eG Single Agent

Key benefits of the eG Single Agent

- eG Enterprise's single agent licensing policy avoids the laborious and time-consuming process of configuring each and every agent
- Licensed per server, not by number of CPUs, Cores, or Sockets
- Offers unparalleled deployment flexibility - one agent can monitor all the applications running on a server
- No need to configure innumerable firewall rules to get your monitoring system to work
- No need for a VPN for secure monitoring – eG Enterprise uses HTTP/HTTPS offering flexible, secure, remote monitoring capabilities
- Automatically upgrade hundreds of agents whenever a new release is available; No need for manual intervention

For decades, monitoring solutions employing the manager-agent model have differentiated themselves by the intelligence and analysis capabilities incorporated into the manager component. The software agents that collect and report measurements pertaining to the health of an IT infrastructure have been viewed as commodity items that perform similar tasks. This line of thought undermines the key role that agents play in a monitoring solution:

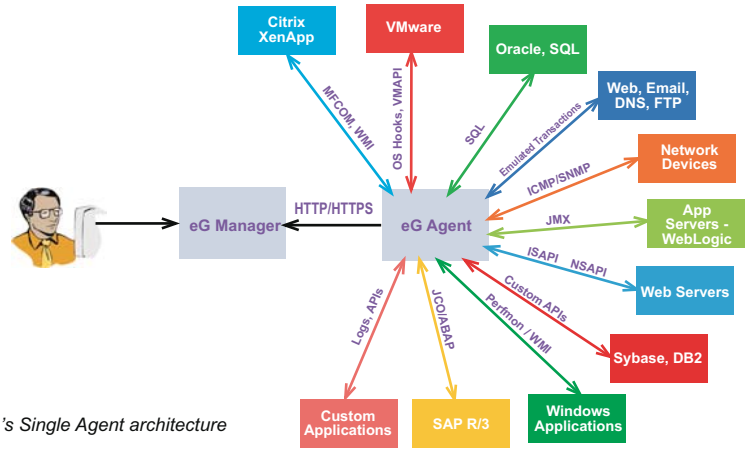
- A large infrastructure may have hundreds of servers and network devices to monitor and the ease of deployment of the agents can have a key impact on the total cost of ownership of the monitoring solution - e.g. are there many firewall rules that need to be configured to get the agent to communicate with the manager?
- Another key aspect is the complexity in configuring the agent – how long does it take to get the agents up and running? Can the configuration be done centrally?
- A third attribute is the on-going maintenance required for an agent. When a new upgrade is available for the agent, does it have to be manually upgraded? If a new application has to be monitored, does a new module or a new license have to be added to the agent?
- Flexibility of the agent licensing is another key – is the agent license bound to a specific IP address? specific operating system? or specific hardware?

The eG Agent Architecture

The eG agent architecture has been designed to benefit both small and large organizations. The key features of this architecture are:

- **Unique Single Agent technology**
  The eG Enterprise Suite requires just one agent to manage the operating system and all the applications executing on a server. This unique single agent licensing policy ensures that administrators no longer have to worry about which applications are deployed on a server and whether there are sufficient licenses and appropriate agent monitoring modules available to manage these applications.

- **Low overhead through multi-level monitoring**
  To minimize the overheads involved in on-going monitoring, eG agents support multi-level monitoring. On an on-going basis, the most critical metrics are collected. When a performance abnormality is detected, the agents can make more detailed measurements. This multi-level monitoring capability ensures that the overhead of an eG agent is minimal – typically, 0.1-0.3% CPU.



