

INTRODUCTION

Infoblox NIOS™ 4.3r2-3 software, coupled with Infoblox appliance platforms, enables customers to deploy large, robust, manageable and cost effective Infoblox grids. The next-generation solution enables distributed delivery of core network services - including DNS, DHCP, IPAM, RADIUS, TFTP, and FTP - with the nonstop availability and real-time service management required for today's 24x7 advanced IP networks and applications.

For the most current version of these release notes, visit <http://www.infoblox.com/support>.

NOTE: If you are upgrading from a release that is earlier than NIOS 4.3r2-0, Infoblox strongly recommends that you review the [GUIDELINES FOR UPGRADING TO NIOS 4.3r2-1 AND LATER](#) on page 4.

INFOBLOX NIOS 4.3r2-3 FEATURES

Parameter Specific Search

In the API, you can now perform a quick search by specifying only specific fields in an object using the `return_object` method. You can then retrieve all the fields for the corresponding object using the `fill_partial_object` method. For example, if you want to search all of the FQDNs in all of the DNS zones, you can perform a search with the `return_object` method set to "name". The appliance returns only the FQDNs, not all the fields, in the zones. You can then retrieve all the fields using the `fill_part_object` method.

DNS Security

The NIOS appliance provides CLI commands for monitoring DNS queries and responses for signs of cache poisoning attacks. You can configure the appliance to track two parameters: DNS responses with mismatched DNS transaction IDs and responses to UDP ports that are not open. You can also use the CLI commands to set a threshold value for both parameters. An alert is sent through email and/or SNMP traps when the threshold is exceeded. There are also new SNMP counters for both parameters. In order to help mitigate attacks, you can use the CLI commands to rate limit DNS responses from individual IP addresses and/or from network blocks.

IPv6 Enhancement

You can now use the command `set mld_version_1` to run IPv6 MLD (Multicast Listener Discovery) protocol version 1, as described in RFC 2710, *Multicast Listener Discovery for IPv6*. The appliance runs MLD version 2, as described in RFC 3810, *Multicast Listener Discovery Version 2 for IPv6*, by default. MLD version 2 is interoperable with version 1.

GSS-TSIG

Infoblox provides CLI commands that report whether a NIOS appliance serving DHCP is configured to send GSS-TSIG authenticated DDNS updates to an AD integrated DNS server. You can use these commands to verify your configuration and troubleshoot potential issues. You can also test whether the appliance can communicate with the Key Distribution Center (KDC) and the AD domain controller.

INFOBLOX NIOS 4.3r2 FEATURES

Network Views and Overlapping Networks

A network view is a single routing domain with its own networks, shared networks, and DNS Views. You can manage the networks in one network view independently of the other network views on the same Infoblox grid. Because network views are mutually exclusive, the networks in each view can have overlapping address spaces with multiple duplicate IP addresses without impacting network integrity. Note that you can create up to 100 network views.

Extensible Attributes

Extensible attributes are fields that you use to define specific properties for Infoblox objects, such as hosts, networks and fixed addresses. You use extensible attributes to capture object properties for enhanced IP address management. NIOS appliances include predefined extensible attributes. You can also create user-defined extensible attributes for specific usage. Depending on the type of data that you want to capture for each object, you can either use the predefined attributes or create new ones. For example, you can associate the predefined attribute "Country" with a network to keep track of its location. You can also create a new attribute "Owner" and associate it with fixed addresses to track owners of network devices.

GSS-TSIG Dynamic DNS Updates

A NIOS appliance that serves DHCP can now send secure dynamic DNS updates using GSS-TSIG to Active Directory domain controllers running Microsoft Windows 2003. This feature provides a secure alternative to client updates. You can enable this feature at the grid level and override it at the member level, allowing easy configuration. Note that a NIOS appliance serving DHCP and DNS can either send GSS-TSIG authenticated DDNS updates to an AD domain controller or receive GSS-TSIG authenticated DDNS updates from DHCP clients and servers. The appliance does not support both features at the same time.

Home Page

The Home perspective is the default perspective when you log in to the appliance for the first time. For subsequent logins, the appliance displays the perspective that you last accessed. You can always go back to the Home perspective by clicking its icon. The Home perspective contains buttons and links to quickly access panels and editors for viewing and managing data.

