OVERVIEW OF IPAM

Characteristics of IPAM include:

•	**A single IPAM server can support up to 150 DHCP servers and 500 DNS servers.**
•	A single IPAM server can support up to 6,000 DHCP scopes and 150 DNS zones.
•	IPAM stores three years of forensics data (IP address leases, host media access control (MAC) addresses, user logon and logoff information) for 100,000 users in a Windows Internal Database. There is no database purge policy provided, and the administrator must purge the data manually as needed.
•	IPAM supports only Windows Internal Database. No external database is supported.
•	IP address utilization trends are provided only for IPv4.
•	IP address reclamation support is provided only for IPv4.
•	IPAM does not check for IP address consistency with routers and switches.

Benefits of IPAM

IPAM benefits include:

•	**IPv4 and IPv6 address space planning and allocation.**
•	IP address space utilization statistics and trend monitoring.
•	Static IP inventory management, lifetime management, and DHCP and DNS record creation and deletion.
•	Service and zone monitoring of DNS services.
•	IP address lease and logon event tracking.
•	Role-based access control (RBAC).
•	Remote administration support through RSAT. Note: IPAM does not support management and configuration of non-Microsoft network elements.

To ensure a successful IPAM implementation, you must meet several prerequisites:

•	**The IPAM server must be a domain member, but cannot be a domain controller.**
•	The IPAM server should be a single purpose server. Do not install other network roles such as DHCP or DNS on the same server.
•	To manage the IPv6 address space, you must have IPv6 enabled on the IPAM server.
•	Sign in on the IPAM server with a domain account, and not a local account.
•	You must be a member of the correct IPAM local security group on the IPAM server.
•	Enable logging of account logon events on domain controller and NPS servers for IPAM's IP address tracking and auditing feature.

IPAM Hardware and Software Requirements

The IPAM hardware and software requirements are as follows:

•	**Dual core processor of 2.0 gigahertz (GHz) or higher**
•	Windows Server 2012 operating system
•	4 or more gigabytes (GB) of random access memory (RAM)
•	80 GB of free hard disk space

In addition to the previously mentioned requirements, Windows Server 2008 and Windows Server 2008 R2 require the following:

•	**Service Pack 2 (SP2) must be installed on Windows Server 2008.**
•	Microsoft® .NET Framework 4.0 full installation must be installed.
•	Windows Management Framework 3.0 Beta must be installed (KB2506146).
•	For Windows Server 2008 SP2, Windows Management Framework Core (KB968930) is also required.
•	Windows Remote Management must be enabled.
•	Verify that service principal names (SPNs) are written.