

# DNS Zones

## Overview

The commands associated with zone management (located in the **Zone** menu) are only available when a specific DNS server is selected in the Object Section, or when DNS Zones is selected. In other words, the Zone menu is only available when DNS zones are listed in the Object List. When DNS Zones is selected in the Object Browser, all DNS zones are listed on all servers. However, when a particular name server is selected in the Object Section, only the zones being managed on that server are listed.



The functions for this menu option are listed alphabetically after the Zone Icons and Zone Viewing sections.

## Zone Icons

When viewing the zones, you will notice the icons that appear to the left of each zone's name. The color of the square (or lack of a square) designates whether the zone is a static master zone, a dynamic master zone, or a slave zone, as described below:

-  An icon with a blue dot indicates a **static master zone**, which is always the original copy of the zone, and always present on that zone's master server.
-  An icon with a gold dot indicates a **dynamic master zone**, which is always the original copy of the zone, and always present on that zone's master server.
-  An icon with a purple dot indicates an **Active Directory Integrated zone**.
-  A half page icon represents a **stub zone**.
-  An icon with an arrow pointing to the right represents a **forward zone**.
-  A faded icon without any color marking indicates a **slave zone**. A slave zone is a duplicate of a master zone that is made on the master zone's slave server(s). Slave zones bring redundancy and stability to the DNS system because it allows more than one server to process domain requests, and allows requests to be processed even if one of the servers becomes unavailable.



These indications are not related to which physical server on which the zone is created. Any server can be the master server. The terms master and slave are only relative to the zones. Whichever server the zone was created on is the master server for that zone. This means that a new zone is always created on the master server.

## Zone Viewing

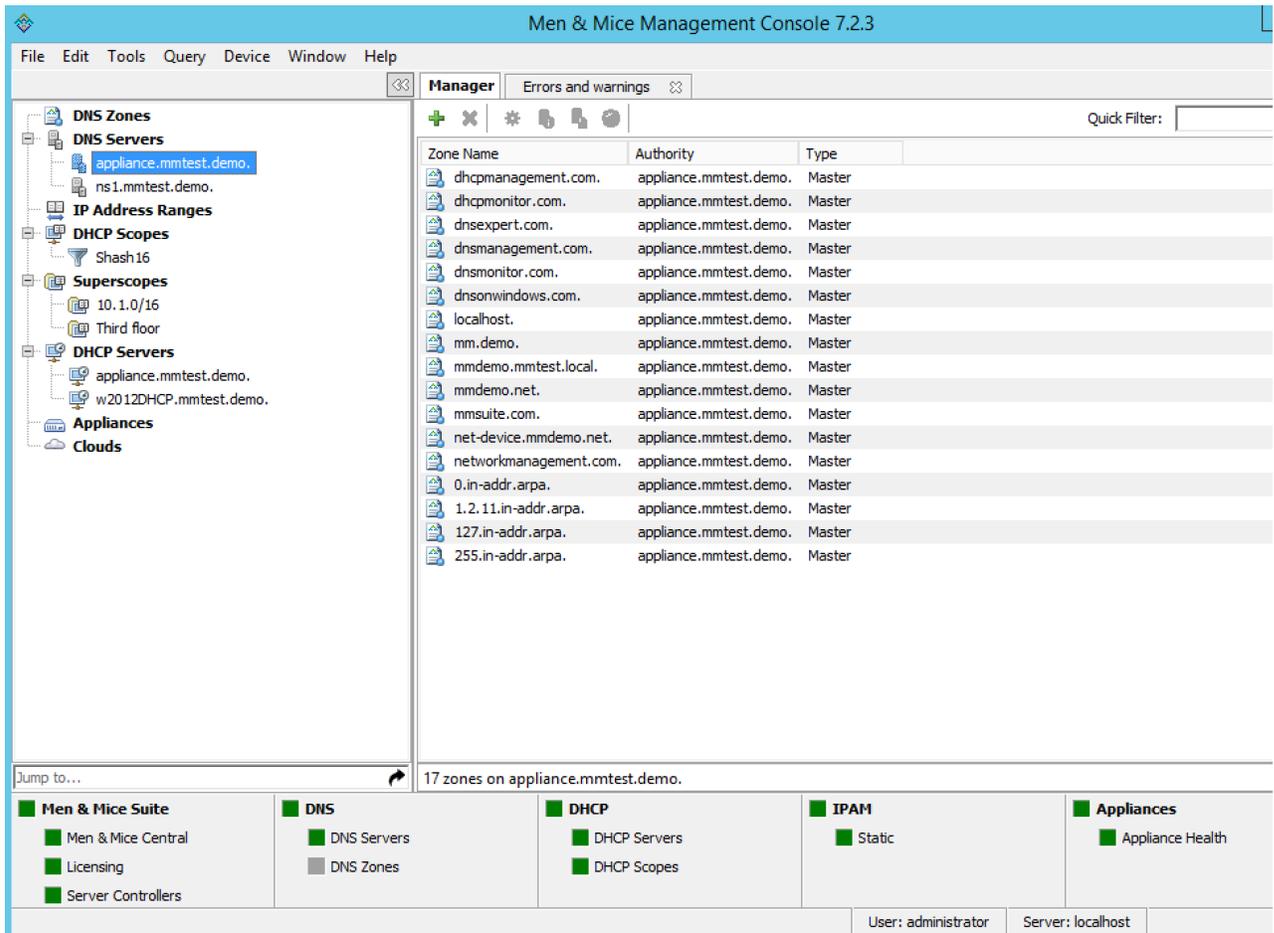
### All Zones on All Servers

You can use the Management Console to view all of the existing DNS zones at once, regardless of the server to which they belong.

- In the Object Section of the Management Console, click the **DNS Zones** object. This causes all existing zones (to which you have access) to appear in the Object List.

### Single Name Server Zones

- In the Object Section of the Management Console, locate the DNS server that owns the zones you want to view and click on it. (The DNS server(s) will be listed under the DNS Servers object. You may need to click the plus  sign in order to see it.) When a server is selected, the zone information for that server displays in the Objects List.



## Zone Contents

The Zone tab provides a detailed look at the data inside of a zone, including its resource records. The name of the zone always displays in the title bar. The header record (a.k.a. Start of Authority or SOA record) displays as a collection of fields above the resource records.

- To view the contents of a particular zone, double-click on it. This opens the Zone tab.

appliance.mmtest.demo.
localhost. on appliance.mmtest.demo.
localhost.localdomain. on ns1.

Quick Filter:

Master:

Hostmaster:

Default TTL:

Serial:

Refresh:

Retry:

Name	TTL	Type	Data
localhost.localdomain.		NS	localhost.localdomain.
localhost.localdomain.		A	127.0.0.1
localhost.localdomain.		AAAA	::1

## SOA Panel

Since the SOA record is seldom modified after it is created, the Zone tab has a built-in control to allow you to conceal the SOA panel from view. This allows you to view more of the resource record area below. If you look at the left edge of the Zone tab, just above the record table, you will notice three short horizontal lines, stacked vertically. This is the Hide/Show SOA panel control. Click on this control once to hide the SOA panel. Click on it again to make it re-appear.

