

虚拟化一键安装 LNMPA+Bind+NamedMnager 安装与配置

(含主、从服务器)

1. 系统初始化

1.1. 关闭 SELinux

```
# setenforce 0
# sed -i 's/SELINUX=enforcing/SELINUX=disabled/g' /etc/selinux/config
# service iptables stop
# ntpdate time.nist.gov
```

1.2. 关闭防火墙 iptables

重启后永久性生效:

开启: `chkconfig iptables on`

关闭: `chkconfig iptables off`

1.3. Crontab 安装使用详细说明

`crontab` 命令常见于 Unix 和 Linux 的操作系统之中, 用于设置周期性被执行的指令。该命令从标准输入设备读取指令, 并将其存放于“`crontab`”文件中, 以供之后读取和执行。通常, `crontab` 储存的指令被守护进程激活。`crond` 常常在后台运行, 每一分钟检查是否有预定的作业需要执行。这类作业一般称为 `cron jobs`。

1.3.1. 安装

说明:

`vixie-cron` 软件包是 `cron` 的主程序;

`crontabs` 软件包是用来安装、卸装、或列举用来驱动 `cron` 守护进程的表格的程序。

```
# yum -y install vixie-cron
# yum -y install crontabs
```

1.3.2. 配置

`cron` 是 linux 的内置服务, 但它不自动起来, 可以用以下的方法启动、关闭这个服务:

```
service crond start    //启动服务
service crond stop     //关闭服务
service crond restart  //重启服务
service crond reload   //重新载入配置
service crond status   //查看 crontab 服务状态
```

1.3.3. 加入 CentOS 自己启动

在 CentOS 系统中加入开机自动启动

```
# chkconfig --level 345 crond on
```

列子:

```
01 * * * * root run-parts /etc/cron.hourly
02 4 * * * root run-parts /etc/cron.daily
22 4 * * 0 root run-parts /etc/cron.weekly
42 4 1 * * root run-parts /etc/cron.monthly
```

2. LNMPA 一键安装

<http://lnmp.org> 下载 LNMP1.3 完成整版, 按教程安装!

2.1. 安装步骤

2.1.1. 使用 putty 或类似的 SSH 工具登陆虚拟服务器;

登陆后运行: `screen -S lnmp`

如果提示 `screen: command not found` 命令不存在可以执行: `yum install screen` 或 `apt-get install screen` 安装, 详细内容参考 [screen 教程](#)。

2.1.2. 下载并安装 LNMP 一键安装包

您可以选择使用下载版(推荐美国及海外 VPS 或空间较小用户使用)或者完整版(推荐国内 VPS 使用, 国内用户可用在[下载](#)中找国内下载地址替换), 两者没什么区别, 只是完整版把一些需要的源码文件预先放到安装包里。

安装 LNMP

下载版:

```
wget -c http://soft.vpser.net/lnmp/lnmp1.3.tar.gz && tar zxf lnmp1.3.tar.gz && cd
lnmp1.3 && ./install.sh lnmp
```

完整版:

```
wget -c http://soft.vpser.net/lnmp/lnmp1.3-full.tar.gz && tar zxf
lnmp1.3-full.tar.gz && cd lnmp1.3-full && ./install.sh lnmp
```

默认安装 `lnmp` 可不写, 如需要安装 LNMPA 或 LAMP, 将 `./install.sh` 后面的参数替换为 `lnmpa` 或 `lamp` 即可。

如下载速度慢请更换其他下载节点, 详情请看[下载页面](#)。LNMP 下载节点具体替换方法。按上述命令执行后, 会出现如下提示:

```
+-----+
|          LNMP V1.3 for Ubuntu Linux Server, Written by Licess          |
+-----+
|          A tool to auto-compile & install LNMP/LNMPA/LAMP on Linux      |
+-----+
|          For more information please visit http://www.lnmp.org          |
+-----+
Please setup root password of MySQL.(Default password: root)
Please enter: lnmp.org
```

需要设置 MySQL 的 root 密码(不输入直接回车将会设置为 root)如果输入有错误需要删除时, 可以按住 Ctrl 再按 Backspace 键进行删除。输入后回车进入下一步, 如下图所示:

```
Do you want to enable or disable the InnoDB Storage Engine?
Default enable,Enter your choice [Y/n]:
```

询问是否需要启用 MySQL InnoDB, InnoDB 引擎默认为开启, 一般建议开启, 直接回车或输入 `y`, 如果确定确实不需要该引擎可以输入 `n`, 输入完成, 回车进入下一步

选择MySQL版本,目前提供了较多版本的MySQL和MariaDB,需要注意的是MySQL 5.6, 5.7 及 MariaDB 10 必须在 1G 以上内存的更高配置上才能选择:

```
You have 5 options for your DataBase install.
1: Install MySQL 5.1.73
2: Install MySQL 5.5.48 (Default)
3: Install MySQL 5.6.29
4: Install MariaDB 5.5.48
5: Install MariaDB 10.0.23
6: Install MySQL 5.7.11
Enter your choice (1, 2, 3, 4, 5 or 6): █
```

