of system in optimal condition APM—Make the performance

jennifersoft.com

Management with JENNIFER **Application Performance** 





**APM—MAKE THE** PERFORMANCE **OF THE SYSTEM IN OPTIMAL CONDITION** 



**Application Performance** Management (APM) helps keep information systems in optimal condition by conducting performance monitoring of an application and forecasting potential problems.

have solution.



APM also plays a key role by forecasting potential problems and swiftly detecting and responding to existing problems. The demand for APMs will continue to increase as they play a pivotal role in stabilizing IT service while the transactions of web applications increase and become complicated. Because it is necessary to secure the performance of core applications as well as to expand them and ensure their responsiveness, APMs such as JENNIFER are not just good products but a must-



# **EFFECT AND** VALUE **OF APM**

The importance of APM has risen as web service has been widely applied to almost the entire business industry and not just internal systems. Accordingly, investment in APM has increased, growing both at home and abroad during the global financial crisis and the challenging business environment in recent years. APM today is required to monitor various systems running web applications and program elements together to secure stability in relation to the increased complexity of the IT environment. It is important for APM to seamlessly operate with various system platforms such as commercial, open source, operating system, web application, server, database, and numerous application frameworks.

Once APM is applied, a client can manage the entire system and situation using the web service. Therefore, APM can enhance the stability of the client's core business. In addition, APM helps simplify the management of sharply increased IT infrastructure and decrease the related cost.

Unexpectedly, the APM market has continued to grow every year since 2010. According to a market report (2016.08) by IDC, the global APM market was worth \$3.07 billion USD in 2015, an increase of 12.1 percent over the prior year, thanks to the high demand of DevOps and Multi-Cloud. The average growth rate from 2015 to 2020 is expected to be 12.5 percent, resulting in \$5.54 billion USD market share in 2020.

# . . . . . . . . . . . . . . . . MARKET

# NO. 1 APM SOLUTION IN THE DOMESTIC MARKET

JENNIFER is designed to monitor the entire status of WAS at once, and it helps easily identify what caused an error. The software can monitor and analyze performance at each stage of the lifecycle: development, testing, launch, operations, and stabilization. It also enables users to monitor their systems in real time under different platforms such as Java, .Net, and PHP with minimal overheat. It has powerful features such as real-time monitoring of services and resources, performance and fault analysis, reporting, etc. Real-time monitoring and individual transaction monitoring (Smart Profile, X-View) help clients handle application management tasks more quickly and efficiently.



According to a 2016 Daily Grid market report written by Jang, Young-sin, "Jennifersoft led the WAS APM market with its 64 percent market share. WAS monitoring plays a pivotal role in helping companies' applications operate smoothly. For this reason, sales of Jennifersoft and its position in the market are solid. While competitors continue to appear, the company is strengthening its market position by investing more in WAS monitoring. Its monitoring allows users to control large capacity data smoothly."

WHY DO **CUSTOMERS CHOOSE JENNIFER?** 

One of the biggest reasons clients choose JENNIFER is its stability. Given that APM operates together with WAS, a core part of web service, one of the most important tasks for monitoring technology is to minimize influence on WAS. If a solution has not been fully proven under various environments, its users might end up paying extra as they go through numerous tests after buying an APM.

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JENNIFER		·	· · ·	65
Α	11%			
В	4%			
С	4%			
D	3%			
E	3%			
F	2%			
ETC	8%			
	\$3,000,000	\$6,000,000	\$9,000,000 <sup>°</sup>	\$12,000,00



### **HIGH RETENTION RATE**

The retention rate of JENNIFER customers is one of the top in the industry. Once clients use the software, they recognize its effectiveness and tend to repurchase it when they need an additional or new copy. A high retention rate indicates customer trust.



JENNIFER is available for purchase on the Korea Online E-Procurement System. Numerous clients in the public sector are

buying a copy from this system.







### **NO.1 MARKET SHARE**

JENNIFER is the No. 1 APM software with a market share of 65 percent since 2005.



### **1,200 CLIENTS**

JENNIFER is a proven software with 1,200 clients across the globe since 2005. Every year, 80–100 new clients are added in Korea alone, and 350 out of 950 clients in the domestic market are in the public sector.

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### **HIGHLY QUALIFIED** PACKAGE PRODUCT

JENNIFER is a highly qualified package software that has been applied in different environments with varied requirements from numerous clients over the past 12 years. It is a reliable tool to use in a mission-critical work environment.

# **INDIVIDUAL TRANSACTION** MONITORING

**Real-time** active service monitoring

From all transactions that come into WAS for processing, Active Service Monitoring controls the entire process in real-time. Its intuitive chart shows meaningful information such as transaction execution status, including which transactions are not yet processed, which users are suffering response delay, and which SQL query is executing in real time.

**Real-time** X-View

X-View enables users to analyze completed transactions in real-time. X-View is a chart indicating the response time of all transactions as individual dots. Users are able to not only identify the distribution of response time of transactions, but also to detect various distribution patterns. As a result, they can recognize the cause of problems promptly and respond to them.



## Notice application changes

Application Performance

Management with JENNIFER

Companies are more swiftly changing their applications to meet the demands of various customers and of a rapidly changing market. Developing environments based on Micro Service Architecture (MSA) and a change to DevOps accelerate this trend even faster. In this state, it is significant to monitor variations in performance when changes are made so that errors can be spotted. From a monitoring perspective, companies change their applications when they experience performance degradation or notice errors frequently.





monitor performance variation before and after alteration in real-time through its application change detection. It also can detect and track which source code has been changed. By doing so, both developers and operators can see and respond to any change on their services easily and rapidly.