Secure Backups

You can use SCP (Secure Copy) to backup the NIOS system files to a server running SSHv2. You can use SCP for both scheduled and immediate backups.

bloxTools Environment

The bloxTools Environment provides tools for creating custom applications that facilitate the administrative tasks in your organization. It provides a pre-installed environment for running applications using Perl, Python, PHP, CGI scripting, and Infoblox API libraries. It also includes sample applications which you can use or modify to suit your business needs. The bloxTools Environment runs as a service on a standalone appliance or on a grid master. For more information about the bloxTools Environment and to access free applications, visit <http://www.bloxtools.com>

Enhanced Recycle Bin

The recycle bin supports the following additional resource records: host, bulk host, bulk host templates, A, AAAA, CNAME, DNAME, MX, SRV, TXT, and manually created NS and PTR records.

Selecting Multiple Objects for Permissions

When you add object permissions to an admin group or an admin role, you can search for the objects to which you want to apply permissions. After the appliance displays the search results in the *Select Object* dialog box, you can use SHIFT+click to select multiple contiguous objects and CTRL+click to select multiple noncontiguous objects.

Next Available IP Address

When you define a fixed address or a host record in the DHCP and IPAM perspective, you can now have the appliance obtain the next available IP address. In past releases, you had to enter an IP address in the text field. When you select the option to get the next available IP address, the appliance retrieves the first unused IP address, based on certain criteria, in the specified DHCP range or network for which you have administrative permissions.

Source Address for DNS

You can specify which network interface—VIP, MGMT, or any—the appliance will use as the source address for queries, notifications, and zone transfer requests. You can set this in the API and in the General section of the *Member DNS Properties* editor.

Relay Agent Filter

When you create a relay agent filter, you can now set the following values for the Circuit ID and Remote ID:

- Any: The circuit ID/remote ID can contain any value.
- Not Set: The circuit ID/remote ID must be blank.
- Matches Value: The circuit ID/remote ID must match the specified value.

Host Name Code Page

The NIOS appliance now supports UTF-8 encoding of host names for Microsoft Windows clients that support Microsoft Windows code pages. When you use the appliance as a DHCP server, you can configure the DHCP service on the appliance to convert client host names that are encoded with a Microsoft code page to UTF-8 encoded characters. The appliance then stores the UTF-8 encoded host names in the database or sends them in the DDNS updates. The appliance displays the host names in their original characters in the following panels in the Infoblox GUI:

- DHCP Lease History
- DHCP Lease Details
- IP Address Management
- Syslog
- Audit Log

Filter Disabled Objects

In the IP Address Management panel, you can use the Disabled Objects filter to list only disabled objects assigned to IP addresses.

Enhanced License Information

The `show license` CLI command has two additional options. Use `show license all` to view license information for all grid members, and use `show license csv` to view license information in CSV format.

API Enhancements

You can now use the Infoblox API to do the following:

- Get the name attribute of RADIUS Accounting servers and RADIUS Authentication servers.
- Set the RADIUS authentication method.
- Use the `export_data` method to download the DNS cache file.
- Use the comment attribute to search for a MAC address filter object.
- Download the DNS configuration file.

DIW Guidelines

You can use DIW 2.2r2-0 to import data into Infoblox appliances running NIOS 4.3r2-1. Note that though you can import extensible attribute values for networks and fixed addresses, you cannot import the extensible attribute definitions using DIW. You must define the attributes on the appliance before importing the attributes and their values for networks and fixed addresses. For additional guidelines on using DIW 2.2r2-0, refer to the *DIW 2.2r2-0 Release Notes*.

