

Trinzic DDI Overview



Infoblox Solution Benefits

- Massively scalable, highly available, secure, fault-tolerant and the most widely deployed DNS, DHCP and IP address management solution
- Centralized management and support for both IPv4 and IPv6 networks
- Support for virtualization through IP discovery, management of virtual machines and integration with VMware
- Built-in support for DNS, DNS-SEC, DHCP, FTP, TFTP, HTTP, HTTPS and NTP
- Automated failover and disaster recovery mechanisms
- Centralized, collaborative management of both Infoblox and Microsoft DNS and DHCP services
- Synchronization of all devices via a shared distributed database through the Grid
- Efficient network discovery and automated IP address management (IPAM)
- One-click system-wide software patching and upgrades
- Hardened OS, available on physical or virtual appliances, to reduce vulnerability of network attacks

Integrated DNS, DHCP and IP Address Management (DDI), with Massive Scalability and Automation

The explosion of IP addresses and the rapid transitions to IPv6, virtualization and cloud computing — not to mention the onslaught of new networking and personal devices (such as smart phones and tablets) — have put extreme pressure on IT to deliver network services that are automated, scalable and always on. Tracking IP addresses by spreadsheets and/or relying on vulnerable server-based DNS/DHCP services are not realistic options anymore. The solution to these problems is a combination of integrated, highly scalable, fault tolerant, 24x7-available DNS, DHCP and IP Address Management.

Active DDI

Infoblox Trinzic DDI™ is the world's leading appliance-based, integrated DNS, DHCP and IP Address Management (DDI) product. Trinzic DDI employs state-of-the-art IP address management and automated error-checking technologies that are seamlessly integrated with Microsoft DNS/DHCP servers, and supports the Infoblox Grid™ architecture that enables the most advanced, highly available, fault tolerant and scalable solution in the world. With Trinzic DDI you can leverage your existing investments in Microsoft, while simultaneously incorporating collaborative IP address management and ensuring 99.999% network services uptime. We call this trend of automation, scale, real-time visualization, performance and integration “Active DDI,” which only Infoblox offers. “Active DDI” is the heart of Trinzic DDI and incorporates dynamic, automated control of network services to ensure non-stop operation.

Key Benefits

- **Automate** with the integration of advanced DNS, DHCP and IP address management and powerful visualization
- **Ensure** unparalleled security and reliability
- **Meet** business goals with massive scalability and always on availability
- **Conquer** the challenges of IPv6, virtualization, cloud transition and growth
- **Leverage** your existing investment and integrate seamlessly with Microsoft DNS and DHCP services

Automate with the Integration of Advanced DNS, DHCP and IP Address Management and powerful Visualization

Infoblox Trinzic DDI is the industry's leading appliance-based, integrated DNS, DHCP and IP Address Management product. This single appliance integration between DNS, DHCP and other network services like TFTP, HTTP, and others provide a single pane of glass view into your network services in real-time. Through this “single pane of glass” you can view and examine your network in detail and in real time, giving you the ability to make decisions about issues as they happen.

Trinzic DDI Overview



The screenshot displays the Infoblox web interface with the following components:

- Grid Status:** Shows member information for 'infoblox.localdomain' with IP Address 120.120.14.100, Status 'Running', and System Uptime of 16d 20h 50m.
- Member Status > infoblox.localdomain:** Shows Role: Grid Master, Hardware Type: IB-VMOS (IB-VM-550), HA Status: Standalone, and System Uptime: 16d 20h 50m. It also includes service status for TFTP, HTTP (File Distribution), FTP, NTP, and bloxTools.
- My Commands:** Displays a table titled 'IPV4 Networks Over Threshold - IPAM Utilization over 75%':

Network	Comment	IPAM Utilization
120.120.20...		80%
120.120.24...		98%
120.120.30...		98%
120.120.70...		79%
- Discovery Status:** Shows Current Status: Completed, Last Action: N/A, IPv4 Device Discovery: N/A, and VM Discovery: N/A. A summary table shows:

Discovered	Managed	Unmanaged	Conflicts
0	0	0	0
- System Health:** A bottom row of gauges shows CPU Usage (1%), Memory (42%), Database Usage (1%), Disk Usage (11% Used, 89% Unused), and System Temperature (0° C).