输入对应 MySQL 或 MariaDB 版本前面的序号,回车进入下一步,选择 PHP 版本:
注意:选择 PHP7 等高版本时需要自行确认是否与自己的程序兼容。

```
You have 6 options for your PHP install.
1: Install PHP 5.2.17
2: Install PHP 5.3.29
3: Install PHP 5.4.45 (Default)
4: Install PHP 5.5.36
5: Install PHP 5.6.22
6: Install PHP 7.0.7
Enter your choice (1, 2, 3, 4, 5 or 6): █
```

输入要选择的 PHP 版本的序号,回车进入下一步,选择是否安装内存优化:

```
You have 3 options for your Memory Allocator install.
1: Don't install Memory Allocator. (Default)
2: Install Jemalloc
3: Install TCMalloc
Enter your choice (1, 2 or 3): █
```

可以选择不安装、Jemalloc 或 TCMalloc,输入对应序号回车,直接回车为默认为不安装。

如果是 LNMPA 或 LAMP 的话还会提示 “Please enter Administrator Email Address:”,需要设置管理员邮箱,该邮箱会在报错时显示在错误页面上。

```
Please enter Administrator Email Address: █
```

再选择 Apache 版本

```
You have 2 options for your Apache install.
1: Install Apache 2.2.31 (Default)
2: Install Apache 2.4.20
Enter your choice (1 or 2): █
```

按提示输入对应版本前面的数字序号,回车。

提示 “Press any key to install...or Press Ctrl+c to cancel” 后,按回车键确认开始安装。

LNMP 脚本就会自动安装编译 Nginx、MySQL、PHP、phpMyAdmin、Zend Optimizer 这几个软件。

安装时间可能会几十分钟到几个小时不等,主要是机器的配置网速等原因会造成影响。

2.1.3. 安装完成

如果显示 Nginx: OK, MySQL: OK, PHP: OK

```
===== Check install =====
Checking ...
Nginx: OK
MariaDB: OK
PHP: OK
PHP-FPM: OK
Clean src directory...

+-----+
| LNMP V1.3 for Ubuntu Linux Server, Written by Licens |
+-----+
| For more information please visit http://www.lnmp.org |
+-----+
| lnmp status manage: lnmp {start|stop|reload|restart|kill|status} |
+-----+
| phpMyAdmin: http://IP/phpmyadmin/ |
| phpinfo: http://IP/phpinfo.php |
| Prober: http://IP/p.php |
+-----+
| Add VirtualHost: lnmp vhost add |
+-----+
| Default directory: /home/wwwroot/default |
+-----+
| MySQL/MariaDB root password: root |
+-----+
+-----+
| Manager for LNMP, Written by Licens |
+-----+
| http://lnmp.org |
+-----+
nginx (pid 18784 18783 18782 18781 18780) is running...
php-fpm is running!
* MySQL running (19334)
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
tcp 0 0 0.0.0.0:22 0.0.0.0:* LISTEN
tcp 0 0 0.0.0.0:25 0.0.0.0:* LISTEN
tcp 0 0 0.0.0.0:3306 0.0.0.0:* LISTEN
tcp 0 0 0.0.0.0:80 0.0.0.0:* LISTEN
tcp6 0 0 :::22 :::* LISTEN
tcp6 0 0 :::25 :::* LISTEN
Install lnmp V1.3 completed! enjoy it.
```

并且 Nginx、MySQL、PHP 都是 running, 80 和 3306 端口都存在, 并提示 Install lnmp V1.3 completed! enjoy it. 的话, 说明已经安装成功。

接下来按添加虚拟主机教程, 添加虚拟主机后上传网站代码, 可以使用 sftp 或 ftp 服务器上传网站, 将域名解析到 VPS 或服务器的 IP 上, 解析生效即可使用。

2.1.4. 安装失败

```

===== Check install =====
Checking ...
Nginx: OK
Error: MySQL install failed.
PHP: OK
PHP-FPM: OK
Sorry, failed to install LNMP!
Please visit http://bbs.vpser.net/forum-25-1.html feedback errors and logs.
You can download /root/lnmp-install.log from your server, and upload lnmp-install.log to LNMP Forum.
root@vpser:~/lnmp1.3#

```

如果出现类似上图的提示，则表明安装失败，说明没有安装成功！！需要用 [winscp](#) 或其他类似工具，将 /root 目录下面的 lnmp-install.log 下载下来，到 [LNMP 支持论坛](#) 发帖注明你的系统发行版名称及版本号、32 位还是 64 位等信息，并将 lnmp-install.log 压缩以附件形式上传到论坛，我们会通过日志查找错误，并给予相应的解决方法。