GUIDELINES FOR UPGRADING TO NIOS 4.3r2-1 AND LATER

- **You must do the following before upgrading an appliance to NIOS 4.3r2-1:**
 - Clear the "Match Members" option in the DNS view editor. It does not apply in 4.3r2-1.
The upgrade will fail if a DNS view has its "match all members" or "match member clients" flag set and it is not selected for dynamic DNS updates at the grid DHCP properties level. If, however, the DNS view is selected for dynamic DNS updates, the appliance will drop the "match all members" and "match member clients" flags, and the upgrade will succeed.
 - Make sure that none of your TSIG key names start with DHCP_UPDATER. Otherwise, the upgrade will fail because the internal TSIG key names also begin with DHCP_UPDATER.
- If you are upgrading from 4.3r1, you can run an upgrade test before performing the actual upgrade. Infoblox recommends that you run the upgrade test, so you can resolve any potential data migration issues before the upgrade.
- During the upgrade, the appliance will check if all the grid forward-mapping zones selected for dynamic DNS updates belong to the DNS view that was selected for dynamic DNS updates. Zones that belong to other DNS views will be changed to use this DNS view in the list. If the appliance finds that the FQDN of a zone already exists in the view, it will drop the duplicate zone from the list.
- In 4.3r2-1, remote forward/reverse mapping and grid forward mapping zones for DDNS updates are specified at the network view level. Therefore when an appliance upgrades to 4.3r2-1, these settings will be moved from the grid DHCP properties to the default network view.
- After the upgrade, all DNS views will be associated with the default network view. In addition, the internal DNS view that was selected for DDNS at the grid DHCP properties level will become the DNS view to which the default network view will send DHCP updates.
- The NIOS appliance will generate syslog messages for all changes to the data during the upgrade.
- Extensible attributes replace all previously defined IPAM device type fields. During the upgrade process, the appliance examines current data in the database. If there are previously defined device type fields in the database, the appliance converts the fields into extensible attributes. The appliance converts the device type fields using the following rules:
 - If there is only **Unassigned** data in the Device Type field, the appliance does not create an extensible attribute.

- If there is at least one value in the Device Type field, the appliance creates an extensible attribute called Device Type. The appliance then adds each device type value to the list of values for the extensible attribute.
- When there is at least one value set in other device type fields, such as Location and Model, the appliance creates a corresponding attribute.
- If the audit flag is set for one instance of usage and not the other, the appliance creates two attributes for those two instances. For example, if the Location field for the router device type has the audit flag set and the Location field for the printer device type does not, the appliance creates two extensible attributes, Location and Location(A).
- If you renamed a custom field, the appliance uses the new name as the name of the extensible attribute.
- The appliance uses the original labels of the custom fields as the name of the extensible attributes if you have not renamed them.
- For all objects that have IPAM field values, the appliance creates extensible attributes for these fields and copies the values into the extensible attributes.

CHANGES TO DEFAULT BEHAVIOR IN NIOS 4.3r2-1

- In previous releases, because of the fix for CERT VU#800113, the maximum number of concurrent clients from which the appliance could receive recursive queries was limited to 800. In this release, that limit has increased to 20,000 due to the implementation of the ISC 9.3.5-P2 patch.
- The following are changes to default behavior in dynamic DNS:
 - A network view can send DDNS updates to one DNS view only. You can no longer configure the appliance to send DDNS updates to more than one DNS view. These updates will use a TSIG key per DNS view to send updates.
 - When you enable option 81 for DDNS updates, you can use the DDNS forward-mapping zones at the network view level to identify the domain names client will use when they send the DDNS updates. These zones are written to the dhcpd.conf file as "zone" statements and specify the correct TSIG key of the DNS view, so the updates are sent to the correct DNS view.

API Guidelines

This release of NIOS does not support full compatibility with the previous releases of NIOS. The following are changes to the Infoblox API:

- Infoblox::Grid::DHCP is NO longer backward compatible.

Removed support for the following fields from this object type and added them to the Network View object type:

```
"internal_ddns_primaries"  
"external_ddns_primaries"  
"internal_updates_view"
```

- Infoblox::DNS::View is NO longer backward compatible.

Removed support for the following fields from this object type:

"match_all_members"

"match_members"

DHCP updates now use a TSIG key per DNS view to send the updates; hence, these configurations no longer apply.

- Users will not be allowed to change the "network_view" of the following object types:
 - Infoblox::DHCP::Network
 - Infoblox::DHCP::FixedAddress
 - Infoblox::DHCP::DhcpRange
 - Infoblox::DHCP::SharedNetwork
- Infoblox::DHCP::DeviceType was modified to support the new DeviceType extensible attribute. The required name attribute is now used as a new value for the DeviceType extensible attribute.
- The following methods have been modified:
 - Infoblox::Session->add() adds the value in the name attribute of the Infoblox::DHCP::DeviceType object as a new specified value for the DeviceType extensible attribute. This method fails when the user renames or deletes the DeviceType extensible attribute.
 - Infoblox::Session->get() retrieves all the objects that match the specified value in the name attribute in the DeviceType extensible attribute. This method fails when the user renames or deletes the DeviceType extensible attribute.
 - Infoblox::Session->search() searches for all matching objects. Only the name attribute can return matching values in the DeviceType extensible attribute. This method fails when user renames or deletes the DeviceType extensible attribute.
- Infoblox::Session->remove() always fails because extensible attributes with a List type do not support the deletion of items that contain the values in the list.
- name() retrieves or sets the value of the name attribute.
- Removed support for the following methods:
 - customXX()
 - customXX_flags()
 - name_flags()
 - location_flags()
 - manufacturer_flags()
 - owner_flags()
 - model_flags()

