

Configuring and Troubleshooting DDNS on CNR

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Introduction

This document provides details on configuring and troubleshooting Dynamic Domain Name Services (DDNS) on Cisco Network Registrar (CNR).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software versions:

- Cisco Network Registrar NT 5.0.6
- Windows 2000

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Configuring and Verifying Zones

- List all configured zones by entering:

```
nrcmd> zone zonename show
```

- Verify that the zone type is primary on this server:

```
nrcmd> zone zonename type = primary
```

- Verify from the list that "dynamic=enable." If this is not the case, it can be set by typing:

```
nrcmd> zone zonename enable dynamic
```

- Find out which servers are allowed to update the DNS. This is shown by the field:

```
dynupdate-set = zonename
```

- To specify the list of IP addresses type:

```
nrcmd> zone zonename set dynupdate-set=ip1,ip2
```

- Verify zone configuration again:

```
nrcmd> zone zonename show
```

Configuring the DHCP Server

- Verify configured scopes and their properties:

```
nrcmd> scope scopename show
```

- Things to look for:

```
dynamic=enabled  
dns-server-addr = ip address of primary dns server (forward zone)  
dns-rev-server-addr = ip address of primary dns server (reverse zone)  
dns-zone-name = forward zone  
dns-reverse-zone-name = reverse zone
```

- Verify from the list that "dynamic=enable." If this is not the case, it can be set by typing:

```
nrcmd> scope scopename enable dynamic-dns
```

- If necessary, change the other settings:

```
nrcmd> scope scopename set dns-server-addr = ip address
```

```
nrcmd> scope scopename set dns-rev-server-addr = ip address
```

```
nrcmd> scope scopename set dns-zone-name = forward zone
```

```
nrcmd> scope scopename set dns-reverse-zone-name = reverse zone
```

- Verify scope configuration again:

```
nrcmd> scope scopename show
```

- Save your work:

```
nrcmd> save
```

- Reload the DNS and DHCP servers for the changes to take effect.

Troubleshooting DDNS

- Increase logging capabilities, specifically for monitoring detailed DNS updates:

```
nrcmd> server DHCP set log-settings=dns-update-detail
```

- For changes to take effect, save and reload the servers.
- Now you can view the DHCP and DNS log files looking for dynamic update messages (success & failure messages).
- Next, you can verify the dynamic records in a number of ways:

- ◆ nrcmd> zone zonename listRR {all|static|dynamic}

- ◆ Use **nslookup** or some client utility (point to the CNR DNS server).

Related Information

- [Using the Nrcmd Commands](#)
 - [Cisco Network Registrar CLI Reference Guide](#)
 - [Cisco Network Registrar Tech Notes](#)
 - [Technical Support – Cisco Systems](#)
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