



NetGain Enterprise Vista™ – Distributed Monitoring

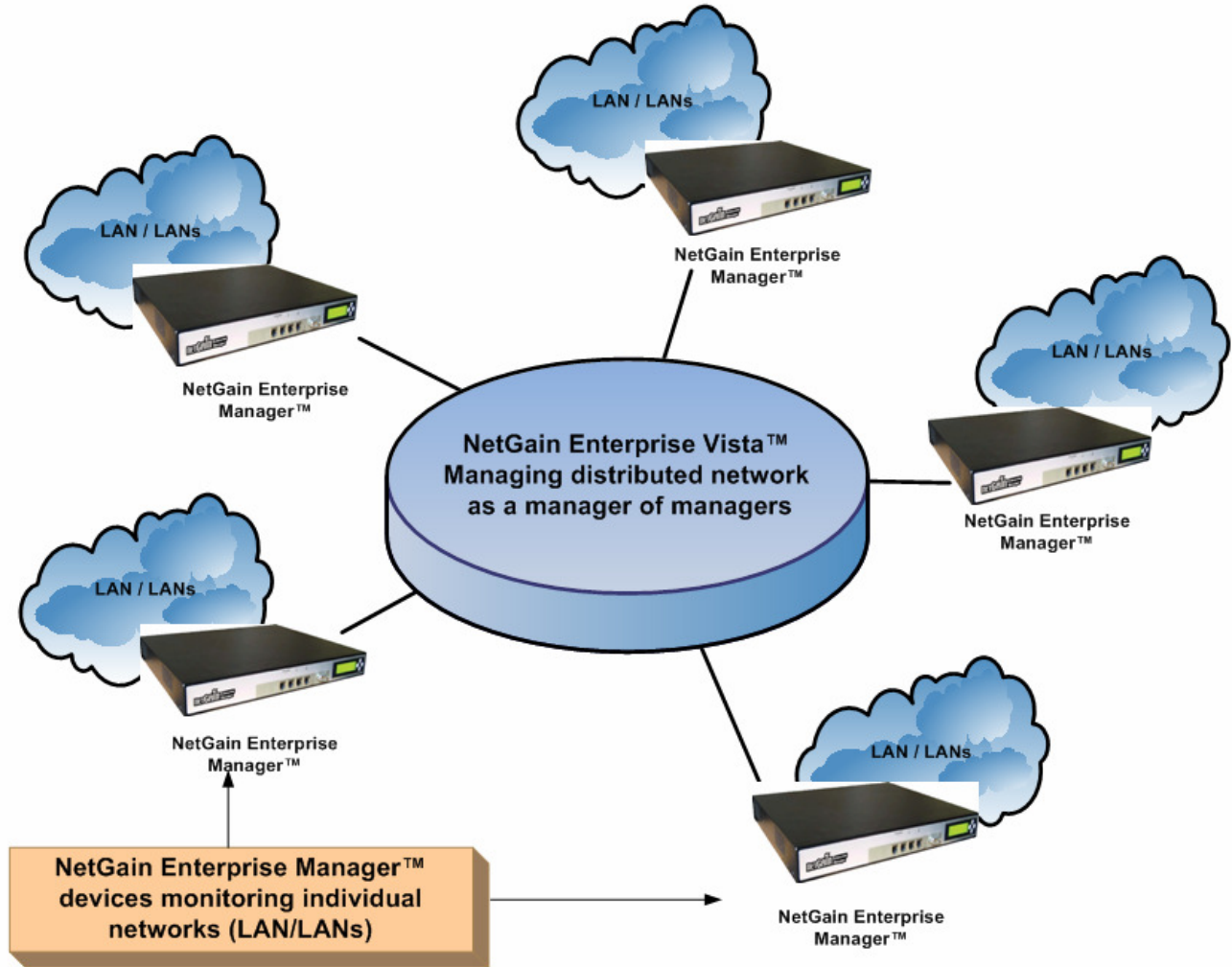
Introduction

As an enterprise succeeds and grows, its IT network complexity increases, as it expands from a simple local area network to a wide area network with heterogeneous devices spread across vast geographical distances. When the network size is limited and restricted to vicinity such as an office building, its maintenance and management can be performed by a local team of IT personnel. As the enterprise expands, for example, as in a new office in another part of the country or province, the responsibility of maintaining and managing the network in the new office is given to another team of IT personnel that is nearer to that office. As the above mentioned scenario repeats itself when the enterprise continues to grow, we will have a situation of “network of networks”, where peer IT personnel teams that are local to the networks manage their own part of the network. The unified management of “network of networks” poses a considerable challenge to the IT manager in-charge of the organization (such as the CTO), in terms of planning and steering the entire IT infrastructure to perform and move towards the common goals.