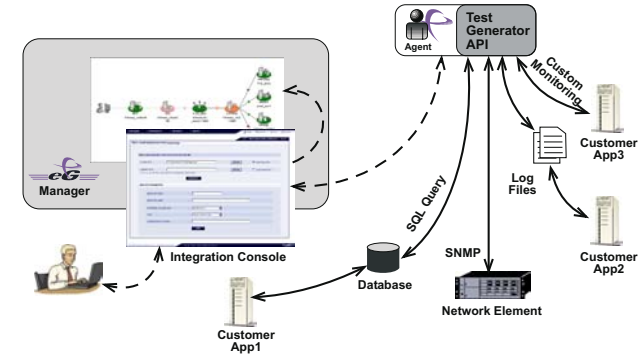
eG's Single Agent architecture

info@eginnovations.com
www.eginnovations.com

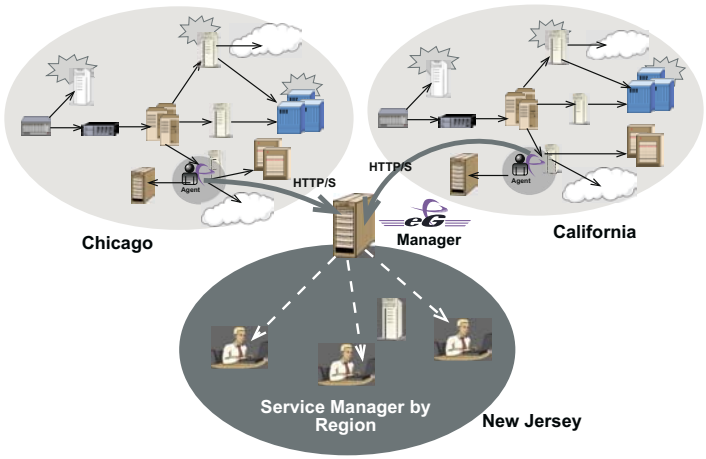
- **Fast deployment through 100% web architecture**
  Deploying the eG Enterprise solution is a breeze, regardless of the size of the target environment. Using a single, central utility called the Remote Agent Controller (RAC), the eG agents can be instantly deployed on any remote host in the environment, and can be effortlessly controlled (started, stopped, uninstalled). Once installed, the agents communicate with the manager using web protocols – HTTP or HTTPS. This ensures that administrators do not have to bother about proprietory protocols being used in their networks. Furthermore, since all communications are initiated by the agents, firewall rules need not be changed in order to get the eG Enterprise Suite operational. The agent initiated communication model also facilitates remote monitoring across geographic boundaries. This architecture is particularly ideal for managed service provider (MSP) environments, wherein the agents may be located within different customer Intranets, and the manager may be in a central server farm. The use of HTTPS ensures that it is no longer necessary for IT administrators to set up expensive virtual private networks between a network operations center and the infrastructure being managed.

- **Zero maintenance through automatic upgrade capability**
  One of the long-standing drawbacks of agents has been the need for on-going maintenance. The eG architecture effectively addresses these limitations. New functions to monitor new applications can be dynamically downloaded to the agents. Product enhancements are also delivered as upgrades that the agent can retrieve periodically or on-demand. Administrators can centrally control when and which agents are enabled for automatic upgrades using a web browser interface, thereby facilitating zero maintenance during operation.

- **Cost-effective, hardware independent licensing**
  The eG license controls how many agents are simultaneously reporting to the manager, not where the agents are deployed. Hence, administrators have complete flexibility in determining when and where the agents need to be deployed. Moreover, the agent licensing is independent of the operating system of the target servers, thereby offering administrators complete deployment flexibility.



Extending the monitoring capabilities of the eG Agent to support custom/proprietary applications



Remote Monitoring using the eG Enterprise Suite

- **Flexible yet rapid integration**
  While SNMP is a standard way of interfacing with network devices, there is no real standard for monitoring applications. Each application is different in its functionality and in the APIs it supports to expose performance information. To handle these varied infrastructure components, eG agents adopt an open architecture. The eG agent uses various approaches to interface with applications – e.g., it supports SNMP for network devices, Java Management Extensions (JMX) for middleware servers, proprietary APIs for web servers, SQL for databases, Windows Management Instrumentation (WMI) for Microsoft applications. The Integration Console plugin allows developers to add new capabilities rapidly to the eG agent in a few hours, not over days or months!

- **Multi-perspective monitoring**
  A single eG agent is capable of performing different types of functions. Taking an external perspective, an agent can simulate user requests to an application (e.g., web server, database server, DNS server). The same agent is also capable of using the application APIs to collect internal metrics of server processing time, queue lengths, error rates, etc. Multiple agents can also be deployed to assess the performance of an application from different locations. The flexibility it offers to administrators makes the eG Enterprise Suite an attractive choice for infrastructure administrators.

Key Reasons to Choose the eG Single Agent*

- A single agent license for Microsoft Windows, Red Hat Linux, SuSE Linux, Sun Solaris, HPUX, IBM AIX, VMware ESX, Citrix XenServer, and others
- A single price, regardless of OS or server configuration (2, 4, 8, 16 CPUs)
- A single price for any application supported
- A single price to manage multiple applications on the same server
- Transportable - move the agent from one application to another seamlessly
- A single agent to monitor a number of network devices

* *Assumes one IP address per server; Multiple operating systems on a server require individual agents.*