

FreeNAS - Feature #7493

Use inadyn as DDNS backend to support more providers

01/13/2015 12:45 PM - Ben Whitman

Status: Resolved	Estimated time: 0.00 hour
Priority: Nice to have	
Assignee: Vladimir Vinogradenko	
Category: GUI (new)	
Target version: 11.1-BETA1	
Severity: New	Needs Merging: Yes
Reason for Closing:	Needs Automation: No
Reason for Blocked:	Support Suite Ticket: n/a
Needs QA: No	Hardware Configuration:
Needs Doc: Yes	

Description

Google Domains recently opened up their services publicly in the US, and they offer Dynamic DNS. It would be nice if it could be added to the list of DDNS providers. They utilize the dyndns2 protocol, and all relevant information can be found here: <https://support.google.com/domains/answer/6147083>.

Associated revisions

Revision fa9ce189 - 09/19/2017 02:32 AM - Vladimir Vinogradenko

Switch inadyn-mt to <https://github.com/troglobit/inadyn>

Ticket: #7493

Revision 77d16033 - 09/27/2017 01:27 PM - Vladimir Vinogradenko

Switch inadyn-mt to <https://github.com/troglobit/inadyn>

Ticket: #7493

Revision e7c2a7da - 10/10/2017 12:13 PM - Dru Lavigne

Add framework for new DDNS fields. Still need to add descriptions.

Ticket: #7493

Ticket: #20908

Revision 45b8b3be - 10/16/2017 09:11 AM - Dru Lavigne

Input descriptions for new fields.

Ticket: #7493

Ticket: #20908

History

#1 - 01/13/2015 12:48 PM - Jordan Hubbard

- Category set to 2

- Assignee set to Anonymous

- Target version set to 133

#2 - 01/14/2015 06:03 PM - Anonymous

- Status changed from Unscreened to Screened

#3 - 01/28/2015 03:14 PM - Ben Whitman

I believe FreeNAS uses inadyn as its DDNS backend, is that correct? If so, it would seem that google domains DDNS support was added in December, so you'll probably need a build that's at least that recent.

<https://github.com/troglobit/inadyn/commit/ee7340e817354d387f4275e8c167161b45ee81f0>

#4 - 04/17/2015 05:39 PM - Anonymous

- Priority changed from Nice to have to No priority

#5 - 04/30/2015 05:45 PM - Anonymous

- Due date set to 05/15/2015

#6 - 05/06/2015 01:30 PM - Anonymous

- Target version changed from 133 to Unspecified

BRB: This is actually much easier to do in 9.3, and we'll bring it into 10 at some point in the future.

#7 - 03/03/2016 02:13 PM - Anonymous

- Target version changed from Unspecified to 49

I keep thinking this will be easy but then find it is more difficult since you have to do alot of script fu around inadyn-mt to make it work, I'm going to mark this as Future until inadyn-mt natively supports SSL and whatnot to make this work

#8 - 03/03/2016 03:47 PM - Ben Whitman

No rush from me, I ended up just paying for a static IP from my ISP. Managed to get one out of the last block they're ever going to get from ARIN, so lucky me...

#9 - 03/31/2016 05:03 AM - Anonymous

Hi Jordan,

I looked into this feature request.

Its about using dynamic DNS service provided by domains.google.com.

domains.google.com is a paid service. Also, this service is not available in India.

Do you have any domain name registered for testing purpose on domains.google.com or any idea how to bypass this mandatory requirement.

Thanks

Rajesh Kaushal

#10 - 03/31/2016 07:05 AM - Ben Whitman

I do have a registered domain with Google domains that I'd be happy to let you test with. Shoot me an email `qwertymodo at qwertymodo dot com`.

#11 - 04/14/2016 04:55 PM - Mathew Keith

Rajesh Kaushal wrote:

Hi Jordan,

I looked into this feature request.

Its about using dynamic DNS service provided by domains.google.com.
domains.google.com is a paid service. Also, this service is not available in India.
Do you have any domain name registered for testing purpose on domains.google.com or any idea how to bypass this mandatory requirement.

Thanks
Rajesh Kaushal

I will second this offer. rommy at appus dot org

#12 - 05/02/2016 03:20 AM - Anonymous

- File DDNS_log.png added

1. FreeNAS 9.10 already has updated Inadyn-mt which contains google DDNS support.
2. We configured Stunnel on FreeNAS 9.10. (Stunnel Configuration Given Below.)
3. We changed the FreeNAS GUI to add otion of domains.google.com in the FreeNAS DDNS service.
4. The Inadyn configuration (arguments) is different from existing DDNS service providers. The google reference doc was not clear on required commandline options. We figured it out after many trials. The working options given below.

```
--dyndns_system default@domains.google.com  
--ip_server_name localhost:8081/. --update_period_sec 60 --background --syslog --username Swiz0hXKbb1L6Ygo --  
password ilBs9zilmoIYoH9C --alias test1.qwertymodo.com
```