Unified Management of “Network of Networks”

The unified management of ‘network of networks’ is the new challenge to be met by the next generation IT manager. The CTO would like to have a bird’s eye view, a centralized management framework from which he or she can plan and execute, thus drive the entire organization’s IT infrastructure to meet the latest demands and to secure the future. To achieve the mentioned goal of unified management, the complex problem of managing ‘network of networks’ has to organically evolve along with the enterprise, so as to reduce investment costs for management or monitoring solutions and protect the earlier investment on the individual network management solutions.

To evolve from the individual network management solutions to a unified management solution, a “manager of managers” can be introduced. The figure below shows the ‘manager of managers’ that handles the unified management of peer networks that are in turn managed by NetGain Enterprise Manager™ devices.



Note: In the above figure, a single NetGain Enterprise Manager™ device can be managing more than a few local area networks. Each NetGain Enterprise Manager™ device can handle up to 250 network nodes.

Distributed Monitoring / Management

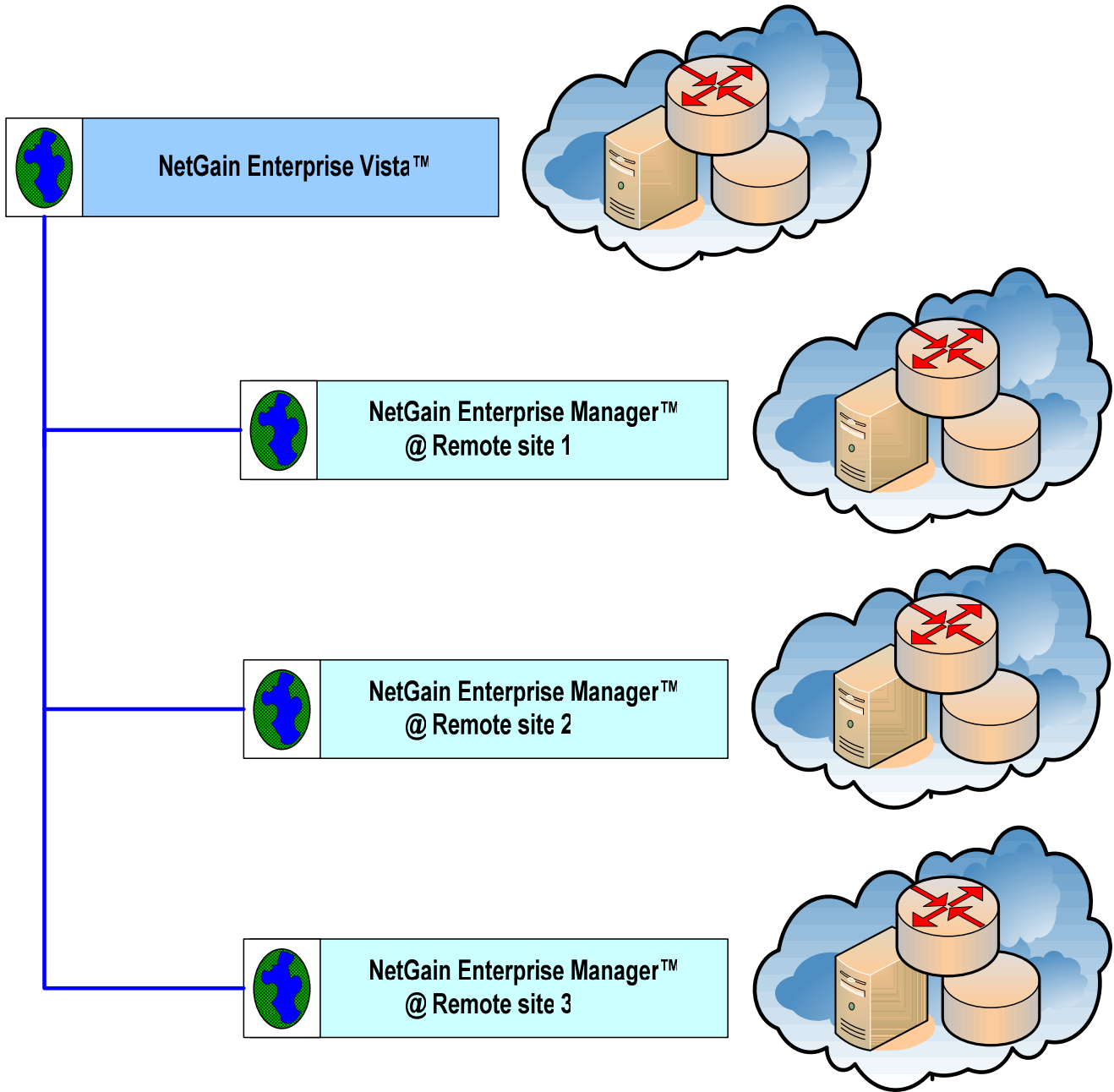
The core functionality of the “Manager of Managers” is the distributed monitoring or management of ‘network of networks’. An ideal distributed monitoring solution should have at least the following basic features:

- The ‘Manager of Managers’ in-charge of the distributed monitoring system should reflect the status, fault/alarm information, performance data of the individual local networks.
- The ‘Manager of Managers’ in-charge of the distributed monitoring system should reflect the ‘true status’ within reasonable period of time. The ‘true status’ implies that the status visible at the local level should be the same as that visible at the central level.
- It is preferable that the centralized ‘Manager of Managers’ should collect the existing information from the network management/monitoring solution such as the NetGain Enterprise Manager™ instead of repeating the collection of information.

NetGain Enterprise Vista™

The NetGain Enterprise Vista™ is a true distributed management solution. It is architecturally designed as ‘Manager of Managers’ of ‘NetGain Enterprise Manager™’ devices. NetGain Enterprise Vista™ collects the following information from the individual NetGain Enterprise Manager™ devices:

- Status information of individual networks including the detailed status of the managed network elements
- Fault or alarm information
- Performance data



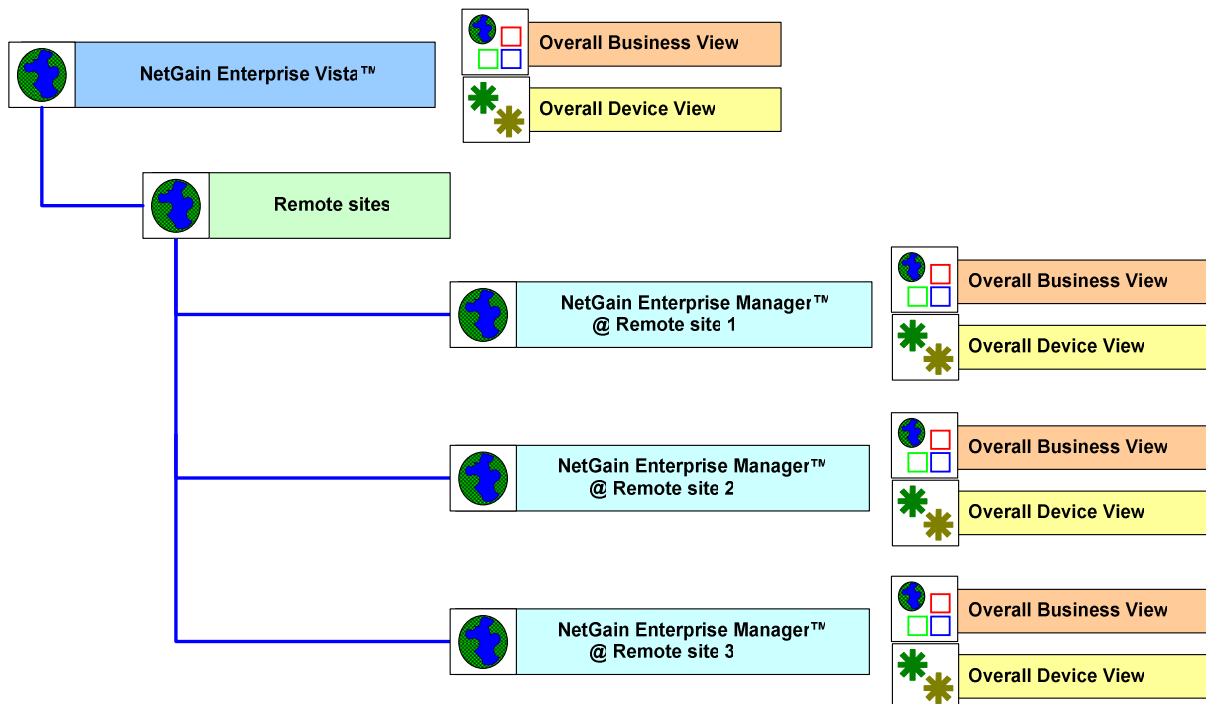
An example: NetGain Enterprise Vista™ – Managed Environment