## SOA Fields

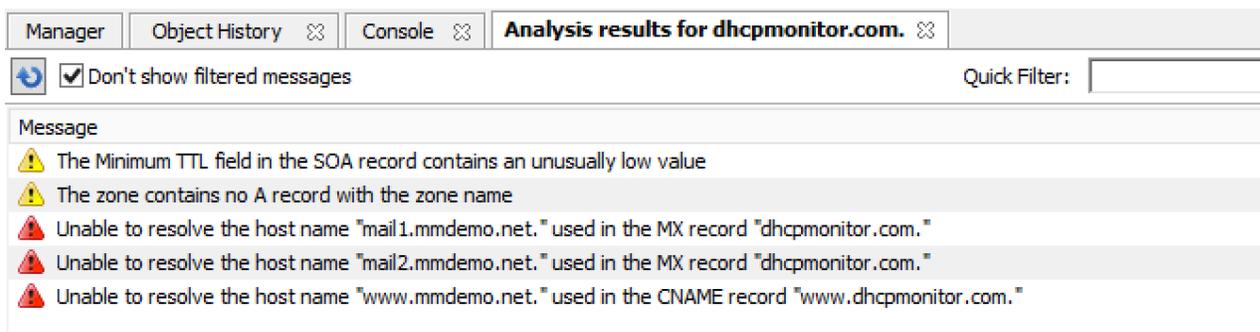
FIELD	DESCRIPTION
<b>Master</b>	This field gives the name of the server that acts as master server for the zone.
<b>Hostmaster</b>	This field is properly formatted by giving the e-mail address of the person responsible for zone with the @ symbol replaced with a period (.). For example, instead of <code>hostmaster@example.com</code> type <code>hostmaster.example.com</code> . The username part of the e-mail address cannot contain a (verbatim) dot ".". See RFC 1912 "Common DNS Operational and Configuration Errors", Section 2.2 for additional information
<b>Serial Number</b>	The serial number is a ten-digit number consisting of the year, the month, the day, and a two-digit daily revision number. (Actually, it is any integer between 0 and ~ 4 billion, but the preceding is the standard convention.) To create a unique serial number, the Management Console adds 1 to the daily revision number every time the zone is saved.
<b>Refresh</b>	This is the period (in seconds) that determines how often slave servers will check with the master server to determine if their zone files are up to date. This is done by checking the serial number. The default value for this field is 28800, which equates to once every 8 hours.
<b>Retry</b>	This determines the period that a slave server will wait before trying to re-contact the master zone (in the event that an earlier contact attempt is unsuccessful). The default value is 7200 seconds, or once every 2 hours.
<b>Expire</b>	This value determines how long a slave server will keep serving a zone after its last successful contact to the master name server. Once the zone has expired, the slave stops giving information about the zone because it is deemed unreliable. The default expiration period is 604800 seconds, or 1 week.
<b>Neg. caching</b>	This field is only available when connected to a BIND server. This value specifies how long a server will retain (cache) the knowledge that something does not exist. The default value is 86400 seconds, 24 hours.
<b>Default TTL</b>	This value serves as the default time-to-live for all records without an explicit TTL value. The default value is 86400 seconds, 24 hours.
<b>TTL of SOA</b>	This TTL applies to the SOA record. It represents the maximum time in seconds any outside DNS server should cache this data. The default value is 86400 seconds, 24 hours.

## Zone Analysis

The DNS Expert *Zone Analysis* engine allows zones to be analyzed for correctness. To analyze a zone, do any of the following:

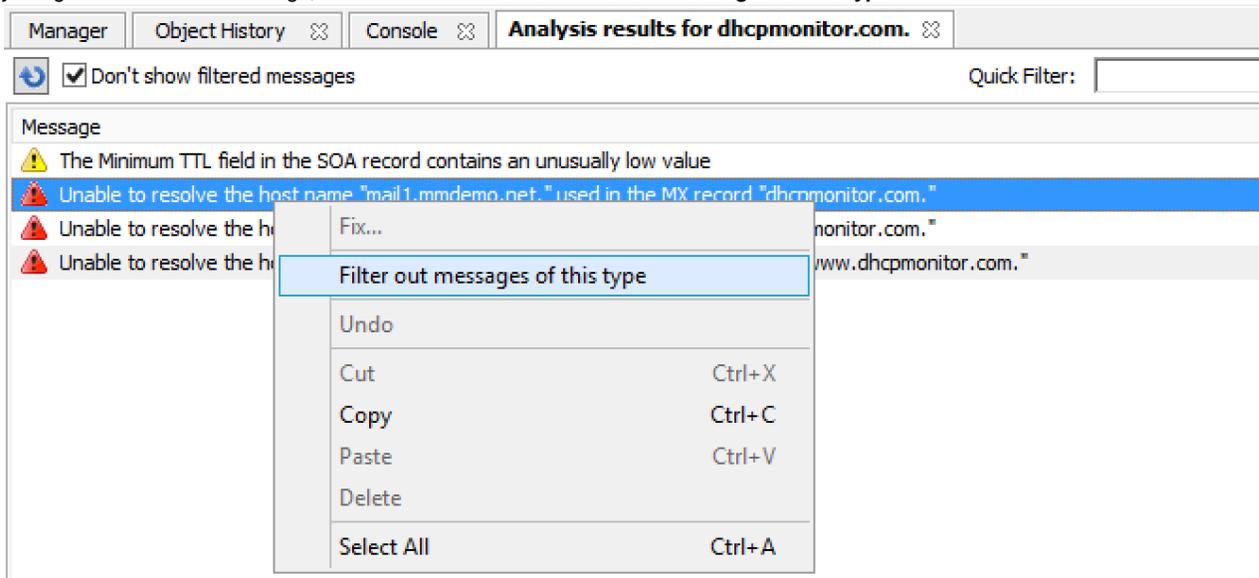
- Right-click on the zone you want to analyze, and from the shortcut menu select **Analyze**.
- Choose **Zone, Analyze**, or
- Open the zone and click the **Analyze** button on the toolbar. 

The results of the zone analysis are shown in a new window:



- **Reanalyze.** To perform the analysis again, press **F5** or click the **Analyze** button.
- **Filtering.** It is possible to filter out messages of a certain type. When the checkbox, **Don't show filtered messages** is selected, the filtering is active and these messages are not shown in the message list. Deselecting the checkbox disables the filtering and all messages are shown in the message list.
- **Quick Filter.** The Quick filter works the same as it does in other windows.

- **Messages.** The message list shows the results of the zone analysis. Messages are either warnings or errors (as indicated by the icon next to the message). Selecting a message will display detailed information about the message at the bottom of the window.
- **Fix.** When the application can fix an error, the Fix menu item becomes available. Selecting this menu item will display more information about the fix for the error.
- **Filter out messages of this type.** Selecting this item, will suppress the display of the selected error type unless the **Don't show filtered messages** checkbox is unselected. **NOTE:** This setting is global and it is applied to all subsequent analysis in all zones. If you right-click a filtered message, this item will read as **Don't filter out messages of this type**.