默认 LNMP 是不安装 FTP 服务器的，如需要 FTP 服务器：

<https://lnmp.org/faq/ftpserver.html>

2.1.5. 添加、删除虚拟主机及伪静态管理

<http://lnmp.org/faq/lnmp-vhost-add-howto.html>

2.1.6. eAccelerator、xcache、memcached、imageMagick、ionCube、redis、opcache 的安装

<http://lnmp.org/faq/addons.html>

2.1.7. LNMP 相关软件目录及文件位置

<http://lnmp.org/faq/lnmp-software-list.html>

2.1.8. LNMP 状态管理命令

<http://lnmp.org/faq/lnmp-status-manager.html>

3. namedmanager 安装

3.1. namedmanager-bind 安装

```

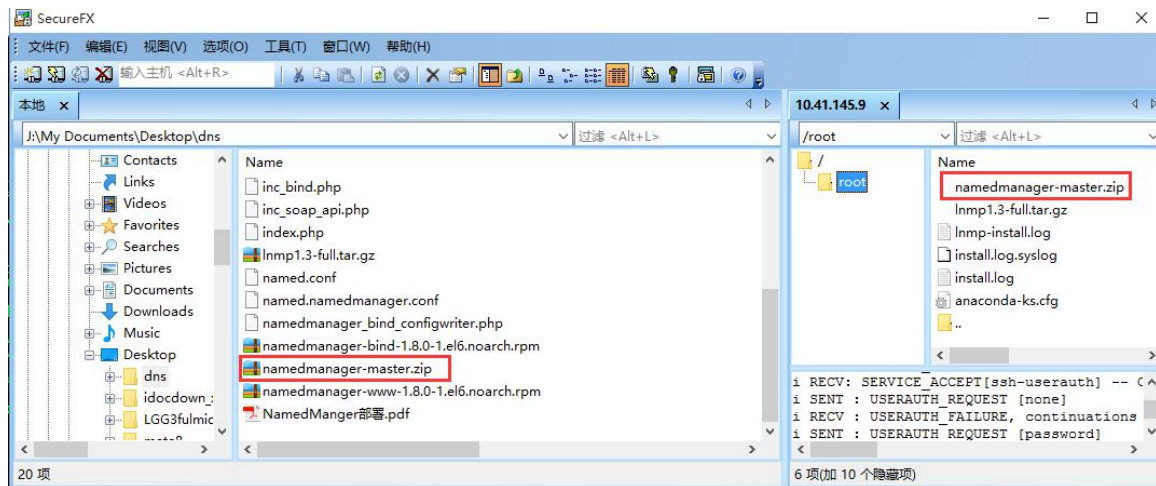
# wget -O /etc/yum.repos.d/amberdms-c6-public.repo
http://repos.jethrocarr.com/config/centos/6/amberdms-c6-public.repo
# yum -y install namedmanager-bind
# chkconfig --level 35 namedmanager_logpush on
# chown named.root /etc/named.namedmanager.conf

```

3.2. Namedmanager-www 安装

3.2.1. 上传原文件至服务器

把下载下来的 namedmanager.zip 压缩包通过 SecureFX 工具上传压缩包至服务器



3.2.2. 解压并设置目录结构

```
# unzip namedmanager
# cd /usr/share/namedmanager/htdocs
# cp /usr/share/namedmanager/bind/namedmanager_bind_configwriter.php ./
# cp /usr/share/namedmanager/bind/include/application/inc* .
# mkdir /var/log/namedmanager/
# touch /var/log/namedmanager/namedmanager.log
```

3.2.3. 导入数据库

```
# mysql -u root -p < /usr/share/namedmanager/sql/version_20150416_install.sql
#mysql -u root -p
>GRANT USAGE ON * . * TO 'namedmanager'@'%' IDENTIFIED BY 'passwordgoeshere' WITH
MAX_QUERIES_PER_HOUR 0 MAX_CONNECTIONS_PER_HOUR 0 MAX_UPDATES_PER_HOUR 0 ;GRANT
SELECT , INSERT , UPDATE , DELETE , CREATE , DROP , INDEX , ALTER , CREATE TEMPORARY
TABLES, LOCK TABLES ON `namedmanager` . * TO 'namedmanager'@'%' ;
>\q
```

