





# **Integrated Performance Monitoring**

JENNIFER provides comprehensive and integrated performance monitoring through its many dashboard views, which include Realuser Monitoring and Real-time Topology.



# **Service Availability**

JENNIFER analyzes statistical data regarding system resources, application performance and errors with a view to achieving continuous and optimal service availability.



# **Fast Problem Troubleshooting**

JENNIFER's continuous monitoring helps with rapid detection and troubleshooting of performance problems. That can help prevent the problems from affecting service availability later.



# **Improved Customer Satisfaction**

Minimizing system downtime and improving overall performance at the application and system levels greatly improves customer satisfaction.

# PERFORMANCE MANAGEMENT

# What is JENNIFER?

# Monitor Application Performance Intelligently with JENNIFER.

JENNIFER is a performance management solution for monitoring and analyzing performance at each stage of the lifecycle: development, testing, launch, operations, and stabilization of applications. It has powerful features such as real-time monitoring of services and resources, performance and fault analysis, reporting, etc. Real-time monitoring and X-View help clients to handle application management tasks more quickly and efficiently.

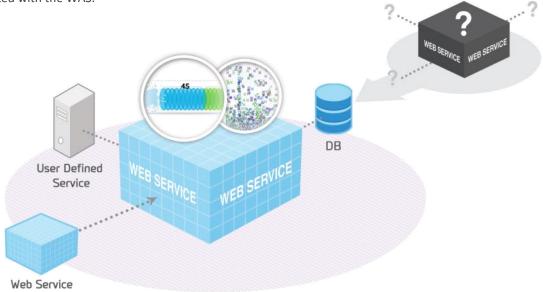
# **Application Performance Management (APM)?**

Application Performance Management (APM) is a system management methodology that focuses on monitoring and managing application software performance and service utilization. It includes real user monitoring, deep dive application component monitoring, transaction monitoring, and analytics. It is a critical function managed by DevOps, IT operation, application teams, developers, support teams, business managers, and other application professionals.

# Real-time Web Systems Topology View

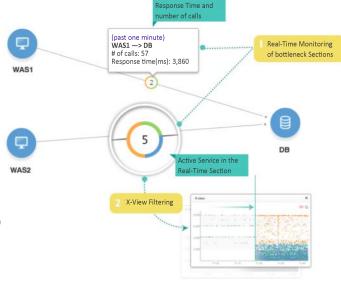
JENNIFER's topology view is a key feature enabling visualization of Web systems across the whole enterprise. JENNIFER provides effective monitoring of the Web application server (WAS) in a black box fashion. In fact, it enables monitoring of each transaction that takes place in the WAS.

JENNIFER's advanced capabilities include monitoring of transactions in the DB, external services, HTTP server, and other subsystems associated with the WAS.



# 1 Real-time Monitoring of Bottleneck Sections

Using active service data for subsystems and response time data, it is possible to intuitively monitor the locations of bottlenecks. For example, it is possible to monitor whether load balancing is achieved by database (DB) dualization. This enables you to head off faults before they happen.

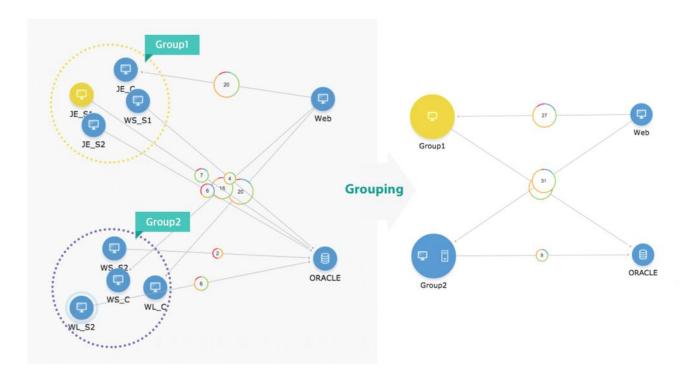


2 Analysis of Response Time Distribution (X-View) for All Transactions Executed in a Subsystem

It is possible to intuitively analyze all transactions executed in a subsystem through X-View.

# Monitoring of Large-scale Sites by Grouping

Large-scale Web systems use a lot of instances to execute the same service. It is possible to monitor the instances through real-time grouping.

