web
  - Download supported formats directly without access to Jasper
  - Job scheduling
- New module interface
  - Update safe modules
  - Independent module configuration and installation
- New API
  - New Doctrine based abstraction layer supports various databases with easier configuration

Current Development – Stats



Current Development – Stats

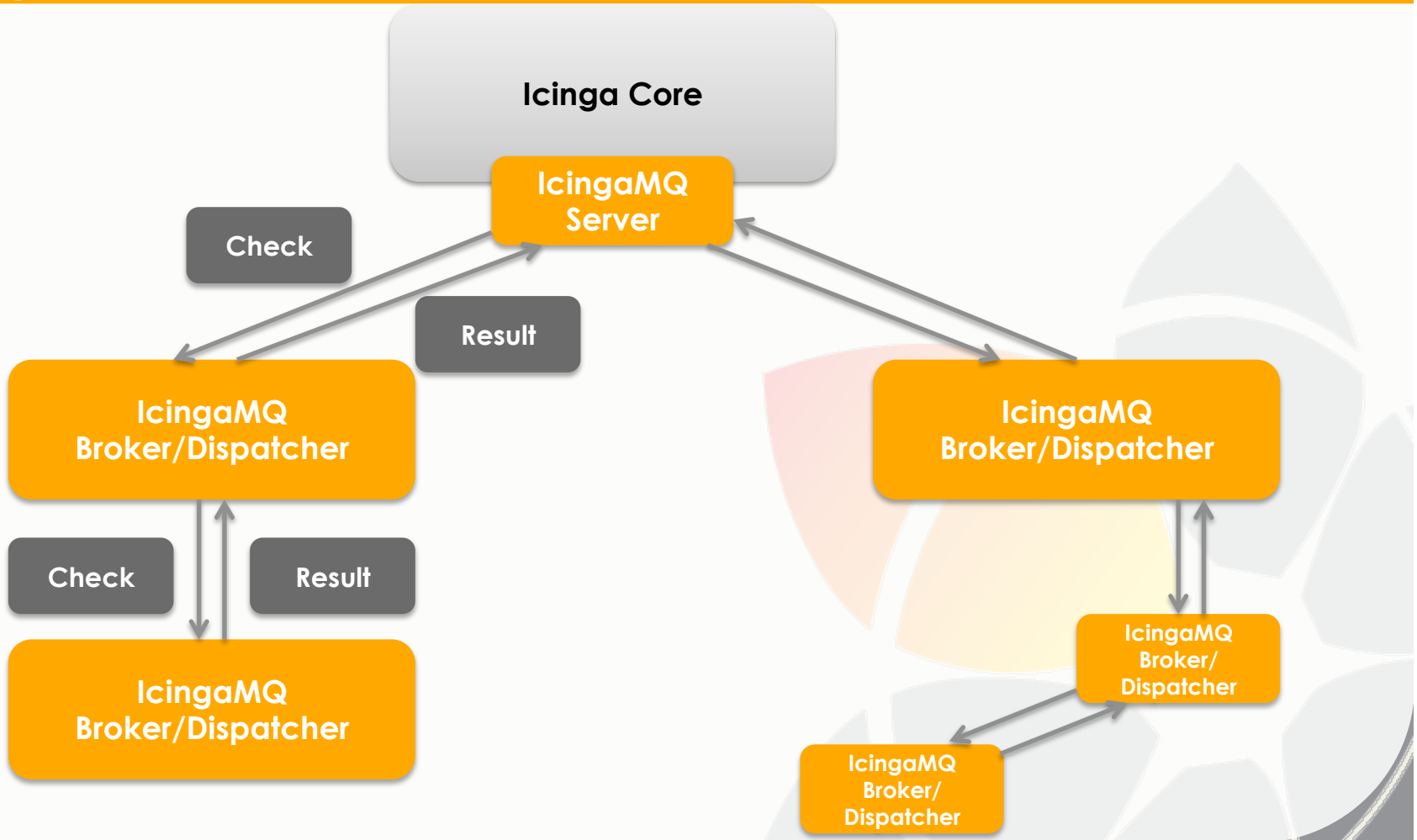


Current Development - Mobile

PostgreSQL

Current Development - MQ

IcingaMQ - Advanced



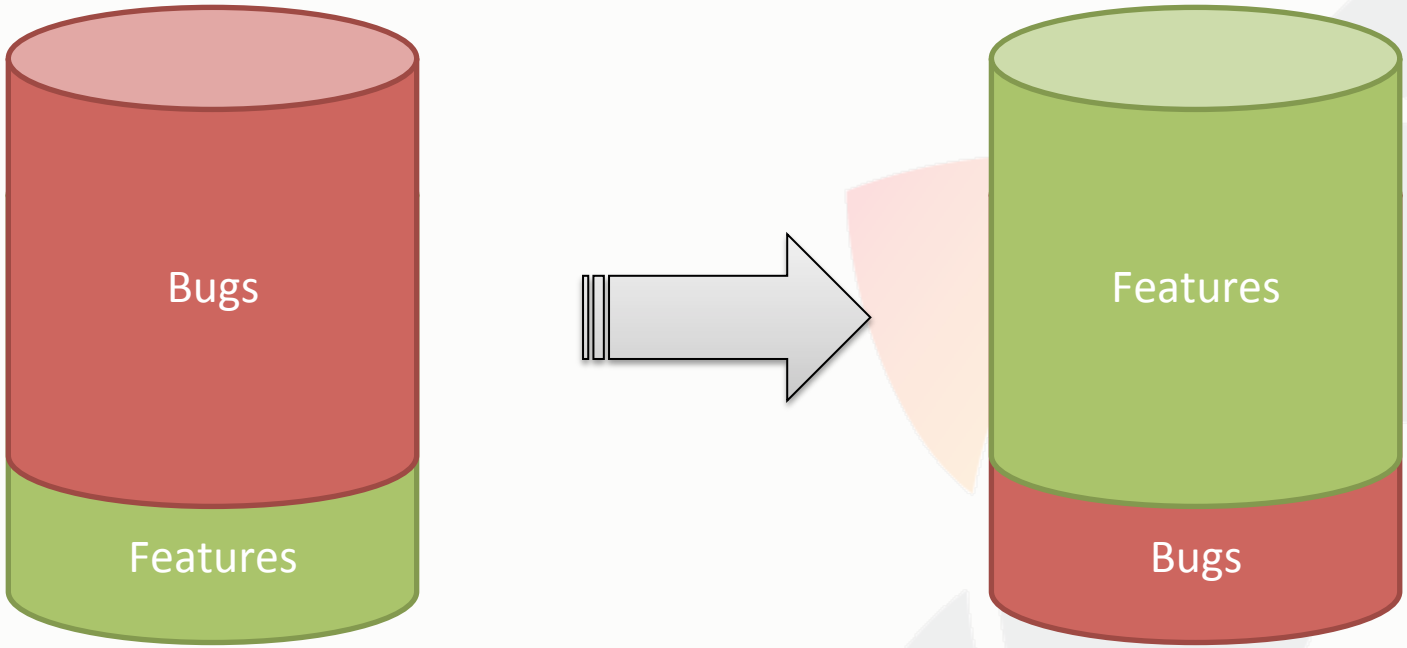
Live Demo

DEMO

What's next ?

- Performance improvements
  - Optimized check result handling
  - Easier handling of large installations
- Optimized installation process
- Extending Core Concept

Workload distribution



Feedback.icinga.org

- API to add new hosts/groups/services/commands automagically
- Multiple adresses for one host
- Icinga with real distributed architecture

What's next ?

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  - Optimized check result handling
  - Easier handling of large installations
- Optimized installation process
- Extending Core Concept

Roadmap

- Versions planned for 2012
  - 08/01/2012 – 1.8
  - 10/17/2012 – 1.9

Questions & Answers

Questions & Answers

Web www.icinga.org

Development dev.icinga.org

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Everywhere!