4. BIND 服务器配置

4.1.1. 安装 bind 服务

```
#yum -y install bind
```

4.1.2. 配置 bind

修改/etc/named.conf,注意红色部分为需修改!

```
# vi /etc/named.conf
```

```
//
// named.conf
//
// Provided by Red Hat bind package to configure the ISC BIND named(8) DNS
// server as a caching only nameserver (as a localhost DNS resolver only).
```

```
//  
// See /usr/share/doc/bind*/sample/ for example named configuration files.  
//  
  
options {  
    listen-on port 53 { any; };  
    // listen-on-v6 port 53 { ::1; };  
    directory "/var/named";  
    dump-file "/var/named/data/cache_dump.db";  
    statistics-file "/var/named/data/named_stats.txt";  
    memstatistics-file "/var/named/data/named_mem_stats.txt";  
    allow-query { any; };  
    allow-query-cache { any; };  
    recursion yes;  
  
    forward first;  
    forwarders{ 180.76.76.76; };  
  
    dnssec-enable yes;  
    dnssec-validation yes;  
    dnssec-lookaside auto;  
  
    bindkeys-file "/etc/named.iscdlv.key";  
  
    managed-keys-directory "/var/named/dynamic";  
};  
  
logging {  
    channel default_debug {  
        file "data/named.run";  
        severity dynamic;  
    };  
};  
  
zone "." IN {  
    type hint;  
    file "named.ca";  
};
```

```
};

zone "test.com" IN {
    type master;
    file "test.com.zone";
};

include "/etc/named.rfc1912.zones";
include "/etc/named.root.key";
include "/etc/named.namedmanager.conf";
```

暂时建立/var/named/test.com.zone

```
$ORIGIN test.com.
$TTL 86400
@           IN SOA ns1.test.com. root.test.com. (
                2016101604 ; serial
                28800 ; refresh
                14400 ; retry
                3600000 ; expiry
                86400 ; minimum ttl
        )
; Nameservers
@           120 IN NS test.com.
test.com.   86400 IN NS ns1.test.com.
test.com.   86400 IN A 10.41.145.9
Ns1         86400 IN A 10.41.145.9
```

```
# service named restart
# chkconfig --level 345 named on
```

5. 配置 Namedmanager

提示：当前需要修改 named.conf，添加 include "/etc/named.namedmanager.conf"; 语法，另外 **PHP** 管理页面需要配置 /etc/namedmanager/config-bind.php 文件
参考主要配置文件与作用

路径	说明
/etc/namedmanager/	Configuration directory for NamedManager
/etc/cron.d/namedmanager-bind	NamedManager cronjobs

/etc/init.d/namedmanager_logpush	Bootscript for starting/stopping the log collector
/etc/named.conf	Default name for your Bind name server configuration file.
/var/named/chroot/etc/named.conf	using bind-chroot.

5.1.1. crond.d 下计划任务说明

查看 crontab 计划任务说明

```
#cat /etc/cron.d/namedmanager-bind
# check for new configuration every minute
*/1 * * * * root php -q /usr/share/namedmanager/bind/namedmanager_bind_
configwriter.php >> /var/log/namedmanager/namedmanager_bind_configwriter
# PHP slowly leaks memory, restart the process weekly to prevent it
getting too large over months
01 01 * * 0 root /etc/init.d/namedmanager_logpush restart >> /dev/null
2>&l
```

每分钟把 mysql 中的 DNS 数据数据刷新并记录到日志中

5.1.2. 修改文件属性

```
# chkconfig --level 35 namedmanager_logpush on
# chown named.root /etc/named.namedmanager.conf
```

5.1.3. 修改 namedmanager 的配置文件

修改/etc/namedmanager/config-bind.php

```
#vi /etc/namedmanager/config-bind.php
```

```
$config["db_host"]="localhost";//hostname ofthe MySQL server
$config["db_name"]="namedmanager"; //database name
$config["db_user"]="root"; //MySQL user
$config["db_pass"]=""; //MySQL password (if any)
$config["api_url"]="http://nsl.test.com"; //Application Install Location
$config["api_server_name"]="nsl.test.com"; // Name of the DNS server ( // [必
须写主机名])
$config["api_auth_key"]="DNSkey"; // API authentication key [该密钥随意定
义] 下面 WEB 管理面处要填回这里的 KEY

$config["log_file"]="var/log/namedmanager/namedmanager.log";

$config["lock_file"]="var/lock/namedmanager_lock";

$config["bind"]["version"]="9"; //version of bind (currently only 9 is
supported, although others may work)
$config["bind"]["reload"]="usr/sbin/rndc reload";//command to reload bind config
```

```
& zonefiles
$config["bind"]["config"] = "/etc/named.namedmanager.conf"; //configuration
file to write bind config too
$config["bind"]["zonefiledir"] = "/var/named/"; //directory to write zonefiles
too
// note: if using chroot bind, will often be /var/named/chroot/var/named/
$config["bind"]["verify_zone"] = "/usr/sbin/named-checkzone"; //Used to verify each
generated zonefile as OK
$config["bind"]["verify_config"] = "/usr/sbin/named-checkconf"; //Used to
verify generated NamedManager configuration

$config["AUTH_METHOD"] = "sql";
```

5.1.4. namedmanager 虚拟主机主根目录与配置文件关联

```
# ln /etc/namedmanager/config-bind.php
usr/share/namedmanager/htdocs/include/config-settings.php
# chmod 777 config-settings.php
# chown www:www config-settings.php
```