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In the above example, the NetGain Enterprise Manager™ devices at the remote sites need to specify the IP address of the NetGain Enterprise Vista™ to which they need to forward the status, fault and performance related information. Both the NetGain Enterprise Manager™ devices and NetGain Enterprise Vista™ keep in sync by updating periodically in configurable intervals. The update/syncing of information is done in a combination/choice of both push and pull models.

Additionally NetGain Enterprise Vista™ provides

- Top down 'bird's eye view' of the entire network
- Integrated network hierarchy and structure
 - Business and Device views that reflect the on the ground situation at the remote sites
 - Alarms and performance data as an integrated managed hierarchy
- Unified management interface
- Easy to use and setup. Its features allow easy integration of individual NetGain Enterprise Manager™ devices with NetGain Enterprise Vista™.



An example (cont): View from NetGain Enterprise Vista™

To add a new NetGain Enterprise Manager™ device as a remote manager in the NetGain Enterprise Vista™ managed environment hierarchy is as simple as specifying the IP address of NetGain Enterprise Vista™ in the new NetGain Enterprise Manager™ device. The process of updating the hierarchy and syncing of the information is done automatically. At the end of the day, what you can achieve is a highly scalable distributed management solution that is as simple as adding more devices in a plug-and-play model.

The screenshot displays the 'Manager-of-Manager(MoM) Configuration' window. On the left, a tree view shows the system hierarchy: System Functions, Current Status, Topology Views, Alarms, Inventory, Traffic Analysis, Diagnostic Tools, System Admin (expanded), Accounts, Periodic tasks, Logs, Data Mgmt, System Mgmt, MoM (expanded), Upper interface, and Sync data. The main configuration area is titled 'Upper interface configuration' and contains the following fields:

Central Server IP Address:	192.168.1.100
Local Site ID:	netgain1
Local Site Name:	Singapore_B1
Sync Interval(secs):	30

At the bottom of the configuration area, there are two buttons: 'Save' and 'Reset'.

Easy to Configure - make NetGain Enterprise Manager™ part of NetGain Enterprise Vista™ distributed managed domain

Conclusion

As an enterprise expands from a small sized network to a distributed network managed by multiple NetGain Enterprise Manager™ devices, the challenge to manage the distributed network centrally is met by the NetGain Enterprise Vista™. The NetGain Enterprise Vista™ delivers a seamlessly integrated distributed monitoring solution on top of the existing NetGain Enterprise Manager™ devices with almost no changes to the existing local monitoring setup. The entire framework of

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NetGain Enterprise Manager™ devices and NetGain Enterprise Vista™ provides an ideal and cost-effective solution for a growing enterprise with its CTO's sight set on the future growth. The framework is also dependable for a large existing organization with networks spread across various geographical areas (such as provinces) where the NetGain Enterprise Manager™ devices are used at the local level and NetGain Enterprise Vista™ is used by the central authority in charge of managing and driving the policies top-down in a highly scalable approach.

Contact Us

If you have any queries regarding NetGain Enterprise Vista™ or the information presented here, please contact us at:



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