

# DHCP Perfected

## DNSBOX IS THE FULL-FEATURED, FAILOVER-READY DHCP SERVER YOU'VE BEEN LOOKING FOR

Beyond the smallest LANs, where the basic DHCP functionality of a simple router is OK, the majority of networks in the world continue to use either Windows Server or ISC's DHCPd. Now, with ever-growing networks and greater need for high availability, Network Managers are finding these are no longer fit for purpose. They need more:

**Priority 1 Failover:** Up to now, either simply not an option or clunky and imperfect with the tools available. Your options were limited to a high-end DDI solution in a grid-like deployment or an open source solution with high Total Cost of Ownership. Microsoft and entry level Cisco solutions do not offer high availability. Now, high availability is seen as essential and so failover is a necessity.

**Priority 2 On-site server:** With Windows Server moving to the cloud, network admins don't want DHCP off-site at the mercy of their internet connection. But it doesn't make sense to retain on-site Windows Server -and its licence cost - solely for DHCP.

**Priority 3 Professional grade:** technicians cannot afford to spend time working around the limitations of basic DHCP solutions. They need a fully featured, dedicated server that makes common tasks simple and complex tasks, like Dynamic DNS, straightforward. To further reduce operating expense:

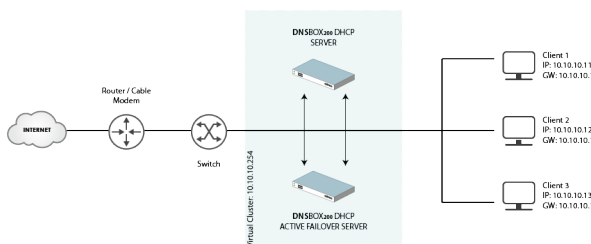
- Troubleshooting must be efficient and automated wherever possible
- Server upgrades and software updates must be simple and undistruptive

### High Availability Failover

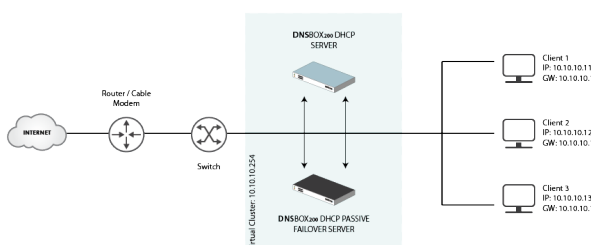
DNSBOX makes it easy to set up and deploy a failover unit for redundancy. DNSBOX200 failover pairs share configuration, ensuring that they never 'disagree' about the network. They also dynamically share available addresses, and information about current leases.

This can be set up in a few simple clicks with two options to suit different network topologies and requirements:

1. Active-Active mode - the pool of available addresses is split between two active DHCP servers.



2. Active – Passive mode - achieved by clustering a pair of DHCP servers on a single virtual IP address. A passive server copies information about the leases distributed by the active server in real time.



### DHCP configuration simplified

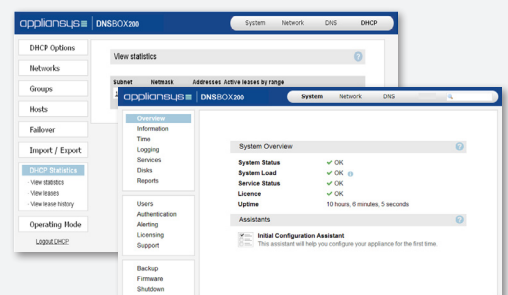
- Inbuilt automation and validation tools
- Deployment Wizards for configuration and to import settings from MSAD, DHCPd and KEA
- Reports on live and historic DHCP usage
- Support for custom configurations such as VoIP/IPT devices, mobile devices
- Dynamic DNS support for DHCP-DNS integration including Windows DNS Servers

### Easy, automated DHCP failover

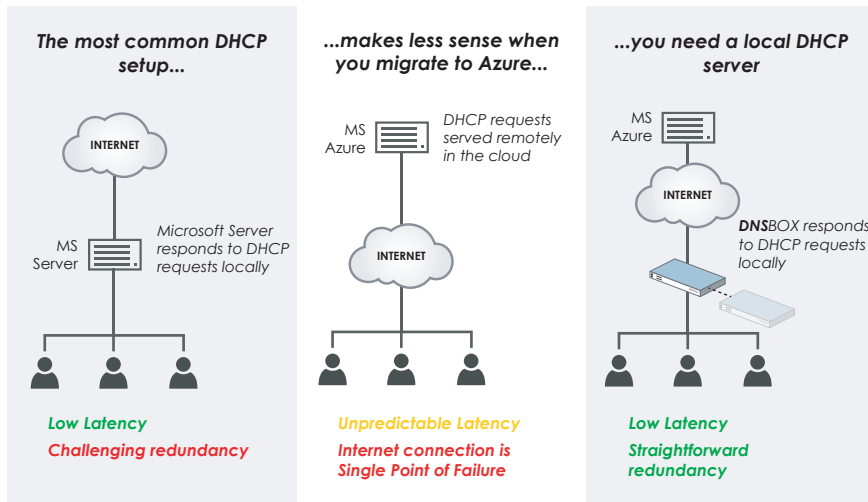
- Simple to set up DHCP failover pairs
  - Data replicated to secondary active unit
  - Configuration automatically shared between servers
  - Address availability and information about current leases dynamically shared
- Easily upgrade without service disruption