5.1.5. 更改 https 访问页面

想去掉 https 访问 WEB 管理页，如：<http://ns1.test.com/>，需要修改网站根目录的 index.php 文件。

```
#cd /usr/share/namedmanager/htdocs
#vi index.php
```

注释掉以下内容：

```
#if (!$_SERVER["HTTPS"])
#{
#header("Location: https://". $_SERVER["SERVER_NAME"]."/".
$_SERVER['PHP_SELF'] );
# exit(0);
#}
```

5.1.6. namedmanager 检查排错

检测 namedmanager 配置文件是否正确方法，通过反馈信息进一步排错。

```
# php -q /usr/share/namedmanager/bind/namedmanager_bind_configwriter.php
```

6. LNMPA 添加 Namedmanager 虚拟主机

提示：如果输入有错误需要删除时，可以按住 Ctrl 再按 Backspace 键进行删除。

执行：lnmp vhost add 出现如下界面：

```
[root@ns1 htdocs]# lnmp vhost add
+-----+
| Manager for LNMP, written by Licess |
+-----+
| http://lnmp.org |
+-----+
Please enter domain(example: www.lnmp.org): ns1.
```

这里要输入要添加 NamedManager 网站的域名，添加 ns1.test.com 域名，如上图提示后输入域名 ns1.test.com 回车后提示

```
=====
Your domain: ns1.test.com
Do you want to add more domain name? (y/n) n
=====
```

这里询问是否添加更多域名，输入 n 不添加会有如下提示：

下面需要设置网站的目录，（注意如要输入必须是全路径即以/开头的完整路径！！！）。

目录：/usr/share/namedmanager/htdocs

```
=====
Do you want to add more domain name? (y/n) n
Please enter the directory for the domain: ns1.test.com
(Default directory: /home/wwwroot/ns1.test.com) /usr/share/namedmanager/htdocs/
=====
```

```
=====
Allow access_log? (y/n)
y
=====
```

```
=====
Please enter Administrator Email Address: webmaster@ns1.test.com
Server Administrator Email:webmaster@ns1.test.com
=====
```

```
=====
Create database and MySQL user with same name (y/n)
n
=====
```

不启用输入 n 回车。

提示 Press any key to start create virtul host... 后，回车确认便会开始创建虚拟主机。

添加成功会提示添加的域名、目录相关信息，如下图：

```
Press any key to start create virtul host...
Create Virtul Host directory.....
set permissions of Virtual Host directory.....
Test Nginx configure file.....
nginx: the configuration file /usr/local/nginx/conf/nginx.conf syntax is ok
nginx: configuration file /usr/local/nginx/conf/nginx.conf test is successful

Restart Nginx.....
Test Apache configure file...
test apache configure... Syntax OK
done
Restart Apache...
restart apache... done

=====
Virtualhost infomation:
Your domain: ns1.test.com
Home Directory: /usr/share/namedmanager/htdocs/
Enable log: yes
Create database: no
Create ftp account: no
=====
```

7. WEB 配置 namedmanager

通过浏览器登陆 `http://ns1.test.com`，默认用户名和密码（setup, setup123）。不要忘记在用户管理中修改用户名和密码。进入 WEB 管理页后，清除 bind 指定域 zone 文件配置。

7.1.1. 清除指定域文件

1、修改/etc/named.conf

```
#vi /etc/named.conf
```

注释以下内容

```
//zone "test.com" IN {
// type master;
```

```
// file "test.com.zone";  
//};
```

2、重命名/var/named/test.com.zone

```
#mv /var/named/test.com.zone /var/named/test.com.zone.bak
```

7.1.2. Namedmanager WEB 管理页配置

选择 configuration, 填写管理员 email (webmaster@test.com), 接着设置 API key: 填写 ADMIN_API_KEY (之前/etc/namedmanager/config-bind.php 中定义的密钥)。

NamedManager

Overview Changelog Domains/Zones Name Servers **Configuration** User Management

CONFIGURATION

Use this page to adjust NameManager's configuration to suit your requirements.

Zone Configuration Defaults

DEFAULT_HOSTMASTER Email address for the DNS administrator.

DEFAULT_TTL_SOA

DEFAULT_TTL_NS Default TTL for Name Server (NS) records.

DEFAULT_TTL_MX Default TTL for MX records

DEFAULT_TTL_OTHER Default TTL for all other record types (A, AAAA, TXT, SPF, PTR, etc)

Zone Database Defaults

ZONE_DB_TYPE ☒ Use internal application SQL database

API Configuration

ADMIN_API_KEY API keys for scripts that interact with NamedManager

Date and Time Configuration

DATEFORMAT ☒ yyyy-mm-dd ☐ mm-dd-yyyy ☐ dd-mm-yyyy

TIMEZONE_DEFAULT

Logging Configuration

FEATURE_LOGS_ENABLE ☒ Enable audit & name server logging functionality.

FEATURE_LOGS_AUDIT ☒ Enable audit trail logging - tracks changes made to DNS records & zones.