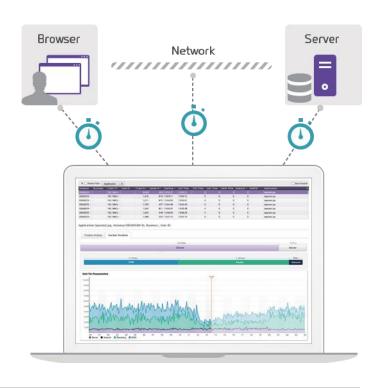


# Monitoring in Cloud Environments

It is possible to monitor increases and decreases in the number of instances in real time. If instances do not increase in response to traffic, it is possible to handle the situation through the auto-scaling feature.

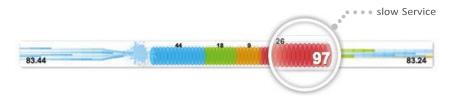
# **Browser Real-User Monitoring**

The performance of a web service is no longer measured in terms of hardware and software usage alone. Customer satisfaction is fast becoming a key performance indicator across virtually all industries, and web services are not immune to this movement. Companies are looking to monitor accurately what customers are experiencing when they use the services, so that they can make improvements to the process and achieve higher levels of customer satisfaction. To answer this need, JENNIFER now offers a real-user monitoring (RUM) feature. JENNIFER measures transaction response time from browser to server, providing a detailed analysis of the application's performance as it traces a user activity path employing the web service.

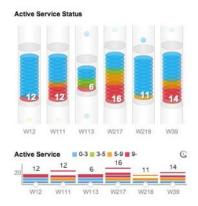


# **Individual Transaction**

# **Real-Time Active Service Monitoring**

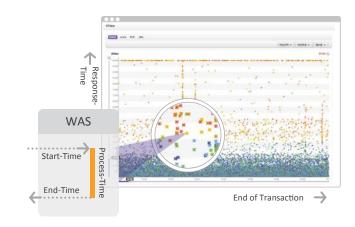


Real-Time Active service monitoring provides speed meter graphs for all processes by which user requests are handled, from immediately after the request hits the Web application server. It is possible to monitor information on transaction execution status, including which transactions are not yet processed, which users are suffering response delay, and which SQL query is currently executing.



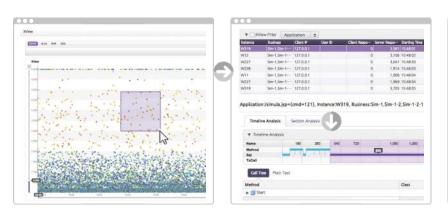
# JENNIFER X-View

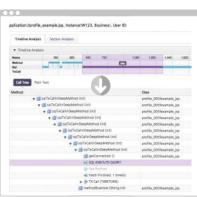
X-View is a chart, developed by JenniferSoft, which visualizes response times for all executed transactions in graph form. Users can monitor the response times of all services at a glance through X-View in order to discover bottleneck patterns. It also enables analysis of transactions, users, applications, etc. from various perspectives.



# **Smart Profiling**

JENNIFER's X-View analysis tool, showing the response times of individual transactions, has proven its worth to many customers. Profiling and analysis of individual transactions are advanced functions tools used by developers or professionals specializing in performance tuning. So, JENNIFER also provides a Smart Profiling function that enables easy analysis and configuration of profiling data. This function is so simple to use that anyone can quickly and accurately identify the location of a performance deterioration or a processing delay in a transaction by using filtering and analysis.





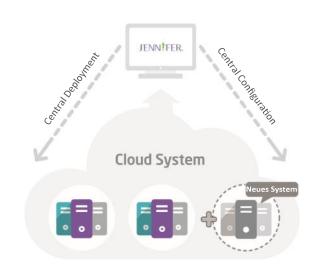
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# **Architecture**

# **Cloud Support**

Cloud computing is revolutionizing how IT resources are used and managed. Administrators can now setup or take-down virtual servers in minutes as needed - also the applications that run on them. To really benefit from a cloud environment, the flexibility and convenience that it offers in terms of hardware resourcing has to be matched in the application deployment and performance management space. JENNIFER provides the following three features, which support application performance monitoring in a cloud environment.

- Automated detection of system expansion.
- Integrated agent management (centralized agent deployment and upgrades).
- A dashboard for the service (domain) perspective.



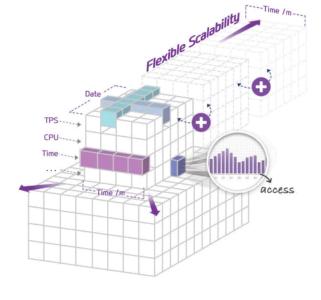
# System Data Server Integration New System Data Server View Server System System

### Scalable Architecture

APM typically needs to monitor more systems and store more data these days due to a proliferation of web systems. For that reason, JENNIFER changed its architecture from a conventional agent/server architecture to an architecture that uses different servers for data collection and view generation.