If the zone you are analyzing is open, an icon with an exclamation mark is shown in the bottom left corner of the window. Clicking this icon will display the errors found during the analysis in a list at the bottom of the Zone tab. Closing the analysis window will clear the error message list in the Zone tab.

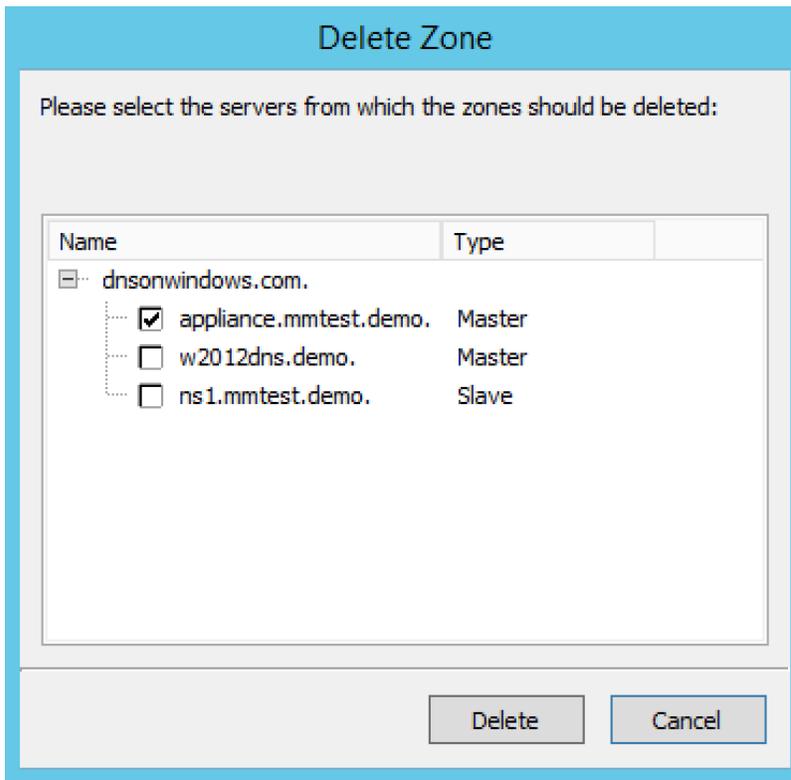
## Access/Access for Non-Master for Zone(s)

Refer to *Administration Functions—Global Access*.

## Delete

Use this command to delete a zone from one or more servers. Before using this command, select the zone you want to delete from the Management Console; the Delete Zone dialog box displays and shows a list of servers on which that zone resides. By default, the zone will be removed from all servers (i.e., all servers are checked). If you want to keep it on one or more servers, clear the checkbox next to that server. Click the **Delete** button to remove the zone from the selected servers.

1. In the Object Section, select **DNS Zones** to view all zones.
2. Select the zone(s) that you want to delete. To select more than one zone, hold down the **Ctrl** key while making your selections.
3. Right-click on any selected zone and, from the shortcut menu, select **Delete**. The Delete Zone dialog box displays, showing each zone you selected and a list of servers that currently serve that zone. The zone(s) you selected will be deleted from every server that is checked on this list. To keep the zone on a particular server, clear the checkbox next to that server.
4. To remove the zone(s) from the selected servers, click the **Delete** button. The zone is removed from the servers.



## Disable/Enable

### Disabling a Zone(s)

This function is only available for *static master zones that have no slave zones*. (For other types of zones (dynamic or AD integrated) the command is not visible. The **Disable** command deactivates the entire zone without deleting it. When disabled, the server ignores the contents of the zone. The zone can still be edited while disabled, but changes will not take effect until the zone is re-enabled.

1. In the Object Section, select DNS Zones to view all zones, or under the DNS Servers object, select the server containing the zone you want to disable. This displays the zones in the Object List.
2. Select the zone(s) that you want to disable. To select more than one zone, hold down the **Ctrl** key while making your selections.
3. From the menu bar, select **Zone, Disable Zone**. A dialog box prompts you to confirm your decision.
4. To disable the selected zone(s), click the **Yes** button. The zone becomes disabled. Zones that are disabled appear faded in the Object List. They are still fully accessible and editable, but they will not be active until you re-enable them.

### Enabling a Zone(s)

Use the following procedure to re-activate a zone that has been disabled.

1. In the Object List, locate the zone(s) that you want to re-enable. To select more than one disabled zone, hold down the **Ctrl** key while making your selections.
2. From the menu bar, select **Zone, Enable Zone**. A dialog box prompts you to confirm your decision.
3. To enable the zone(s), click the **Yes** button. The Object List refreshes itself and shows that the zone(s) has been restored to active status.

## Duplicate

Use the following procedure to create a new zone that is an exact duplicate of an existing one, including master and slave servers, zone data and zone options.

1. In the Object Section, select either DNS Zones, or select a specific server under the DNS Servers object. This lists the zones in the Object List.
2. In the Object List, right-click on the zone you want to duplicate and select Duplicate from the popup menu. The Create Zone dialog box displays.
3. Enter a name for the new zone in the *Zone Name* field.
4. Click the **Create** button. A new zone is created with the same records, Master server, and Slave servers as the original.

## Zone Migration Wizard

The Zone Migration Wizard allows users to migrate one or more zones from one server to another, including all data in the zone. To migrate a zone, do the following:

1. In the Manager window, select one or more zones.
2. Right-click and, from the shortcut menu, select **Migrate Zone**. The Migrate Zone(s) Wizard dialog box displays.
3. For each of the resulting screens, make a selection/entry and move through the wizard.

## View Related Servers

This option is used to see on which servers a copy of a particular zone resides.

1. In the Manager window, select one or more zones.
2. Right-click and, from the shortcut menu, select **Related Servers**. A dialog box with information on where a copy of the zone resides displays.
3. Click OK to close the dialog box.

## Edit Preferred Servers

This option is only available when working with AD integrated zones. It is used to specify the server to use when opening an AD integrated zone.

It is also possible to specify which server to use if the preferred server becomes unavailable—e.g., the server on the top of the list is tried first and, if that server is unavailable, the second server is tried, and so on.

1. From the menu bar, select **Zone, Preferred Server**. The Edit preferred server list dialog box displays.
2. Change the order of your servers into the preferred order.
3. Click **OK**.

## Export

Use this command to export DNS zone files to standard format.

1. Select the zone you want to export and open the Zone tab.
2. From the menu, select **File, Export**. The Export zone to text file dialog box displays.
3. Provide a name and destination for the file and click the **Save** button. All exported files are saved in standard, readable format.

## Folders

Refer to *Management Console: Object Folders* for details on this function.

## Forward Zone

**Create forward zone**

Zone name:

Servers

Name	Location
<input checked="" type="checkbox"/> appliance.mmtest.demo.	
<input checked="" type="checkbox"/> ns1.mmtest.demo.	KOP
<input checked="" type="checkbox"/> w2012dns.demo.	KOP

IP addresses of forward servers

Through this function, you create a forward zone.

