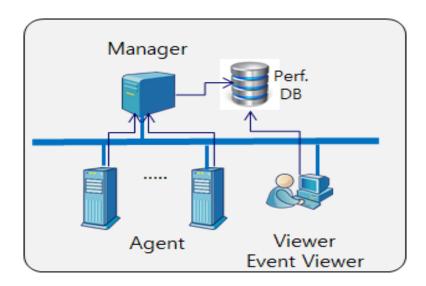
onTune SPA - Server Performance Monitor and Analysis Tool



Product Components - onTune is composed of the <u>Manager</u>; the <u>Agents</u>; and <u>Viewers</u>

Manager - the core on Tune component, and installed on the management/viewing computer

- Stores server performance data collected by Agent into the onTune database
- Manage overall onTune environments with the Expert Management console to provide centralized installation, monitoring, remote job execution, patching, and updating
- Sends system performance and other data to the Event Manager to verify

Agent - Installed on the server(s) to be monitored and managed

- Collects and monitors real-time system performance data down to seconds intervals, and sends it to the Manager
- Execute user-defined jobs

Viewer/Event Viewer - installed on the management/viewing computer, and provides the functions to present system performance information to users.

- Displays real-time monitor, and short-term and long-term performance data analysis
- Displays system performance, results of user-defined jobs, and server information
- Displays user-defined events

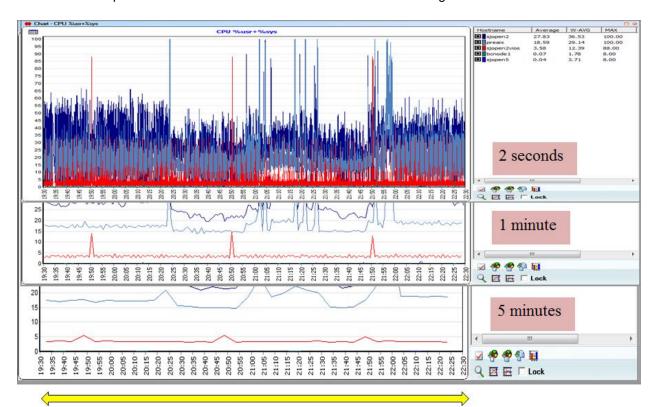
Utilities within the Manager

- Event Manager
- Verifying performance data based on user-defined events conditions
- Save and Store event occurrences
- Facilitate configuration of event conditions
- Notify events to pre-defined users (SMS, E-Mail, and others)
 - Admin
- Administer performance collection settings.
- Manage viewer user and navigation trees
- Edit user-defined scheduling jobs

Product Functionality - Where on Tune is different

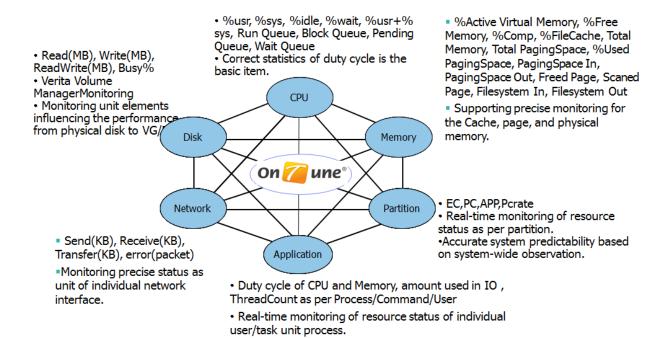
Server Performance Monitoring and Analysis

• Monitor performance in real time - data collection and monitoring to 1 sec intervals.



Collection of Basic Performance Data

- Diversity and depth of performance data collection CPU, Memory, Disk, network; per user, per user + command group; Process ID
- Agents are Lightweight consumes less than 1% of CPU resources of server under monitor



Expert Management Console Viewer

- smartly presents system performance, results of user-defined jobs, and server information for locating bottlenecks
- · presents user defined events



onTune Hardware, System Software and Network Specifications

Manager

- Windows 7 or later, (Windows Server 2008 R2 or later recommended.)
- 2 GHz Quad Core CPU or better
- 4 GB Memory or more (If number of *Agents* are more than 500, consider to add memory.)
- Storage: Refer to "1.3.2 Calculating Storage Requirement"

Agent

- HP-UX : HP-UX 11 or later
- AIX : AIX 5.1 or later
- Solaris : Solaris 5.x or later
- Linux: Redhat, SUSE, Ubuntu, Linux Kernel Version 2.6 or later, (If Linux *Agent* will not work, request appropriate *onTune Agent* to support team with your Linux kernel information.)
- Windows: Windows 2000 or later

Viewer/Event Manager/Event Viewer

- Same as onTune Manager
- For Viewer and Event Viewer, Windows XP, Windows Vista, Windows 8

Calculating Storage Requirement

The storage volume requirement is calculated based on performance data collection interval and storing period.

Calculation

- The number of servers to be monitored
- Short term performance data collection interval (Sec)
- Short term performance data storing period (Day)
- Long term performance data collection interval (Sec)
- Long term performance data storing period (Day)

With *onTune* default settings for performance data collection intervals and storing period, to monitor 100 servers needs about 2.5GB for each, 250GB in total 1 year after installation of *onTune*. 70% storage capacity consumed to store short term performance data. Calculate your storage requirement using this experience. However this number is only used for limited purpose, *onTune* does not guarantee calculated capacity is enough in your environments.

The real requirement of storage volume depends upon the number of servers, CPUs, Processes, server users, number of disks, IO adapters. So this calculation may be different your real requirements. And this calculation only considers storing collected data, you have to consider backup policy.

Network Considerations

onTune modules communicate other onTune modules and databases thru TCP. You should check FIREWALL configurations, and allow using following TCP ports and communication direction.

Connection	Origin IP	Dest. IP	TCP Port (*)	Direction
Agent -> Manager	IP address of Servers to be monitored	Manager IP	18893	oneway
Manager -> Event Manager	Manager IP	Manager IP	18894	oneway
Manager -> Database	Manager IP	Database IP	5432 (PostgreSQL default) 3306 (MariaDB default)	oneway
Event Manager -> Database	Event Manager IP	Database IP	5432 (PostgreSQL default)	oneway
Viewer -> Database	User PC	Database IP	3306 (MariaDB default)	oneway
Event Viewer -> Database	User PC	Database IP		oneway

Comment (*) TCP port settings may be changed. The connection port to database is the listening port of the database engine.

TCP Port: If you install onTune base packages including database such as PostgreSQL or MariaDB, default listening port - 5432 for PostgreSQL or 3306 for MariaDB - will be used.

Confirm availability of this port with your network administrator. If these default database listening ports are in use for other purposes, please change the listening port, and separately install the database.