- To support backward compatibility, the following call will be converted:

```
$device_type = Infoblox::DHCP::DeviceType->new(  
    "name" => "Infoblox Device",
```

is converted to the following:

```
$ext_attr_def = Infoblox::Grid::ExtensibleAttributeDef->new(  
    "name" => "device_type",  
    "value" => "Infoblox Device")
```

- Removed support for the following call:
\$device->customXX
- The following objects were modified to support the definition of value for the Device Type extensible attribute as well as.
Infoblox::DHCP::FixedAddr
Infoblox::DHCP::FixedAddrTemplate
Infoblox::DHCP::Range
Infoblox::DHCP::RangeTemplate
Infoblox::DNS::Host
- The get/set values of the location, manufacturer, model, owner and customXX attributes were removed.
- The following methods were modified to support the parameters: device_type, location, manufacturer, model, owner, and customXX. These methods work only when the corresponding extensible attributes exist in the system.
 - Device_type() retrieves or sets the device type.
 - The values of location(), manufacturer(), model(), and owner() are used to retrieve or set the values for the Location, Manufacturer, Model, and Owner extensible attributes.
 - customXX() retrieves or sets the value for the CustomXX extensible attributes.

INFOBLOX NIOS 4.3r1 FEATURES

NIOS Virtual Appliance for Riverbed – You can now install the Infoblox NIOS software on Riverbed Steelhead appliances (models 520, 1020, 1520, and 2020) running the Riverbed RiOS Services Platform (RSP), and configure them as NIOS virtual appliances. NIOS virtual appliances are virtual grid members that include a full suite of core network services—DNS, DHCP, IPAM, RADIUS, FTP, TFTP, HTTP, and NTP. This combined solution allows you to configure a serverless branch office and, at the same time, deliver reliable local services to end users. Distributed organizations obtain the cost benefits of consolidation and the simplicity of centrally managed Infoblox NIOS virtual appliances.

The joint Infoblox-Riverbed solution supports hybrid environments that include a mix of physical Infoblox appliances and NIOS virtual appliances depending on branch office requirements. Each NIOS virtual appliance appears to the grid as a grid member, with all of the benefits of distributed services and centralized management. This includes centralized backup and restoration of user data, DHCP failover capabilities, one-touch software upgrades, local RADIUS authentication, DNS without latency, and many other benefits of the Infoblox solution.

For information on supported features and how to install the NIOS software on the RSP, refer to the *Quick Start Guide for Installing NIOS Software on Riverbed Services Platforms*.

Network Discovery – You can use network discovery to obtain and manage information about your networks. When you use network discovery, the NIOS appliance detects all active hosts on the networks you select for discovery. After a discovery, the appliance returns information such as the MAC address, OS, and NetBIOS name of the detected hosts, depending on which discovery method you use. You can then convert unmanaged IP addresses to host records or other object types. You can also resolve network conflicts, troubleshoot network problems, reclaim unused IP addresses, and view unauthorized devices in your network.

Role Based Administration – You can now group global and object-level permissions into roles and assign up to 20 roles to an admin group. The NIOS appliance provides five pre-defined roles and you can create additional roles to emulate the job functions in your organization, e.g., DHCP administrators for the Boston data center. You can also view any conflicting permissions and easily resolve conflicts by reordering roles or adjusting permissions.

Upgrade Test – After you successfully distribute the software upgrade to the grid master, you can test the upgrade on the grid master before actually implementing it. Therefore you can resolve potential data migration issues before the actual upgrade.

Multilingual Support – NIOS appliances now support UTF-8 encoding in certain fields, such as all comment fields, IPAM fields that you use to classify devices, and file name fields for FTP and TFTP backup and restore operations. Administrators can now use characters other than English to input information in those fields thus simplifying administration in non-English speaking geographies.