FEATURE_LOGS_API ☒ Enable logging via API from name servers.

LOG_UPDATE_INTERVAL seconds

LOG_RETENTION_PERIOD Delete logs after defined number of days (0 to disable).

Miscellaneous Configuration

PAGINATION_DOMAIN_RECORDS records per page (recommend maximum of 66, adjust PHP max_input

7.1.3. 添加一个新的域

选择 Domains/zones -> View Domains 通过 Add New Domain 添加一个新的域

NamedManager

Overview Changelog Domains/Zones Name Servers Configuration User Management

View Domains **Add Domain** Import Domain

ADD NEW DOMAIN

Use this page to add a new domain to the system.

Domain Details

Domain Type *
☒ Standard Domain
☐ Reverse Domain (IPv4)
☐ Reverse Domain (IPv6)

Domain Name * **test.com**

Description

Local DNS Server

Domain Server Groups

Select the group or groups that this domain belongs to - groups allow domains to be located on specific sets of name servers which is useful for segregation purposes

☒ default -- Default Nameserver Group

Start of Authority Record

Email Administrator Address *	webmaster@
Domain Serial *	2016101601
Refresh Timer *	21600
Refresh Retry Timeout *	3600
Expiry Timer *	604800
Default Record TTL *	120

Save Changes

Please note that all fields marked with "*" must be filled in.

Save Changes

7.1.4. 添加服务器。

Name Server FQDN 的名称要和 httpd 中的 ServerName 一致。

- Name Server FQDN * 配置 DNS FQDN 为当前域中的 DNS 服务器主机名
- 选择服务器类型, [API]
- 再次填写 ADMIN_API_KEY 密钥
- 定义当前主机为 DNS 主服务器

确保最后绿色部分为配置文件同步中(时间稍长一点), 假设非绿色显示, 则需要进一步排错

NamedManager

Overview Changelog Domains/Zones **Name Servers** Configuration User Management

View Name Servers **Add Name Server** Manage Server Groups

ADD NEW NAME SERVER

This page allows you to add a new name server to the system and define the API access key for the server.

Server Details

Name Server FQDN *

Description

Server Type

Server Type

☒ API (supports Bind) ☐ route53

API Authentication Key 填写config-bind.php里的key

Server Domain Settings

Nameserver Group * ☒ default -- Default Nameserver Group

Primary Nameserver * ☒ Make this server the primary one used for DNS SOA records.

Use as NS Record * ☒ Adds this name server to all domains as a public NS record.

Save Changes

Please note that all fields marked with "*" must be filled in.

Save Changes

7.1.5. 为 NameServer 添加 A 记录（非常重要的一步）

A IP地址

7.1.6. 导入 domain

若之前有做静态 Zone 文件，可在这里导入 zone 文件，该文件的记录最好不要超过 50 行，否则会报错。

NamedManager

Overview Changelog **Domains/Zones** Name Servers Configuration User Management

View Domains Add Domain **Import Domain**

IMPORT DOMAIN

Use this page to import a domain from a legacy DNS platform. Upload the zonefile and NamedManager will match records as best as it can to

Upload

Import Source

Zone File ☒ Bind 8/9 Compatible Zonefile

Save Changes

Save Changes

7.1.7. 添加正向域

NamedManager

[Overview](#) [Changelog](#) [Domains/Zones](#) [Name Servers](#) [Configuration](#) [User Management](#)

[View Domains](#) [Add Domain](#) [Import Domain](#)

ADD NEW DOMAIN

Use this page to add a new domain to the system.

Domain Details

Domain Type *
☒ Standard Domain
☐ Reverse Domain (IPv4)
☐ Reverse Domain (IPv6)

Domain Name *
test.com

Description
Local DNS Server

Domain Server Groups

Select the group or groups that this domain belongs to - groups allow domains to be located on specific sets of name servers which is useful for segregation purposes

☒ default -- Default Nameserver Group

Start of Authority Record

Email Administrator Address *	webmaster@
Domain Serial *	2016101601
Refresh Timer *	21600
Refresh Retry Timeout *	3600
Expiry Timer *	604800
Default Record TTL *	120

Save Changes

Please note that all fields marked with "*" must be filled in.

Save Changes

7.1.8. 添加反向域

Overview Changelog **Domains/Zones** Name Servers Configuration User Management

View Domains **Add Domain** Import Domain

ADD NEW DOMAIN

Use this page to add a new domain to the system.

Domain Details

Domain Type *

Standard Domain

Reverse Domain (IPv4)

Reverse Domain (IPv6)

Note *

This interface allows you to setup a reverse DNS record for a /24 automatically.