Visual IPAM tools enhance visibility and simplify administration

Ensure Unparalleled Security and Reliability

With support for DNSSEC and security in the Infoblox appliances and their connections, Trinzic DDI ensures an unparalleled peace of mind. Secure, role-based administration and self-service components, as well as a hardened OS to prevent root access, are part of the Trinzic DDI security suite. As a member of CERT, Infoblox has advance notice of new threats, and issues easy updates and security patches immediately for instantaneous response to any new vulnerabilities.

The screenshot shows the 'Member DNS Properties Editor' window with the 'DNSSEC' tab selected. The configuration includes:

- Send DNSSEC-signed responses:** Checked.
- Show DNSSEC records:** Checked.
- Key-signing Key:** RSA/SHA-1/NSEC3, Size: 2048.
- Key-signing Key Rollover Interval:** 3 Months.
- KSK Signature Validity:** 3 Months.
- Zone-signing Key:** RSA/SHA-1/NSEC3, Size: 1024.
- Zone-signing Key Rollover Interval:** 1 Year.
- ZSK Signature Validity:** 3 Months.
- Use NSEC3 Opt-in:** Unchecked.
- Enable DNSSEC validation:** Unchecked.
- Accept expired signatures:** Unchecked.
- Trust Anchors:**

Zone	Secure Entry Point	Algorithm	Public Key
ns1.foo.example	<input checked="" type="checkbox"/>	S(RSA/SHA-1)	Ax(EAagwJotLpGJhWt)

DNSSEC adds digital signatures to normal DNS queries to significantly reduce certain types of network attacks