# **JENNIFER Repository**

JENNIFER Repository has a highly flexible and expandable architecture. Users can store and compare huge volumes of performance data, removing the need for additional systems.



# **Platform Support**

Web systems run on a wide variety of different platforms. JENNIFER supports monitoring for Java platforms, Microsoft .NET, and PHP (the most common JENNIFER platform).



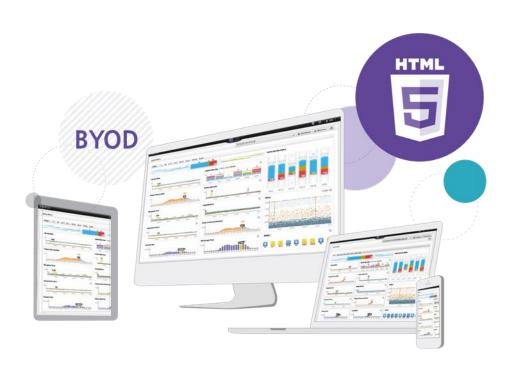
Java



# **HTML 5 View**

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JENNIFER offers N-screen monitoring implemented with standards-based HTML 5. Users can view JENNIFER screens without extra plug-ins for browsers or devices (PC, mobile, tablets, etc.).



- N-screen: Enables the user to view the same content via several different devices.
- BYOD (Bring your own device): Utilization of personal smart devices for the business activities in the company.

### Role-Based Dashboard View

# **System Administrator Dashboard**

When performance issues occur, the system administrator is responsible for identifying problems and stabilizing the operation of services. The system administrator dashboard consists of a real-time monitoring chart for services and system resources and a chart for comparing statistical information. With these charts, the system administrator can not only analyze the service load and performance status but also carry out normal system operations.

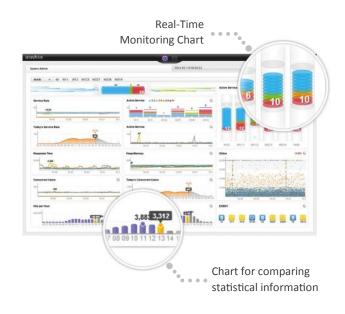
# **Manager Dashboard**

Although this dashboard relates primarily to mangers in the IT department, it is possible that a consulting team or IT planning group would require the ability to monitor operations in a similar way. The manager dashboard provides monitoring functions organized into two different perspectives. With these function, the manager can intuitively identify correlations that indicate the causes of a deterioration in business performance. It is possible to see whether the deterioration is a problem with the system as a whole or only a particular part of the business. The manager

can also facilitate communication between personnel who are responsible for relevant activities in the IT department or elsewhere. It is the manager's role to ensure that everyone works together to provide seamless IT services to the business. To achieve this, it is necessary to monitor both the system and the business.

# **Multi-Domain Dashboard**

This dashboard enables management of a large-scale system in a cloud environment with minimal human input. These days, it is essential that APM solutions are able to cope with such systems. JENNIFER's multidomain dashboard is comprised of a real-time active service chart, an overall performance chart showing the status of the entire system and a chart showing event notifications. With these tools it is possible to monitor multiple domains in a large-scale enterprise environment, in real time, and all from a single screen.







As new IT trends such as mobile devices, the cloud and big data have emerged, management of IT operations has become more complex. In Web environments it is becoming difficult to monitor the sheer number of transactions across multiple applications in a rigorous way. JENNIFER has revolutionized APM in terms of monitoring capabilities, the ability to inspect individual transactions, the provision of architectural and platform overviews, and in terms of its user views.

# Application Web Application Server **JAVA** JVM OS Application Data **JENNIFER** View .NET TCP TCP TCP Server Client .Net Server IIS JENNIFER Repository **Application Server** Web Browser PHP Module PHP Apache JENNIFER Agent

# **Supported Environment**

# JAVA

# **Operating Systems**

- AIX 5.x, 6.x, 7.x 32bit, 64bit
- HP-UX 11.x 32bit, 64bit, Itanium 64bit
- Oracle Solaris 2.8, 2.9, 10, 11 32bit, 64bit, x86
- Intel Linux 32bit, Redhat Itanium 64bit
- Microsoft Windows 2000, XP, 2003, 2008, 7, 8
- IBM iSeries(AS400) for WebSphere
- IBM z/OS for WebSphere, zLinux