IPv4 Network Address * **192.168.10.0/24** include /cidr for ra

Autofill IPs *

☐ Automatically create PTR records for all the IPs in the domain

Description

Domain Server Groups

Select the group or groups that this domain belongs to - groups allow domains to be located on specific sets of name servers which is useful for segregation

☒ default -- Default Nameserver Group

Start of Authority Record

Email Administrator Address * webmaster@

Domain Serial * 2016101601

Refresh Timer * 21600

Refresh Retry Timeout * 3600

Expiry Timer * 604800

Default Record TTL * 120

Save Changes

Please note that all fields marked with "*" must be filled in.

Save Changes

上述步骤完成之后，相当于我们手动在 `named.namedmanager.conf` 添加区域记录，以及在 `var/named` 目录下面创建相应的 `zone` 文件。

7.1.9. 重启服务器

```
#reboot
```

注意：不建议直接【手动】修改：区域文件 `zone` 以及 `named.namedmanager.conf` 文件

- `//` This file is automatically generated any manual changes will be lost.
- `//` 直接修改了 `zone` 文件 (will be lost)，web 上也不会同步更新，然后又回写到 `zone` 文件

8. namedmanager 主从 (master、slave)

8.1. 虚拟机克隆主 DNS 服务器

8.1.1. 更改 IP

```
#ifconfig -a
#cd /etc/sysconfig/network-scripts
#mv ifcfg-eth1 ifcfg-eth2
#vi /etc/sysconfig/network-scripts/ifcfg-eth2
```

```

DEVICE=eth2
HWADDR=
TYPE=Ethernet
UUID=5e18ef85-053b-4e26-82a2-717bf85817b0
ONBOOT=yes
NM_CONTROLLED=yes
BOOTPROTO=static
IPADDR=
NETMASK=255.255.255.0
GATEWAY=
DNS1=10.41.145.9
DNS2=10.41.145.8
DNS3=202.97.128.86

```

8.1.2. 重启网卡

```
#service network restart
```

```

[root@ns1 network-scripts]# service network restart
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
Bringing up interface eth2: [ OK ]
[root@ns1 network-scripts]#

```

8.1.3. 永久修改主机名称

1、修改/etc/sysconfig/network 中的 hostname

修改 network 的 HOSTNAME 项。点前面是主机名，点后面是域名。没有点就是主机名。

```
#vi /etc/sysconfig/network
```

```
HOSTNAME=ns1.test.com #修改 ns1.test.com 为 ns2.test.com
```

```

NETWORKING=yes
HOSTNAME=ns2.test.com

```

2、修改/etc/hosts 文件

```
#vi /etc/hosts
```

```
127.0.0.1 ns1.test.com #修改 ns1.test.com 为 ns2.test.com
```

```

127.0.0.1 localhost ns2.test.com localhost4 localhost4.localhost4
::1 localhost localhost.localhost localhost6 localhost6.localhost6

```

3、重启服务器

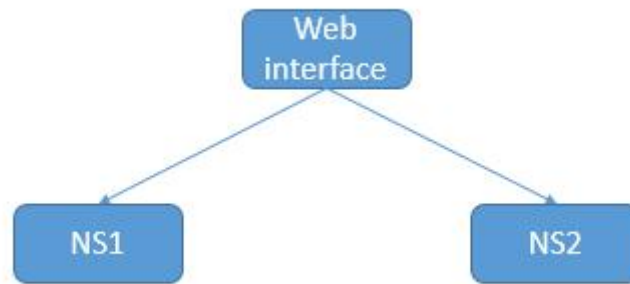
```
#reboot
```

8.1.4. 修改从属 DNS 服务器 Namedmanager 配置文件

使用 NamedManager，主从复制不是通过 zones 文件（区域传送功能）实现的，而是 NamedManager 来处理。

NamedManager 提供一个统一的 web 界面，管理所有的 NS 服务器。实现向多台服务器分发 zone 文件，所以不建议手工改动各个 NS 的 zone 文件，导致 NS 间的 zone 数据不一致的状态。

Web 向多台 NS 分发，而不是 NS 之间同步。



Namedmanager 分发示意图

这是从官方 wiki 抄录过来的， config-bind.php 文件配置

`$config['api_url']` : 必须设置和 master 保持一致。
`$config['api_server_name']` : 和各自 NS 的 httpd.conf 中 ServerName 保持一致。
`$config['api_auth_key']` : 各自 NS 的随意指定，足够复杂即可

8.1.5. 主 DNS 服务器 namedmanager 管理 WEB 设置

登录 master 的 web 管理页，所有的 dns server pool 一致。 添加 Name Server :
 再者，在 master 域的 Domain Records 中， 添加该 Slave DNS 的

- NS 记录
- A 记录

1、添加 NS 记录

NamedManager

Overview Changelog Domains/Zones **Name Servers** Configuration User Management

View Name Servers **Add Name Server** Manage Server Groups

ADD NEW NAME SERVER

This page allows you to add a new name server to the system and define the API access key for the server.