1. In the Object List, right-click on **DNS Zones** and, from the shortcut menu, select **New Forward Zone**. The Create forward zone dialog box displays.
2. **Zone name**. Type the name for this forward zone. You cannot use spaces in the name.
3. **Servers**. Select all the servers to which this forward zone applies by clicking in the checkbox.
4. **IP Addresses of forward servers**. Type the IP Address of any master servers for this zone.
5. Click **Create**. The new forward zone is created and displays in the Detail View of the main window.

## Import

Through this function, you can import multiple DNS zones at one time.

1. From the File menu, select **Import Zone**. The Import dialog box displays.
2. Locate the zones to be imported. The zones must within the same folder. To select multiple zones, press/hold the **Ctrl** key. Then click on each zone.
3. Click **Open**. The files are uploaded and the Import zones dialog box displays.

Master server: appliance.mmtest.demo.

Name	Location
<input checked="" type="checkbox"/> ns1.mmtest.demo.	KOP
<input checked="" type="checkbox"/> w2012dns.demo.	KOP

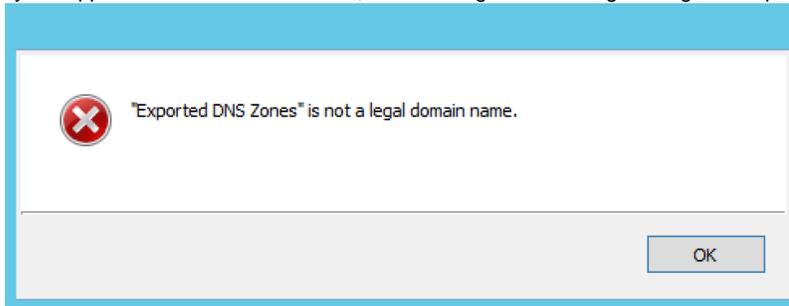
AD Integrated zone

AD Replication...

Zone name: Exported DNS Zones

Import Cancel

4. Click **Import**.
5. If you happen to select an invalid zone, the following error message dialog box displays:



6. Click **OK** and when you return to the Import zones dialog box, clear the field containing the zone.

## Master Zone

This procedure is the fastest way to add a new blank (i.e., empty) zone. If you want to duplicate an existing zone, you should use the Duplicate command instead.

It does not matter which server is currently selected when you add a zone. You always have the option to select the Master Server when you configure the zone.

1. In the Object Section, select either DNS Zones, or select a specific server under the DNS Servers object.
2. On the toolbar, click the **New Zone** button. The Create Zone dialog box displays.
3. To use the Create Zone Wizard from this dialog box, click the Assist me button and follow the instructions found under the section titled, "Zone Wizard." If you chose not to use the zone wizard, continue with the steps below.
4. In the *Zone Name* field, type a name for the new zone.
5. In the *Master server* field, click the drop-down list, and select the server that you want to designate as the master for this zone. The Slave servers list automatically updates itself based upon your choice of the master server.
6. In the Slave server area, select the slave server(s) onto which you want to place this zone. The slave servers are selected by default, so if you do not want to assign this zone to a slave server, you must clear the associated checkbox. You can select or deselect all slave servers by right-clicking the list of slave servers in the dialog box for creation of master zones, and selecting the appropriate menu item.
7. If you want the zone to be an Active Directory Integrated zone, click the AD Integrated zone checkbox.
8. If the zone is Active Directory Integrated, the **AD Replication** button is enabled. Click this button to display a dialog box where you can set the AD Replication options for the zone.

### Create Zone

Zone Name:

Master server:

Slave servers:

Name	Location
<input checked="" type="checkbox"/> ns1.mmtest.demo.	KOP
<input checked="" type="checkbox"/> w2012dns.demo.	KOP

AD Integrated zone

- To finish creating the zone, click the **Create** button. The new zone is created with the appropriate name server (NS) records, and the Zone SOA Panel displays.

### Men & Mice Management Console 7.2.3

File Edit Tools Query Device Zone Window Help

Console Analysis results for dhcpmonitor.com. testzone.m

**DNS Zones**

- DNS Servers**
  - appliance.mmtest.demo.
  - ns1.mmtest.demo.
  - w2012dns.demo.
- IP Address Ranges**
- DHCP Scopes**
  - Shash16
- Superscopes**
  - 10.1.0/16
  - Third floor
- DHCP Servers**
  - appliance.mmtest.demo.
  - keaDHCP.mmtest.demo.
  - w2012DHCP.mmtest.demo.
- Appliances**
- Clouds**

Master:

Hostmaster:

Default TTL:

Name	TTL	Type	Data
testzone.mmtest.demo.		NS	w2012dns.demo.
testzone.mmtest.demo.		NS	ns1.mmtest.demo.
testzone.mmtest.demo.		NS	appliance.mmtest.demo.

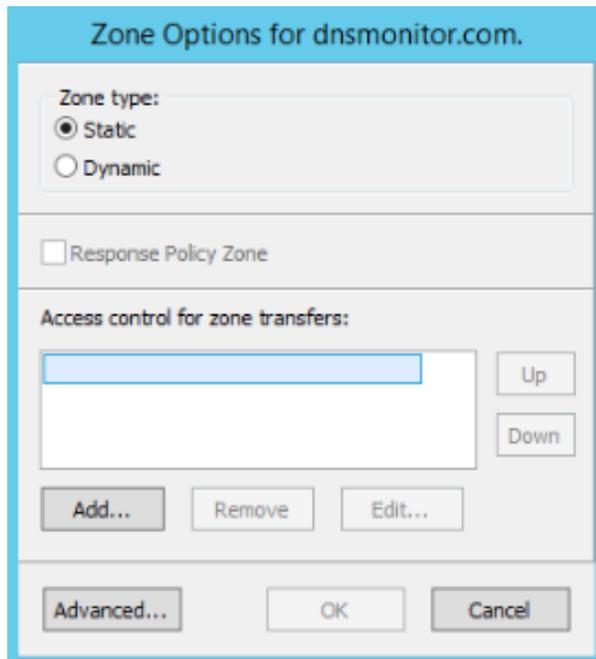
3 records

- Make any desired changes to the data shown.
- When all selections/entries are made, click **Save**.

## DNS Response Policy Zones (BIND only)

The ISC BIND name server (9.8 or later) supports DNS Response Policy Zones (RPZ). You can find more information on RPZ at [dnssrpz.info](https://dnssrpz.info)

You can manage RPZ zones from within the Men & Mice Suite. When you open the Options dialog box for a master zone on a BIND server you will see the Response Policy Zone checkbox. To specify zone as an RPZ zone, just click the checkbox.



To use RPZ, a response-policy statement must exist in the DNS server options file. The Response Policy Zone checkbox is disabled if a response-policy statement is not present. For example

```
options {  
    ...  
    response-policy {zone "rpzzone.com" ;};  
    ...  
};
```

## DNSSEC Zones

Zones containing DNSSEC records are labeled as "Signed" in the DNSSEC column in the zone list.

When DNSSEC zones are opened, the system ignores most DNSSEC records unless the system setting to include DNSSEC records has been set.