Host Name Checking – To ensure that DNS records do not contain invalid characters when entered through zone transfers and dynamic updates, the appliance can apply the strict host name checking policy to DNS records it receives through dynamic DNS updates and zone transfers. The strict host name checking policy allows only host names with alphanumeric characters and dashes. You can enable the host name checking policy at the grid level. From the DNS perspective, click the **DNS Members** tab > *grid* > **Edit** > **Grid DNS Properties**, or click the **DNS Members** tab > *member* > **Edit** > **Member DNS Properties**.

Modify Authentication Methods — You can now modify existing authentication methods for DHCP and RADIUS authentication. Both are accessed from the AAA perspective by clicking the **AAA Members** tab > + (for *grid*) > *member* > **Edit** > **Member AAA Properties**, and expanding the appropriate section. You can then select an authentication method and click **Modify**. You can change either the action on failure of an authentication method or you can replace it altogether. Before this release, you had to remove an existing authentication method and add a new one.

Syslog File Size — When the syslog file reaches its maximum size, the NIOS appliance automatically writes the file into a new file by adding a .0 extension to the first file and incrementing subsequent file extensions by 1. You can specify the maximum size of the syslog file before the appliance rotates it. Valid values are from 10 through 300 MB.

Audit Log — The Audit Log now supports line wrapping. When you click the line wrapping icon on the top-right corner of the *Audit Log* panel, the appliance displays the messages on multiple lines.

In addition, you can now search on the following DHCP object types: Network Container, Network, Shared Network, DHCP Range and Fixed Address.

DNS Cache Control — The Infoblox CLI provides commands for controlling the DNS cache. You can view DNS query statistics and the recursive cache of each Infoblox view. In addition, you can flush the cache file of a view, and reload a zone from an external primary server.

Capacity Report Panel — The *Capacity Report* panel displays capacity and object type information of an independent appliance, a grid master, or a grid member. It displays the maximum number of database objects the appliance can support along with the total number of objects used and the percentage of capacity used. To view the Capacity Report from the Grid perspective, select the **Grid** tab + (for *grid*) > + (for Members) > *member* > **View** > **Capacity Report**.

Update-Security Logging — The Logging section of the Grid and Member DNS editors has a new option—**Enable Update-Security**. When you enable this option, the appliance logs approved and denied update requests.

NOTE: Pre-2.2r1-0 versions of the Data Import Wizard (DIW) can be used to import DNS data, but not DHCP data, due to changes in the DHCP framework in NIOS. A new version of DIW that can be used to import DNS and DHCP data into an appliance running NIOS 4.3r1-0 will be available at a later date. Contact Infoblox Technical Support for information.

CHANGES TO DEFAULT BEHAVIOR IN NIOS 4.3r1

- The fix for Vulnerability Note VU#800113 (see #24190 in the Resolved Issues section) resulted in the following changes to how BIND serves recursive queries:
 - BIND uses random ports to serve recursive queries. Because of this change, Infoblox strongly recommends that firewall administrators set policies to allow the DNS service to use the entire range of ports; otherwise, the DNS service will be adversely affected.
 - BIND uses a new socket (and hence file descriptor) for each recursive query. A large number of recursive queries could cause BIND to run out of file descriptors, affecting DNS service. Therefore, the maximum number of concurrent clients from which the appliance can receive recursive queries is now limited to 800, when you enable the appliance to accept recursive queries and do not specify a static source port. Note that you can lower this value, but not increase it, in the Queries section of the Member DNS Properties editor.