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# **Operating Systems**

 Linux kernel version 2.6.8 or later (RHEL 5 or later Ubuntu 7 or later)

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# **Operating Systems**

• Windows Server 2003 or later (2003, 2008, 2008 R2, 2012, 2012 R2), x86 und x64

### **Application Server**

- BEA WebLogic 9.x. 10.x. 11.x. 12.x
- IBM WebSphere Application Server 6.1, 7.x, 8.x
- Tmaxsoft JEUS 4.x , 5.x, 6.x, 7.x
- SUN Application Server 8.x, 9.x
- Fujitsu Interstage 5.x, 6.x, 7.x
  Hitachi Cosminexus 7.x, 8.x, 9.x
- Sybase EAServer 4.x, 5.x
- Apache Jakarta Tomcat 5.x, 6.x, 7.x, 8.x
- Caucho Technology Resin 3.x, 4.x
- RedHat JBoss Application Server 5.x, 6.x, 7.x
- GlassFish 2.x, 3.x , 4.x

# **Web Server**

• Apache 2 in prefork, worker, event mode

### **PHP Version**

- anache module hased
- 5.2, 5.3, 5.4, 5.5

# **GNU libc Version**

• 2.5 or later

# Web Server

• IIS 6.0 or later (6.0, 7.0, 7.5, 8.0, 8.5)

### .Net Framework

• .NET Framework 2.0 or later (2.0, 3.0, 3.5, 4.0, 4.5)

# **Supported DB**

 Derby, DB2, Informix, MS-SQL Server, MySQL, PostgreSQL, Oracle Database, Sybase, MongoDB

# **Supported DB**

• MySQL, PostgreSQL, Oracle, MS-SQL

# **Supported DB**

 Windows Server 2003 oder h\u00f6her (2003, 2008, 2008 R2, 2012, 2012 R2), x86 und x64

# **JENNIFER Key Features**

# **Real-Time Integrated Monitoring**

- Role-based dashboard view
- Real-time topology view
- N-screen monitoring environment
- Intuitive active service monitoring
- Real-time transaction analysis
- Alerts





# **Performance analysis and statistics**

- X-View and detailed transaction
- Profiling
- Smart profiling
- Browser Real-user monitoring
- Statistical analysis and reporting





# **Problem Diagnosis** and Management

- Load control for traffic congestion
- Memory leakage tracing
- Role-based event management
- Application and SQL tuning data provided



# Cloud (large system) support

- Auto-detection of an expanded instance
- Integrated agent management (centralized agent deployment and upgrades)
- Integrated Dashboard for large scale services

### **About NuPSoft**

NuPSoft is a sales, marketing, development and support organization that provides robust and proven "State-of-the-Art" business solutions on a worldwide basis. Founded in 2002 by a group of experienced multinational software distribution and IT professionals, backed by a highly skilled team of developers and engineers, NuPSoft has the expertise and market knowledge required to identify, develop, distribute and support high quality and effective IT solutions that meet the fast evolving needs of today's major business organizations. We consider our customers to be our partners, which we provide with consultation, products and support continuously. NuPSoft has the objective to be an important supplier of software solutions, services and technology integrations in all fields. To reach this goal we co-operate closely with our worldwide reputable partners of the IT industry. Apart from security, stability, user comfort and performance of our solutions we put our special attention on short development cycles with customer oriented adaptations and/or developments. Up to now the company has sales and support offices in Austria, Germany and Switzerland. From our locations we run the sales, the support and the 24x7 support for the following regions: Western Europe, Central and Eastern Europe, Middle East and South Africa.

# www.nupsoft.com

### About Jennifersoft

JenniferSoft, Inc. is a software development company with expertise in system performance monitoring and problem resolution. With experience in enterprise system planning and consultation, JenniferSoft provides Application Performance Management (APM) solutions and services for companies' enterprise web-systems. JenniferSoft's APM solution, JENNIFER®, specializes in JAS (WebSphere, WebLogic, Resin, GlassFish, JBoss, Tomcat, etc.) performance monitoring and supports different types of Operating Systems including Windows, all types of UNIX (IBM AIX, Oracle Solaris, HP-UX), IBM i and especially z/OS. JenniferSoft's APM solution, JENNIFER®, provides efficient real-time system monitoring, practical performance problem diagnosis and troubleshooting, and effective performance management for all enterprise web-based systems on the market.





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