### Appliance Benefits

- No headaches, no hassles: Plug-and-play, easy to administer
- Slashes cost of ownership; offers high ROI
- Inherently better than a general-purpose server:
  - Greater reliability and security
  - High level of resilience and availability
  - Dedicated server: better performance
- Dual IPv4 / IPv6 configuration



## On-site server



With DNSBOX you can retain on-site DHCP when migrating to MS Azure either:

- Replacing all DHCP infrastructure so that Azure plays no role in DHCP whatsoever
- Deploying **DNSBOX** as Relay Agents that integrate with Azure

GSS-TSIG (Generic Security Service Algorithm for Secret Key Transaction) provides the functionality you need for smooth integration with Azure Active Directory.

## Professional Grade DHCP

With DHCP the initial setup is usually the most time-consuming administrative task. **DNSBOX's** user interface is designed to radically simplify day-to-day DHCP administration.

User feedback has always rated the **DNSBOX** DHCP solution highly. With increasing need for stand-alone DHCP, in 2021 we decided to re-build it from the ground up, to build **indisputably the world's best DHCP server**. Informed by expert customer insight every step of the way, that's what we've done:

- Templates and wizards for the most common use cases make **DNSBOX** the quickest, easiest DHCP server you'll ever deploy
- Pared back navigation and dynamic workflows put the fields you need in-front of you, removing unnecessary clutter
- Templating couldn't be easier, streamlining workflows and allowing junior administrators to safely make changes
- You can easily edit subnets without worrying about config errors – inbuilt validation takes care of it all
- Help is built in to the user interface to guide you every step of the way
- Informative DHCP statistics give you full visibility of the service, allowing you to easily search for leases, hosts, zones and IP ranges

“I've worked with a lot of DHCP appliances, this is by far the easiest by far I've ever dealt with. I love the fact the UI is not nested, I'm not having to go six layers deep and then back myself up 2 layers to make sure it worked. It has been a pleasure working with this device and how resilient it is.”

*Anthony Grande, Senior Systems Administrator, Phoenix Suns*

## Your choice of DHCP engines

Under the hood, **DNSBOX** gives you a choice between ISC's industry standard DHCP software (known as DHCPd) or KEA which was developed for an always-connected world with low tolerance for network disruption. Rather than holding DHCP data in a single file, KEA uses a relational database, making it particularly attractive if you:

- need to make frequent configuration changes as the service does not need to restart to implement changes
- need active/active failover

As of the end of 2022, ISC has announced that DHCPd is end of life and it does not intend to issue any further maintenance releases. Users will want to move more quickly to replace DHCPd with KEA and the **DNSBOX** DHCP server makes this easy.

## DNSBOX<sub>200</sub> - Key Features

### Easy to Use

- Simple, intuitive interface and workflows
- Configure from any browser, anywhere
- Easy backup export and import
- One click upgrade with rollback functionality

### Simple DHCP Administration

- Automated validation of DHCP configuration
- Custom configuration fields
- Group hosts, subnets and networks
- Automated log rotation
- Comprehensive monitoring, reporting & alerting
  - System health monitoring
  - SNMP/Syslog monitoring
  - SMS and email alerts
- Create networks and static host metadata for easy categorisation
- Set vendor classes in DHCP options and assign different policies to each

### Appliance Security and Reliability

- Integrated firewall
- Built-in user authentication
- 10x more reliable with solid state storage
- Dual CompactFlash cards - program and data
  - Give you faster boot times
  - Can easily be ejected to retain all settings
- Customised Linux OS

### Expandable solution

- Integrates seamlessly with **DNSBOX<sub>300</sub>** or **DNSBOX<sub>400</sub>** to create a complete DDI solution
- Convenient, cost-effective upgrades for new services: authoritative DNS, DNS caching and IP Address Management (IPAM)

## Technical Specifications

A range of **DNSBOX** hardware models allow you to select a solution that fits your budget and DHCP lease performance needs.

	DNSBOX <sub>210</sub>	DNSBOX <sub>220</sub>	DNSBOX <sub>230</sub>
<b>DHCP Performance</b>	Up to 2,330 LPS	Up to 4,270 LPS	Up to 6,570 LPS
<b>Ethernet (NICs)</b>	2 x 10/100/1000		
<b>Flash Storage</b>	1 x OS, 1 x data		
<b>DHCP Storage</b>	SSD		
<b>Dimensions</b>	19" (482.6mm) x 1.75" (44.45mm) x 10" (254mm)	19" (482.6mm) x 1.75" x (44.45mm) x 17" (432mm)	