- When a session timeout occurs, the NIOS GUI immediately displays a confirmation dialog. The appliance restarts the session after you click OK. Before this release, the appliance displayed the confirmation dialog only after you moved the mouse or used the keyboard.
- All **Comment** fields in the NIOS GUI and API accept a maximum of 256 characters.
- The administrative permissions for some tasks have changed as follows:
 - Adding, modifying, and deleting networks and DHCP ranges with assigned members require read/write permission to the network or DHCP range, and read/write permission to the assigned members. If a range is assigned to a DHCP failover association, then admins must have read/write permission to all members in the association.
 - Splitting a network with the "Automatically create reverse zone in view" option enabled requires read/write permission to the appropriate parent zones.
 - Assigning a MAC address filter to a DHCP range requires read/write permission to the DHCP range, as well as read-only to the MAC address filter.
 - Managing resources in the File Distribution and AAA perspectives require read-only or read/write permission. Before this release, only superusers could manage these resources.
- You can now add a host to a DNS zone from the DHCP and IPAM perspective. You can also configure a host address for DHCP in either the DNS or the DHCP and IPAM perspective. In addition, you can configure this host as a fixed address or a reservation.
- When you create a new network in the *Network* editor, you can now press a number for the netmask value instead of scrolling through the list of values. For example, if you press 2 on the keyboard, the value jumps to 20, then 21, and so on.
- The Merge Database menu item was removed from the GUI.
- The following are changes to the Infoblox API:
 - Performing a "get" on a fixed address with the match-client parameter set to "MAC address=00:00:00:00:00:00" returns "match_client = reserved".
 - "network" is now an optional attribute when updating or inserting the Infoblox::DHCP::Range and Infoblox::DHCP::FixedAddress object types. Note that if you do not specify an IP address in the Infoblox::DHCP::FixedAddress object type (indicating that it is a dynamic fixed address), then you must specify the "network" attribute.
 - A more descriptive error message is returned when you try to add an Infoblox::DHCP::Range or Infoblox::DHCP::FixedAddress object using a DHCP Range template or Fixed Address template that does not exist in the database.

BEFORE YOU INSTALL

Infoblox recommends that administrators planning to perform an update from a previous release create and archive a backup of the Infoblox appliance configuration and data before upgrading.

NIOS 4.3r2-3 supports the following upgrade and revert paths:

4.3r2-2, 4.3r2-1, 4.3r2-0
4.3r1-1, 4.3r1-0
4.2r5-3, 4.2r5-2, 4.2r5-1, 4.2r5-0
4.2r4-3, 4.2r4-2, 4.2r4-1-sp1, 4.2r4-1, 4.2r4-0
4.2r3-8, 4.2r3-7, 4.2r3-6, 4.2r3-5, 4.2r3-4, 4.2r3-3, 4.2r3-2, 4.2r3-1, 4.2r3-0
4.2r2-2, 4.2r2-1, 4.2r2-0
4.2r2i-2, 4.2r2i-1, 4.2r2i-0
4.1r7-3, 4.1r7-2, 4.1r7-1, 4.1r7-0
4.1r6-3, 4.1r6-2, 4.1r6-1
4.1r5-3, 4.1r5-2, 4.1r5-1, 4.1r5-0
4.1r4-5, 4.1r4-4, 4.1r4-3, 4.1r4-2, 4.1r4-1
4.1r3-4, 4.1r3-3, 4.1r3-2, 4.1r3-1, 4.1r3-0
4.1r2-7, 4.1r2-6, 4.1r2-5, 4.1r2-4, 4.1r2-3, 4.1r2-2, 4.1r2-1, 4.1r2-0
4.1r1-8, 4.1r1-7, 4.1r1-6, 4.1r1-5, 4.1r1-4, 4.1r1-3, 4.1r1-2, 4.1r1-1, 4.1r1-0
4.0r3-6, 4.0r3-5, 4.0r3-4, 4.0r3-2, 4.0r3-1, 4.0r3-0

Note: You can only upgrade from NIOS 4.1r4-0 to 4.1r4-1. NIOS 4.3r2-3 does not support 4.1r4-0 as an upgrade or revert path.

Technical Support

Infoblox technical support contact information:

Telephone: 1-888-463-6259 (toll-free, U.S. and Canada); +1-408-625-4200, ext. 1

E-mail: support@infoblox.com

Web: <http://www.infoblox.com/support>

GUI Requirements

To use the NIOS 4.3r2-3 GUI, administrators must have one of the following installed on their management systems.

OS	Browser
Microsoft® Windows XP®	Microsoft Internet Explorer® 6.0+ Firefox 1.7+
Microsoft Windows Vista®	Microsoft Internet Explorer® 7.0+
Red Hat® Enterprise Linux®	Mozilla Firefox 1.7+
Fedora Core 5 or higher	Mozilla Firefox 1.7+

In addition, the Infoblox Management GUI requires Java Runtime Environment (JRE) version 1.5.0_14 or version 1.6. Infoblox recommends that you use the latest JRE 1.6 version for your platform. Note that JRE 1.6 and JRE 6.0 are the same version. You can download JRE from: <http://java.sun.com/javase/downloads/index.jsp>