Server Details

Name Server FQDN *

Description

Server Type

Server Type ☒ API (supports Bind) ☐ route53

API Authentication Key * Authentication key to enable bind

填写第二台DNS服务器config-bind.php里的KEY

Server Domain Settings

Nameserver Group * ☒ default -- Default Nameserver Group

Primary Nameserver * ☐ Make this server the primary one used for DNS SOA records.

Use as NS Record * ☒ Adds this name server to all domains as a public NS record.

Save Changes

Please note that all fields marked with "*" must be filled in.

Save Changes

2、添加 A 记录

NamedManager

Overview Changelog Domains/Zones Name Servers Configuration User Management

View Domains Add Domain Import Domain

Domain Details Domain Records Delete Domain

DOMAIN NAME RECORDS

Below is a list of all the records for your domain name, if you change any of them and click save, the changes will be applied and the name servers will reload shortly.

Domain Details

Domain gztbx.net selected for adjustment

Nameserver Configuration

The following is a list of all the nameservers that this domain is managed by. These are auto-populated with the domains configured in the DB, however you can add your own records if you wish to sub-delegate the domain (for example, setting internal example).

Type	TTL	Name/Origin	Content
NS	120	@	
NS	86400		ns1.gztbx.net
NS	86400		ns2.gztbx.net
NS	86400	Domain Name (usually gztbx.net)	FQDN of the name server

Mailserver Configuration

Configure all the mailservers for the system here, remember that all mail will be delivered to the server with the lowest priority by default.

Type	TTL	Priority	Name/Origin	Content
MX	120		Origin (usually gztbx.net)	FQDN or hostname of mail server
MX	120		Origin (usually gztbx.net)	FQDN or hostname of mail server

Host Records Configuration

Type	TTL	Name	Content
A	86400	ns2	

8.1.6. 查看主、从 DNS 服务器状态

NamedManager

logged on as admin | options | logout

Overview Changelog Domains/Zones Name Servers Configuration User Management

View Name Servers Add Name Server Manage Server Groups

NAME SERVERS

Define all the name servers that are being used for management in this interface, all NS servers should be set here since the values are used to set the NS records on the domains.

Primary Nameserver	Use as NS Record	Name Server FQDN	Description	Server Group	Server Type	Zonefile Status	Logging Status	
✓	✓	ns1.gztbx.net	Master Local DNS Server	default	api	status_synced	status_synced	details logs delete
✗	✓	ns2.gztbx.net	Slave Local DNS Server	default	api	status_synced	status_synced	details logs delete

Add New Server

8.1.7. 监控两台 DNS 服务器日志

1、Master DNS 服务器

```
#tail -f /var/log/namedmanager/namedmanager.log
```

```
Mar 18 12:29:02 localhost named-sdb[3039]: reloading configuration succeeded
Mar 18 12:29:02 localhost named-sdb[3039]: reloading zones succeeded
Mar 18 12:29:02 localhost named-sdb[3039]: zone 1.168.192.in-addr.arpa/IN: loaded serial 2016031804
Mar 18 12:29:02 localhost named-sdb[3039]: zone 1.168.192.in-addr.arpa/IN: sending notifies (serial 2016031804)
Mar 18 12:29:02 localhost named-sdb[3039]: zone test.com/IN: loaded serial 2016031807
Mar 18 12:29:02 localhost named-sdb[3039]: zone test.com/IN: sending notifies (serial 2016031807)
```

2、

```
#tail -f /var/log/namedmanager/namedmanager.log
```

Slave DNS 服务器

```
Mar 18 12:29:02 localhost named-sdb[2835]: reloading configuration succeeded
Mar 18 12:29:02 localhost named-sdb[2835]: zone 1.168.192.in-addr.arpa/IN: loaded serial 2016031804
Mar 18 12:29:02 localhost named-sdb[2835]: zone test.com/IN: loaded serial 2016031807
Mar 18 12:29:02 localhost named-sdb[2835]: reloading zones succeeded
Mar 18 12:29:02 localhost named-sdb[2835]: zone test.com/IN: sending notifies (serial 2016031807)
Mar 18 12:29:02 localhost named-sdb[2835]: zone 1.168.192.in-addr.arpa/IN: sending notifies (serial 2016031804)
```

可以看到，日志中并没有任何 zones 同步、传输的信息。（和区域传输不一样）

9. 配置服务防火墙（初始化时若关了可不配置）

```
iptables -F
iptables -P INPUT DROP
iptables -P FORWARD DROP
iptables -A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT
iptables -A INPUT -i lo -p all -j ACCEPT
iptables -A INPUT -p icmp -j ACCEPT
iptables -A INPUT -p tcp --dport 22 -j ACCEPT
iptables -A INPUT -p tcp --dport 53 -j ACCEPT
iptables -A INPUT -p udp --dport 53 -j ACCEPT
iptables -A INPUT -p tcp --dport 80 -j ACCEPT
iptables -A INPUT -p tcp --dport 443 -j ACCEPT
```