Quick Filter:  Hide DNSSEC RecordsMaster: Serial:  Expire: Hostmaster: Refresh:  Default TTL: Retry:  TTL of SOA: 

Name	TTL	Type	Data
dnsmanagement.com.	172800	NS	ns1-06.azure-dns.com.
dnsmanagement.com.	172800	NS	ns2-06.azure-dns.net.
dnsmanagement.com.	172800	NS	ns3-06.azure-dns.org.
dnsmanagement.com.	172800	NS	ns4-06.azure-dns.info.
dnsmanagement.com.	3600	MX	10 mail1.mmdemo.net.
dnsmanagement.com.	3600	MX	20 mail2.mmdemo.net.
dnsmanagement.com.	172800	RRSIG	NS 8 2 172800 20160923181032 20160913171032 64815
dnsmanagement.com.	3600	RRSIG	SOA 8 2 3600 20160923181032 20160913171032 64815
dnsmanagement.com.	3600	RRSIG	MX 8 2 3600 20160923181032 20160913171032 64815
dnsmanagement.com.	300	RRSIG	DNSKEY 8 2 300 20160920181032 20160913171032 64815
dnsmanagement.com.	300	RRSIG	DNSKEY 8 2 300 20160920181032 20160913171032 27109
dnsmanagement.com.	300	RRSIG	NSEC3PARAM 8 2 300 20160923181032 20160913171032 64815
dnsmanagement.com.	300	DNSKEY	256 3 8 A=EAAGPACD887h-wTLdgpLE7h-3vRk-wc7MqgDROgh
dnsmanagement.com.	300	DNSKEY	256 3 8 A=EAAGdUPDQz/PREtpuA123Dh3wE+GUnw8773Qd81
dnsmanagement.com.	300	DNSKEY	257 3 8 A=EAAGU6A8gh/P33wC2wR2Dm7y003p866wvCH8L87
dnsmanagement.com.	300	NSEC3PARAM	1 0 32 BD7DD4540153195
250u9m1mqcdgi4nked0u	300	RRSIG	NSEC3 8 3 300 20160923181032 20160913171032 64815
250u9m1macdai4nked0u	300	NSEC3	1 0 32 BD7DD454015319 <HASH> CNAM

<

35 records

**NOTE:** All DNSSEC record types, with the exception of the DS and NSEC3PARAM record types, are read-only.

## DNSSEC Management on Windows Server 2012

You can use the Men & Mice Suite to manage DNSSEC on Windows Server 2012. You can sign and unsign zones. You can customize the zone signing parameters and add, edit and remove Key Signing Keys (KSK) and Zone Signing Keys (ZSK). The details of DNSSEC are beyond the scope of this documentation. For more information on Windows Server 2012 and DNSSEC, see the Microsoft web site <http://www.microsoft.com>.

### Signing Zones using DNSSEC

To sign a zone on a Windows Server 2012, do the following:

1. With the zones displayed in the Object List, select the zone you wish to sign.
2. Do one of the following to display the Zone Signing dialog box:
  - a. Right-click on the zone record and select **Sign Zone**.
  - b. From the menu bar, select **Zone, Sign Zone**.



3. Select an option for signing the zone:
  - a. **Customize zone signing parameters.** Signs the zone with a new set of zone signing parameters. When this option is selected you can choose or create new Key Signing Keys (KSK) and Zone Signing Keys (ZSK).
  - b. **Sign the zone with parameters of an existing zone.** Signs the zone using parameters from an existing signed zone. To use this option, you must enter the name of the zone containing the parameters to use.
  - c. **Use default settings to sign the zone.** Signs the zone with the default zone signing parameters.
4. Click **Next**. If you chose the **Customize zone signing parameters** option, the zone signing wizard allows you to choose KSK and ZSK for signing the zone. If you chose either of the other options, an overview panel displays in which you can see the zone signing parameters that will be used to sign the zone.
5. Click **Finish** to complete the zone signing process.

## Unsigning Zones using DNSSEC

To unsign a zone on a Windows Server 2012, do the following:

1. With the zones displayed in the Object List, select the zone you wish to unsign.
2. Do one of the following to unsign the zone:
  - a. Right-click on the zone record and select **Unsign Zone**.
  - b. From the menu bar, select **Zone, Unsign Zone**.

The zone is unsigned and all DNSSEC records are removed from the zone.

## Options

The Zone Options dialog box is where you can configure individual settings for a specific zone on each server.

### Zone Options (Windows and BIND)

To access the zone options for a specific zone only, do the following:

1. With the zones displayed in the Object List, select the zone you wish to configure.
2. Do one of the following to display the Zone Options dialog box:
  - a. Right-click on the zone record and select **Options**.
  - b. From the menu bar, select **Zone, Options**.
  - c. On the toolbar, click the **Options** button.

Depending on the type of zone you select, the Option dialog box varies.

### Master Zones

- **Allow Zone Transfers.** When enabled, zone transfers will occur according to the method indicated by the radio buttons below. You must select at least one of these methods.

### Zone Options for dsonwindows.com.

Allow zone transfers

To any server  
 Only to listed name servers in the zone  
 Only to the following servers:

10.5.0.1

To specify secondary servers to be notified of zone updates, click Notify.

Notify...

Dynamic updates: No Updates

Aging / Scavenging

OK
Cancel

- **To any server.** When selected, the zone transfer will be performed to any requester.
- **Only to listed name servers in the zone.** When selected, the zone will be transferred from the server to any other name server listed in the zone.
- **Only to the following servers.** When selected, the zone will only be transferred to the servers you specify in the list below. To enter a server, click in the first available row and enter its IP Address.
- **Dynamic updates.** Specifies whether dynamic updates are allowed for the zone
- **AD Replication.** Displays a dialog box where you can set the AD Replication options for the zone.
- **Aging/Scavenging.** Displays a dialog box where aging and scavenging options can be set for the zone.

### Aging / Scavenging

Scavenge stale resource records

**No-refresh interval**

The time between the most recent refresh of a record timestamp and the moment when the timestamp may be refreshed again.

No-refresh interval: 7 days

**Refresh interval**

The time between the earliest moment when a record timestamp can be refreshed and the earliest moment when the record can be scavenged. The refresh interval must be longer than the maximum record refresh period.