Documentation

The *Quick Start Guide for Installing NIOS Software on Riverbed Services Platforms*, *Infoblox Administrator Guide*, *Infoblox CLI Guide*, and installation guides for the Infoblox-250, Infoblox-550, Infoblox-1050, Infoblox-1550, Infoblox-1552, and Infoblox-2000 appliances are available in PDF format on the documentation CD that ships with the product and on the Support website: <http://www.infoblox.com/support/>

Training

Training courses and materials are available on: <http://www.infoblox.com/training/training.cfm>
 Access to this site requires the user ID and password you receive when you register your product at http://www.infoblox.com/support/product_registration.cfm

RESOLVED ISSUES IN 4.3r2-3

ID	Summary
27753	In some cases after an upgrade, the name servers did not serve some of the DNS zones.
27726	The "named" process did not start after an upgrade because the match-client list of a DNS view either totally or partially matched the match-client list of another DNS view.
27533	After numerous RADIUS restarts, the passive node in an HA pair could not synchronize with the active node after rejoining it because the RADIUS restart process did not terminate the database handles.
27486	The DNS service could become unavailable for a short duration when the Infoblox DNS server received DNS update requests from Windows 2000 clients that contained NTLM data.
26955	In some cases, the passive node in an HA pair could not synchronize with the active node.
26919	After upgrading to 4.3r2-0, the association between zones and a grid member was lost if the member's "override grid recursive query settings" flag was checked, and recursion was disabled. This caused the member to stop serving those zones until this association was restored.
26907	The DNS service could become unavailable for a short duration upon receiving a DNS update request in a particular format.
26766	The "show routes" CLI command did not display newly added static routes.
26668	Setting the port configuration (duplex or speed settings) could inadvertently power off/on the Ethernet PHY. This affected the Infoblox-550, -1050, -1550, and -1552 appliances only.
26662	The grid member did not synchronize with the grid master when users enabled a grid master candidate in the grid.
26644	API: The API installation on the client machine generated warning messages when users debugged a Perl script by running Perl with the -w argument.
26547	The field for the number of DNS queries for non-existent records NXRRSET was misspelled as NXRRESET in the zone statistics file.
25968	When the NTP service was enabled on an appliance and the list of NTP external servers contained numerous FQDNs, a database operation timeout caused the appliance to restart.
25850	The appliance did not allow CA certificates that did not have a CN (common name).
25227	Under certain conditions, the NIOS appliance failed to reboot. The reboot function has been enhanced to resolve this issue.

24996	Re-parenting PTR records with non-numeric names prevented users from adding subdomains to specific reverse zones.
24882	The appliance generated unnecessary messages regarding the USB port.
24587	API: When you used the API to search for leases, it timed out after it used up all the memory on the computer running the script.
24338	Restarting the DHCP service took much longer than expected.
24093	Copying zone records was not captured in the audit log.
23690	The comment of a manually entered NS record was incorrectly updated after an automatically generated NS record with a similar name was removed.
23509	API: The IPv6 address format in a PTR record was incorrect.
23002	API: When you tried to add a zone with a non-existent member, the appliance returned an incorrect error message.
22853	A member could not join a grid because its certificate had expired. The incorrect expiration date was due to a system clock error that occurred when the certificate was generated.
22841	API: When you tried to add a host with a null value in the device type attribute, the appliance returned an incorrect error message.
22795	API: When you tried to add a host to a non-existent DNS view, the appliance returned an incorrect error message.
22575	You could not add host records to a child zone from the IP Address Management panel.
22308	Executing the <code>dig</code> command with the <code>-b</code> option failed.
21534	API: When you executed a "get" for a fixed address by its IP address, the API erroneously performed a search and returned all results that matched the substring.
21105	When a grid member attempted to synchronize its time with a grid master that was out of synch with an external NTP server, the grid member kept restarting and trying to synchronize its time with either the grid master or an external NTP server.
21069	When you used the LCD navigation buttons on the front of the NIOS appliance to enter an IP address, you could not type in 255.
20944	The appliance erroneously allowed users to enter DHCP_UPDATER as a TSIG key name, causing a 'named' daemon failure.
19374	The appliance included TFTP files and directories in scheduled backups even when the option to Include files and directories in system backups was not enabled.