JENNIFER

# TRANSACTION **ANALYSIS**

### Smart Profiling

JENNIFER's X-View analysis tool, showing the response times of individual transactions, has proven its worth to many customers. Users find it difficult to do profiling analysis unless they are either developers or professionals specializing in performance tuning. JENNIFER provides a Smart Profiling function that enables anyone to conduct profiling data analysis. Users can select the part where response time is slow among Method, SQL, and external services, enabling them to analyze the profile easily and quickly.

### Auto-Stacktrace

performance expert.



Most APM systems, including JENNIFER, provide a third profiling so as to analyze what made the transaction slow. Such a feature, however, could influence performance with a false setting or could fail to find the actual sluggish method. Moreover, it is very difficult to use unless a user knows well the application logic or is a performance expert. To overcome such a limitation, JENNIFER provides Auto-Stacktrace. When a slow transaction occurs, it collects the Stacktrace automatically. A user then can analyze the cause of slowness easily and quickly without being a



### SUMMARY ANALYSIS

JENNIFER finds the slow method by analyzing multiple Stacktrace data and enables users to analyze the cause of delay as quickly as possible.

# **ANALYSIS AND REPORT**

Per-second performance monitoring and post analysis

The JENNIFER Repository, a source technology of Jennifersoft, optimizes per second data storage. JENNIFER can analyze both dashboard and past data per second. Because it can do this during actual monitoring without sampling, users can analyze actual data at the time of monitoring.

Report

reporting chart just with a mouse click.

JENNIFER can analyze both dashboard and past data per second. Because it can do this during actual monitoring without sampling, users can analyze actual data at the time of monitoring.







Creating a performance analysis report can be difficult as users are asked to have professional knowledge and know how to handle related tools. In particular, one used to have to use SQL or an unfriendly drag-and-drop user experience design. The JENNIFER reporting feature, however, is based on a text editor, which means users can easily write a report the same way they use an editing tool. On top of this, JENNIFER users can add a

> feature, however, is based on a text editor, which means users can easily write a report the same way they use an editing

### Architecture

Support

Environment



### **Operating Systems**

• Windows Server 2003 or later

• Tmaxsoft JEUS 4.x, 5.x, 6.x, 7.x • SUN Application Server 8.x, 9.x

Application Server

6.1, 7.x, 8.x

- AIX 5.x, 6.x, 7.x (32bit, 64bit) • Linux kernel • HP-UX 11.x 32bit, 64bit, Itanium 64bit (RHEL 5 or later
- Oracle Solaris 2.8, 2.9, 10, 11 (32bit, 64bit)
- Intel Linux 32bit, Red Hat Itanium 64bit Web Server • Apache 2

- IBM iSeries(AS400) for WebSphere Anv Server th
- IBM z/OS for WebSphere, zLinux
  - GNU libc Versi
  - 2.5 or later

- Oracle, Maria DB
- GlassFish 2.x, 3.x, 4.x

• Sybase EAServer 4.x, 5.x

### Supported DB

MySQL, Microsoft SQL Server, PostgreSQL, DB2, Derby, Oracle, Sybase, MongoDB, HSQL, MariaDB, CUBRID



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**ARCHITECTURE** 

### **Cloud Support**

One of the most significant recent IT trends is the cloud. A core service is still run by companies themselves for security and safety reasons, but mobile services aimed toward the global market have been actively moved to the cloud. One of the biggest merits of the cloud is expandability. The volume of transactions are freed from the limitation of hardware. and the number of servers can be adjusted, if necessary.

- automated detection on an expanded instance
- integrated agent management (e.g.,
- deployment and upgrading of JENNIFER agents)
- an integrated dashboard for large-scale service



### 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. Even if the number of agents to collect increases under a large-scale monitoring environment, users can conduct monitoring by expanding the data server monitor data collected from different servers in the view server.



### **JENNIFER Repository**

The 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.

- PHP Version • BEA WebLogic 9.x, 10.x, 11.x, 12.x • Apache modu • IBM WebSphere Application Server based, PHP-CLI • 5.2, 5.3, 5.4, 5

PHP Built-in

• Fujitsu Interstage 5.x, 6.x, 7.x, 8~11.x

# Supported DB

- Hitachi Cosminexus 7.x, 8.x, 9.x, 10.x
- Apache Jakarta Tomcat 5.x, 6.x, 7.x, 8.x • Caucho Technology Resin 3.x, 4.x
- Red Hat JBoss AS 5.x, 6.x, 7.x

JAVA



РНР	.NET				
Operating Systems	Operating Systems				
• Linux kernel version 2.6.18 or later	• Windows Server 2003 or later				
(RHEL 5 or later Ubuntu 7 or later)	• (x86 and x64 included)				
Web Server	Web Server				
• Apache 2	• IIS 6.0 or later				
<ul> <li>Any Server that can run with PHP-FPM</li> </ul>					
<ul> <li>PHP Built-in web server</li> </ul>	.NET Framework				
	• .NET Framework 2.0 or later				
PHP Version					
• Apache module and PHP-FPM module	Supported DB				
based, PHP-CLI	Microsoft SQL Server, PostgreSQL,				
• 5.2, 5.3, 5.4, 5.5, 5.6, 7.0(NTS), 7.1(NTS)	DB2, Oracle				
GNU libc Version					
• 2.5 or later					

MySQL, Microsoft SQL Server, PostgreSQL,



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