Refresh interval: 7 days

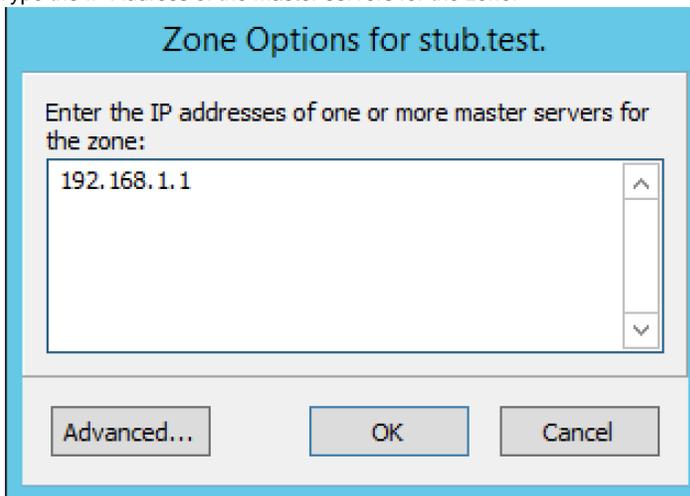
OK
Cancel

## Slave Zones

- **Allow Zone Transfers.** When enabled, zone transfers will occur according to the method indicated by the radio buttons below. You must select at least one of these methods.
- **To any server.** When selected, the zone transfer will be performed to any requester.
- **Only to listed name servers in the zone.** When selected, the zone will be transferred from the server to any other name server listed in the zone.
- **Only to the following servers.** When selected, the zone will only be transferred to the servers you specify in the list below. To enter a server, click in the first available row and enter its IP Address.
- **IP Addresses of master.** Type the IP Address of the master servers for the zone.

## Stub/Forward Zones

- Type the IP Address of the master servers for the zone.



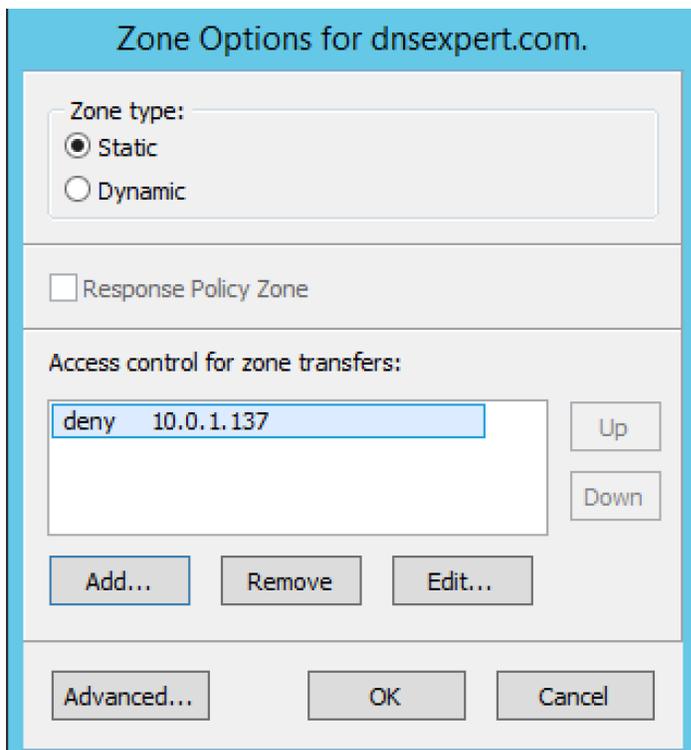
Zone Options for stub.test.

Enter the IP addresses of one or more master servers for the zone:

192.168.1.1

Advanced... OK Cancel

## BIND Servers



Zone Options for dnsexpert.com.

Zone type:

Static

Dynamic

Response Policy Zone

Access control for zone transfers:

deny 10.0.1.137

Up

Down

Add... Remove Edit...

Advanced... OK Cancel

The Zone Options dialog box lets you specify an IP Address (or an address block) from which zone transfers can be allowed, or disallowed.

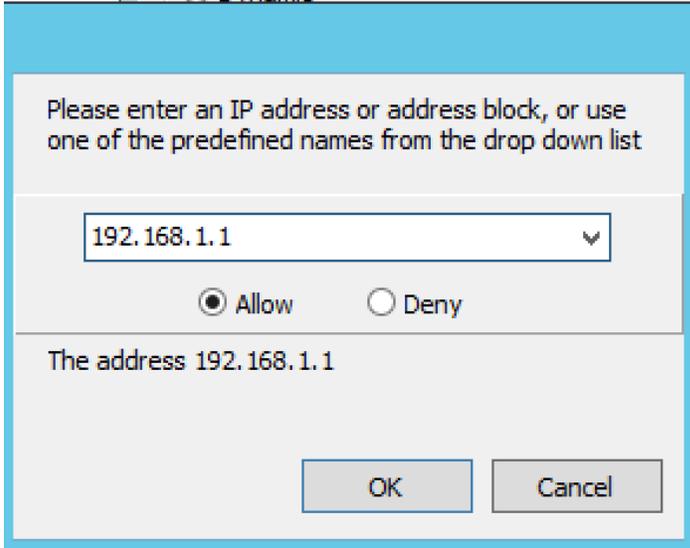
The top section of the Options dialog box lets you designate the zone as either Static or Dynamic. Newly created zones are static by default, but can be changed to a dynamic zone (and vice versa) using this option. Refer to [Appendix B—Dynamic Zones](#) for more

information on dynamic zones versus static zones.

Addresses that have already been setup to handle (i.e., allow or disallow) zone transfers are listed in the lower area of the Zone Options dialog box. If you want to change the settings associated with an address that is already listed here, select it and click on the **Edit** button. To remove the access control completely, select it from the list and click the **Remove** button.

To specify a new address (or block) on which you want to implement access controls, do the following:

1. Click the **Add** button. A small dialog box displays, prompting you to enter the server's IP Address, an address block, or to use one of the predefined names from the drop-down list (**any**, **none**, **localhosts**, **localnets**).



Please enter an IP address or address block, or use one of the predefined names from the drop down list

192.168.1.1

Allow  Deny

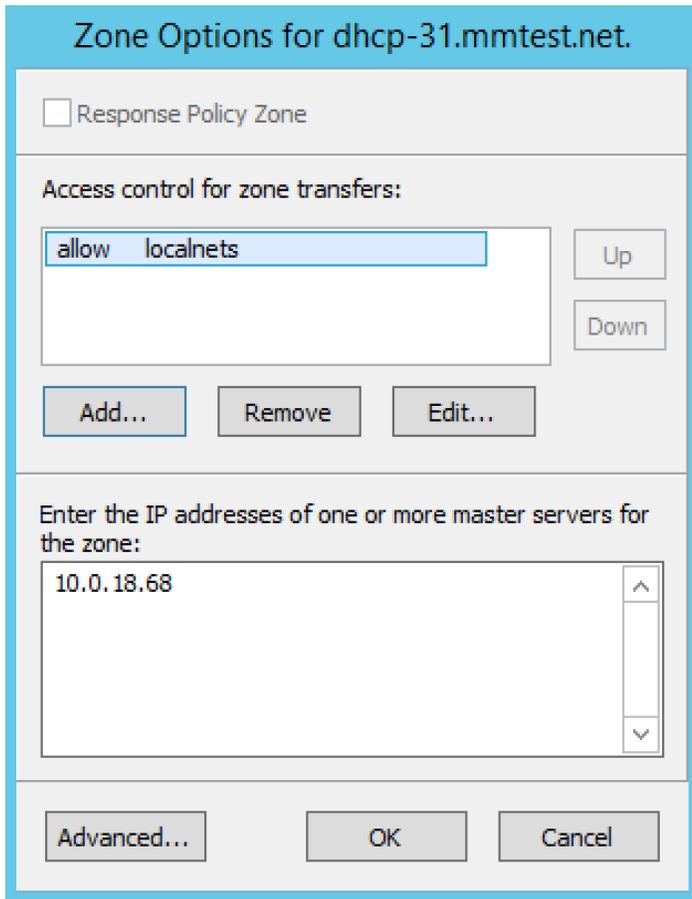
The address 192.168.1.1

OK Cancel

2. After entering the address, select either **Allow** or **Deny** to specify whether to permit or disallow access to/from this address.
3. Click **OK** to save the selection. The new address is now listed in the Zone Options dialog box.