KNOWN GENERAL ISSUES

ID	Summary
26188	The NIOS appliance does not allow specifying an infinite lease time.
26080	Adding, updating, or deleting reverse zones could fail due to unsupported PTR records in the root zone.
25808	<p>In Linux systems running Fedora Core 4 and some versions of Fedora Core 8, the GUI could hang or exit with an error message after you create an extensible attribute and then try to edit the columns in a panel.</p> <p>Workaround: After you create an extensible attribute, close the panel you want to customize and re-open it before trying to edit its columns.</p>
25745	Before NIOS 4.2r3-6, PTR records in reverse zones that were not assigned to a DNS server or name server group were resolved as if they were coming from the parent zone. After upgrading to NIOS 4.2r3-6, the appliance stopped resolving the PTR records in the child zone. For additional information on this issue and how to repair it, log in to the Infoblox Technical Support Knowledge Base and access article #12892.
25727	<p>The GUI does not display extensible attribute values in the correct column after you add the extensible attribute in the Grid perspective, navigate to a different perspective, and then open the Edit Column dialog box to add the extensible attribute to a panel.</p> <p>Workaround: After you create an extensible attribute, close the panel to which you want to add the attribute and re-open it before trying to edit its columns.</p>
25719	Configuration changes made to the 0.0.127.in-addr.arpa zone were not stored by the appliance after upgrading to NIOS 4.2r4. Note that this is a system-defined zone and cannot be configured in NIOS 4.2r4 and later.
25044	Performing a forced restart does not reliably restart RADIUS services if no changes have been made to the RADIUS configuration.
24824	A very small number of customers running NIOS 4.2r4 have reported a rare race condition that may trigger a restart of the appliance or may require a manual reboot. Infoblox is concerned this problem may also exist in later releases. Infoblox is actively investigating and collecting information from the customers affected. If you require additional information or experience any of these issues, please contact Infoblox Technical Support.
24751	API: API performance drops 43% when assigning a DHCP failover association to a DHCP range.
24696	API: When you copy AAAA records from one zone to another, the appliance copies all the resource records in the zone, not just the AAAA records.
24186	The line wrapping function of the Audit Log does not work in Fedora Core 8.
24182	When you view IP addresses in the IP Address Management panel, the paging feature ceases to function after you select an IP address with a status of "Used".
19475	A single grid member sometimes fails to boot up if removed from the grid. If you need assistance with removing a node from the grid and if you run into this problem, please contact Infoblox Technical Support.
18629	NIOS 4.1r4-1 and later do not support IPv6 Link-local addresses.

18059	When you upload a file into TFTP storage, the appliance does not display an error message when it reaches the maximum storage limit.
18028	Do not configure an IPv4 zone primary (master) with IPv6 secondary devices (slaves). The server validation does not allow you to configure an IPv4-only appliance to communicate with IPv6 addresses. If you use IPv6 in the primary, then the appliance can communicate with IPv6 secondaries.
17547	If downgrade fails midway through the process, some elements might not be properly cleaned; therefore, a subsequent downgrade may fail. Workaround: Reboot the appliance to clean up all the elements so that the downgrade can proceed.
17458	You cannot use global search to search RADIUS properties (RADIUS authentication) by specifying the IP address of the RADIUS server.
17324	The front power supply LED status on the Infoblox-2000 stays lit when the power supply goes offline.
17314	The service restart icon blinks after changing the host name policy check.
17273	If the last node in a tree within the GUI is expandable, the GUI only displays as many branches as there is room to accommodate in the GUI view; the scroll bar does not adjust for you to see the remaining branches. This is a known issue in Linux Fedora Core 4 and appears to be addressed in Fedora Core 5, and the issue does not exist in Windows. Workaround: Expand any node above the last node. This adjusts the scroll bar accordingly.
17195	Opening zone statistics after disabling that zone causes a popup error dialog box to appear.
17054	The GUI allows read/write permissions to be assigned to the secondary zones and stub zones but only read-only and deny permissions apply to these zone types. The read/write permission for these zone types exhibits the same behavior as a read-only permission.
16799	For zones with a primary that is external to the grid, it may take up to 15 minutes for changes to the zone to become visible in the zone viewer in the GUI. This happens because the 'named' defers writing to the zone file in order to avoid constant rewrites caused by frequent updates to the zone.
16103	VIM: Infoblox does not support or recommend serial interface access to the VitalQIP restricted shell.