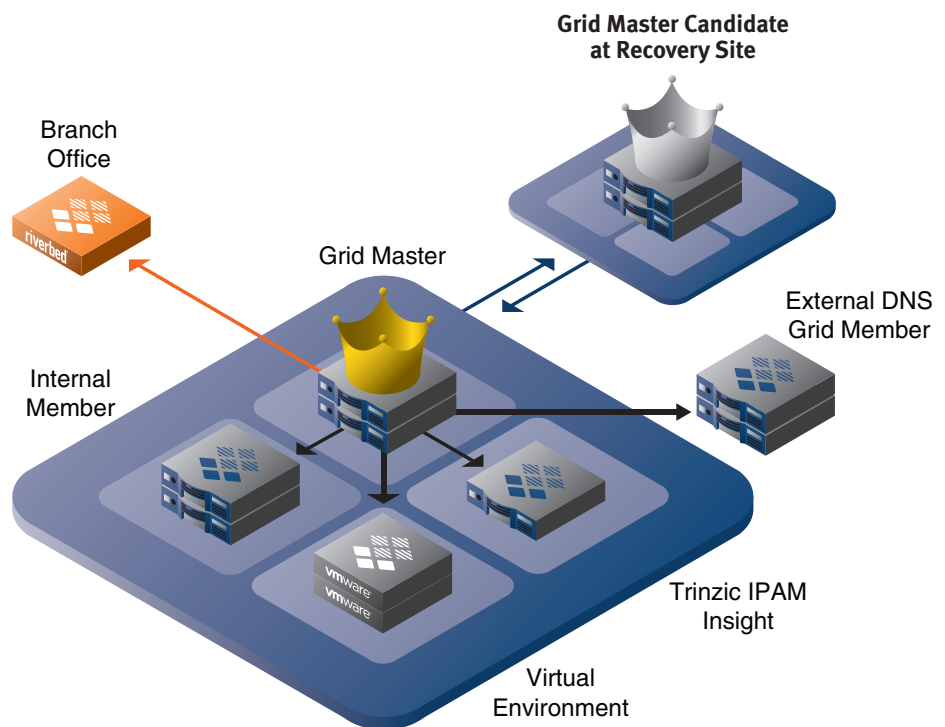
Trinzic DDI Overview



Meet Business Goals with Massive Scalability and Always On Availability

Trinzic DDI delivers massive scalability to cope with the vast proliferation of IP-based devices, web-based apps and the explosion of IPv6 addresses. Through unique and patented high availability Infoblox Grid™ technology, Trinzic DDI ensures network reliability and 24x7 operations. The Infoblox Grid provides resilient network services, failover, recovery and seamless maintenance for an Infoblox deployment inside a single building, across a networked campus or across geographical location. The Infoblox Grid establishes a distributed relationship between individual or paired appliances to remove single points of failure and other operational risks inherent in legacy DNS, DHCP and IP address management infrastructure.

Adding Infoblox Multi-Grid Management technology to Trinzic DDI enables the centralized management of multiple Grids, scalable to thousands of hosts, and includes visual representation of both IPv4 and IPv6 networks.



Infoblox ensures network reliability through unique and patented high availability Grid™ technology

Conquer the Challenges of IPv6, Virtualization, Cloud Transition and Growth

Trinzic DDI includes full support for IPv6 and related protocols, such as DHCP64 and NAT64, to enable a smooth transition to the next generation IP networking. Fully functional IPv6 services and management are part of the Trinzic DDI solution, as are services and management for dual-stack IPv4/IPv6.

With today's rapid transition from physical to virtual environments, Trinzic DDI leads the way by providing extensive support for virtualization through its ability to identify the IP addresses of virtual machines, the location and state of virtual switches and other related transitional information to help bridge the gap between the two environments.

Trinzic DDI Overview



Discovered Data		
Discovered Name: sierra.inca.infoblox.com		
MAC Address: 00:30:48:5d:1c:b0	Last Discovered: 2010-06-09 15:43:13 PDT	Attached Device Name: TM-cisco6509-lab065
First Discovered: 2010-06-08 11:45:18 PDT	Port Speed: 1G	Attached Device Port Name: Gig1/47
Attached Device Port Description: GigabitEthernet1/47		
VLAN Name: VLAN0011	Attached Device Address: 10.65.10.1	VLAN: 11
Virtual Switch:	Virtual Host:	Virtual Entity Type: ESX/ESXi
Virtual Entity Name: sierra.inca.infoblox.com	Virtual Datacenter: ha-datacenter	

IPAM discovers and shows detailed information about physical and virtual hosts

Leverage your existing investment and integrate seamlessly with Microsoft DNS and DHCP services

Trinzic DDI provides the capability for central management of both Infoblox appliances and Microsoft DNS and DHCP servers, which can lead to lower costs and a more efficient use of IT professionals' most valuable resource: time. Such a tightly integrated solution does not require any agent software on clients or servers because it uses native Microsoft RPC APIs to interface with Microsoft DNS and DHCP services. The solution automatically synchronizes all changes made by either Microsoft or Infoblox tool sets.

Name	Status	IP Address	DNS	DHCP	Comment
marquette.mslab...	Running	120.120.14.11			
petoskey.mslabi...	Running	120.120.14.10			

Centrally manage Microsoft DNS and DHCP servers with Infoblox IPAM for easier administration

Infoblox Product Warranty and Services

The standard hardware warranty is for a period of one year. The system software has a 90-day warranty that will meet published specifications. Optional service products are also available that extend the hardware and software warranty. These products are recommended to ensure the appliance is kept updated with the latest software enhancements and to ensure the security and availability of the system. Professional services and training courses are also available from Infoblox. Information in this document is subject to change without notice. Infoblox Inc. assumes no responsibility for errors that appear in this document.