**NOTE:** BIND uses journal files to keep track of changes to dynamic zones. The data in the journal files is merged with the zone data file at a designated interval. It is not possible to manually merge the data from the journal files to the zone data file. This means that if there is data in the zone's journal file when the zone type is changed to a static zone, the entries in the journal file will not be visible in the Management Console.

## Slave Zones on BIND Servers



When a slave zone is hosted on a BIND server, the Options dialog box will look like the one below.

Besides being able to setup the access control (as described in the previous section), you can also specify the IP Address of one or more master servers for the zone.

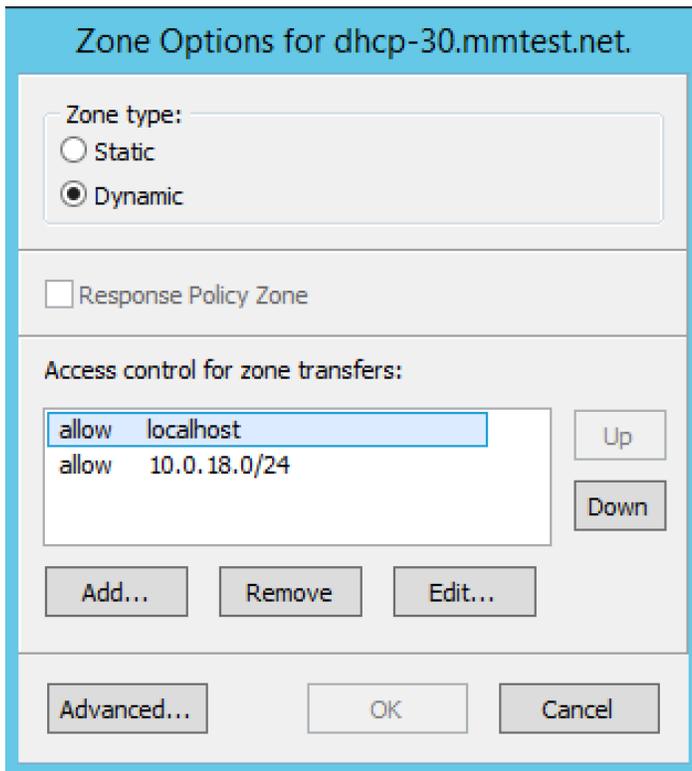
The master servers are specified in the lower half of the Zone Options dialog box. To add a new server to the list, simply click in the white space and enter the IP Address of the master server you are assigning.

- To change the address of an existing server, click on it and make the desired edits.

### Advanced Options

DNS Administrators can now access the BIND configuration files directly to edit DNS server and zone options that are not available in the GUI. Refer to *DNS Servers, Options, BIND Environment – Advanced Server Options* for details.

## Options For a zone



If a zone exists on more than one server (e.g., in a master/slave configuration), it is possible to select the zone instance for which you want to set options.

1. Select the applicable zone.
2. From the menu bar, select **Zone, Options for**.
3. From the submenu, select the desired zone/zone instance (e.g., Master Zones only, Slave Zone only, etc.). The Zone Options dialog box displays.
4. **Allow zone transfers.** When selected, enables the zone transfer options.
  - a. **To any server.** When selected, the zone transfer will be performed to any requester.
  - b. **Only to listed name servers in the zone.** When selected, the zone will be transferred from the server to any other name server listed in the zone.
  - c. **Only to the following servers.** When selected, the zone will only be transferred to the servers you specify in the list below. To enter a server, click in the first available row and enter its IP Address.
5. **Dynamic Updates.** Specifies whether dynamic updates are allowed for the zone
6. **Aging/Scavenging.** Displays a dialog box where aging and scavenging options can be set for the zone.
7. When all selections/entries are made, click **OK**.

## Promote Slave to Master

The Promote Zone feature makes it possible to change a slave zone to a master zone. This might be necessary in emergency situations, for example if the master zone becomes unavailable for an extended period of time. *This feature is only available for DNS Administrators.* When a slave zone is promoted, the following actions are performed:

- The Men & Mice Suite checks whether the most recent copy of the zone is found in its internal database or on the server hosting the slave zone and uses the copy that is more recent.
- The server hosting the slave zone is configured so that the zone is saved as a master zone on the server.
- The zone history and access privileges from the old master zone are applied to the new master zone.
- The configurations of other instances of the slave zone are modified so that they will get the updates from the new master zone.

To promote a slave zone to a master zone, do the following:

1. Select the DNS server that contains the slave zone.
2. Right-click the slave zone you want to promote and, from the shortcut menu, select **Promote to master**. An information message displays:

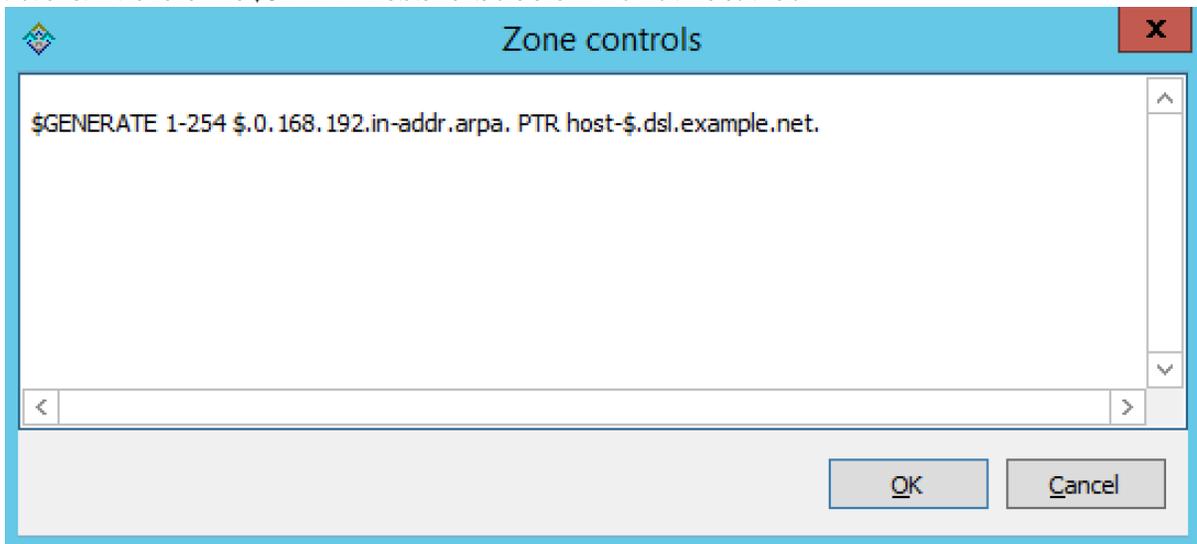


3. Click **Yes** to continue, or **No** to discontinue the process.

## Zone Controls (BIND only)

The Zone Controls feature allows you to create and edit \$GENERATE statements in static zones on BIND DNS servers.

1. Open the zone you want to work with.
2. On the Toolbar click the **Zone Controls** button (  ). The Zone Controls dialog box opens, showing any \$GENERATE statements that exist in the zone. The \$GENERATE statements are shown in a multiline edit field.



3. Make the necessary adjustments to the statements and click OK. **NOTE:** The fields for each \$GENERATE statement must be separated by a tab.

## Properties

Applies only when custom properties have been defined for DNS Zones. Selecting this menu item will display a dialog box where the custom property values can be modified.

1. In the Object browser, select the zone for which you want to manage properties.
2. From the menu bar, select **Zone, Properties**.
3. **Location**. Type the application location.
4. Click **Apply** or **OK**.

## Reload

Sends a command to the DNS server instructing it to reload the zone data.

## Remove from Folder

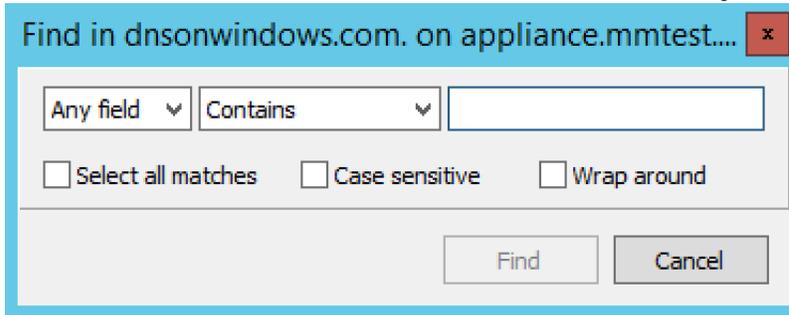
Allows you to remove a zone from a folder. *If you remove a zone from a folder, there is no way to undo this action.*

1. Highlight the zone you want to remove from a folder.
2. Right-click and select **Remove from folder**. The zone is removed from the folder.

## Search

The Zone tab contains a powerful search utility that allows you to search any or all fields in the zone for a particular keyword or numeric value.

1. In the Zone tab toolbar, click the **Find** button. The Find in <zone name> dialog box displays.



2. The first field (on the left) is a drop-down list. The default setting is **Any field**, which means that every field (i.e., column of data) in the zone is included in the search. If you select a specific field from this list, then only that column will be searched.
3. The middle field is a drop-down list that contains several Boolean operators you can use to further define and narrow your search. The default setting is **Contains**, which will find any occurrence of the search criterion, even if it is nestled between other characters. Each operator has a corresponding inverse (e.g., **Does not contain**) that will search for everything but the criterion you entered.
4. The third field is where you enter the text or value you are searching for in this zone.
5. If you check the **Select all matches** checkbox, any records containing information that match the search criterion will automatically be selected. The selected records can then be operated on by other functions, such as Clear, Cut, Copy, Paste, Enable, and Disable. When this option is disabled, only the cell containing the current occurrence of the search criteria is selected.
6. To make your search case sensitive, check the **Case sensitive** checkbox. When checked, a search for ABC will not find fields that contain abc, aBC, AbC, etc.
7. If you check the **Wrap around** checkbox, when you use the Find Again command, the search will start again from the beginning of the zone instead of stopping at the end.
8. To initiate a search, click the **Find** button. The focus will shift to the first cell (or record) that meets the search criteria. If there is no matching information in the zone, a dialog box displays the message, "Nothing found."
9. Shortcut: You can instantly pull up the Find dialog box by pressing **Ctrl+Alt+F**. This will work in any screen where the search tool is available.

## Slave Zone

### Create slave zone

Zone name:

Servers

Name	Location
<input checked="" type="checkbox"/> appliance.mmtest.demo.	
<input checked="" type="checkbox"/> ns1.mmtest.demo.	KOP
<input checked="" type="checkbox"/> w2012dns.demo.	KOP

IP addresses of master servers

^  
v

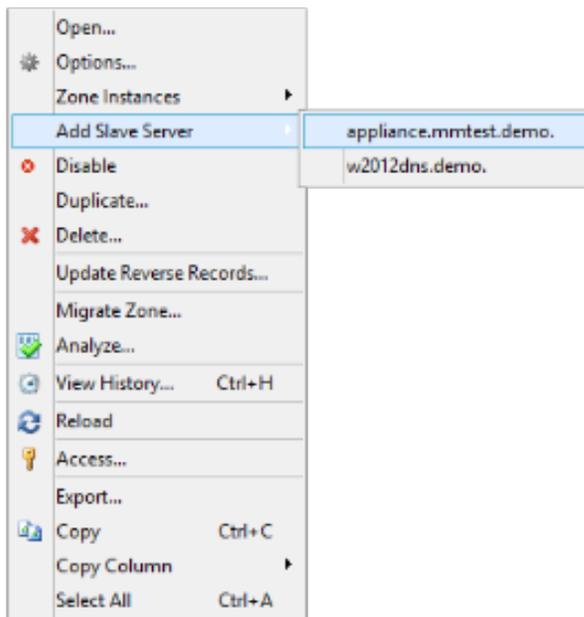
Through this function, you create a slave zone.

1. In the Object List, right-click on **DNS Zones** and, from the shortcut menu, select **New Slave Zone**. The Create slave zone dialog box displays.
2. In the *Zone name* field, type the name for this slave zone.
3. In the *Servers* list, click all the servers to which this slave applies.
4. In the *IP Addresses of master servers*, click in the field, and type the IP Address of any master servers for this zone.
5. When all selections/entries are made, click **Create**. The new slave zone is created and displays in the Detail View of the main window.

## Slave Server Assignments

Use the following procedure to assign a slave server to a particular zone so it will always work from the context of the zone.

1. In the Object Section, under DNS Servers, select the name server containing the zone to which you want to assign a slave server.
2. In the Object List, right-click on the zone to which you want to assign the slave server.
3. From the shortcut menu, select Add slave server.
4. Choose the desired slave server from the submenu that displays. That zone now displays as a slave on the server that was specified.



## Stub Zone

Through this function, you create a stub zone.

1. In the Object List, right-click on **DNS Zones** and, from the shortcut menu, select **New Stub Zone**. The Create stub zone dialog box displays.
2. In the *Zone name* field, type the name for this stub zone.
3. In the *Servers* list, click all the servers to which this stub zone applies.
4. In the *IP Addresses of master servers*, click in the field, and type the IP Address of any master servers for this zone.
5. When all selections/entries are made, click **Create**. The new stub zone is created and displays in the Detail View of the main window.

## View History

Opens the History window and displays a log of all changes that have been made to the zone, including the date and time of the change, the name of the user who made it, the actions performed, and any comments entered by the user. Refer to [Management Console—Object Change History](#).