5. The Inadyn seems to be working and trying to connect google via Stunnel.

Log Message:

```
Apr 14 22:28:33 freenas notifier: Thu Apr 14 22:28:33 2016: W:MAIN: Main: Error 'RC_CMD_PARSER_INVALID_OPTION' (0x50).  
Apr 14 22:30:06 freenas notifier: Starting inadynmt.  
Apr 14 22:30:06 freenas notifier: Thu Apr 14 22:30:06 2016: W:LANG: Cannot open language file. Will use english defaults, or default override  
(--lang_file <path/file_name>...)  
Apr 14 22:30:06 freenas notifier: Thu Apr 14 22:30:06 2016: S:INADYN: Could not open default servers_additional.cfg. Will try svr_add_cfg option, if  
set...  
Apr 14 22:30:06 freenas notifier: Thu Apr 14 22:30:06 2016: W:CMD_OPTS: Could not open default override language strings file,  
inadyn-mt/lang/en.lng...  
Apr 14 22:30:06 freenas notifier: Thu Apr 14 22:30:06 2016: S:INADYN: Started 'inadyn-mt version 02.24.47' - dynamic DNS updater.  
Apr 14 22:30:06 freenas notifier: Thu Apr 14 22:30:06 2016: E:CACHE_LIST Failed opening cache file in ip_cache_list_read...  
Apr 14 22:30:06 freenas stunnel: LOG57: Service [psuedo-httpd] accepted connection from 172.XX.XX.118:54970  
Apr 14 22:30:06 freenas stunnel: LOG37: s_connect: connect 2404:6800:4007:800::200e:443: No route to host (65)  
Apr 14 22:30:06 freenas kernel: <118>Apr 14 22:30:06 freenas stunnel: LOG37: s_connect: connect 2404:6800:4007:800::200e:443: No route to host  
(65)  
Apr 14 22:30:09 freenas stunnel: LOG57: s_connect: connected 216.58.197.78:443  
Apr 14 22:30:09 freenas stunnel: LOG57: Service [psuedo-httpd] connected remote server from 172.XX.XX.118:51415  
Apr 14 22:30:09 freenas stunnel: LOG57: Connection closed: 88 byte(s) sent to SSL, 641 byte(s) sent to socket  
Apr 14 22:30:09 freenas notifier: Thu Apr 14 22:30:09 2016: E:INADYN: ip parse failed in check_my_ip_address...  
-----
```

Above log shows that connection is established to google via STUNNEL.

6. To test this, we need a environment with public IP (DHCP) to host a test web page and then access that page via Google DDNS.
Or
If someone has such environment, this ccan be tested.

STUNNEL Configuration:

Stunnel on FreeBSD

Since stunnel is already installed on the freeBSD, we will use that only

```
cd /usr/local/etc/stunnel/
cp stunnel.conf-sample stunnel.conf
openssl genrsa -out privkey.pem 2048
openssl req -new -x509 -key privkey.pem -out cacert.pem -days 365
chmod 600 cacert.pem
chmod 600 privkey.pem
Change /usr/local/etc/stunnel/stunnel.conf as below,
And invoke below command
```

```
cd /var/run
mkdir -p stunnel
chown stunnel:stunnel stunnel
chmod 0622 stunnel
```

Now edit the /usr/local/etc/stunnel/stunnel.conf

```
cert = /usr/local/etc/stunnel/cacert.pem
key = /usr/local/etc/stunnel/privkey.pem
chroot = /var/run/stunnel
client = yes
; It is recommended to drop root privileges if stunnel is started by root
setuid = stunnel
setgid = stunnel
pid = /stunnel.pid
```

```
; Some debugging stuff useful for troubleshooting
;debug = 7
output = /var/log/stunnel.log
```

```
[psuedo-httpd]
accept = 8081
connect = domains.google.com:443
```

Add below lines also in /etc/rc.conf:

```
-----
stunnel_enable="YES"
stunnel_pid_file="/var/run/stunnel/stunnel.pid"
-----
```

=====
To add google name in the DDNS options.

1. mount -uw /
 2. python manage.py schemamigration services --auto
 3. python manage.py migrate services
 4. service django restart
- Add this line in choices.py:
(default@domains.google.com, 'domains.google.com'),
and run above command

=====

#13 - 05/02/2016 12:35 PM - Ben Whitman

I have a few web servers running on a public IP, and my FreeNAS box is running the latest 9.10-STABLE. Give me a bit to try setting this all up and I'll give it a try. Though, really, you don't even need a web service. Just run the inadynd command, flush your DNS cache, then do a lookup to see if the record changed.

#14 - 05/11/2016 12:52 PM - Ben Whitman

Rajesh, I've been trying to replicate your configuration, and have run into quite a few issues. Several pertain to permissions. For instance:

```
cd /var/run
mkdir -p stunnel
chown stunnel:stunnel stunnel
chmod 0622 stunnel
```

The last one should be `chmod 0722 stunnel`, otherwise stunnel doesn't have write permissions to create the pid file.

Also, you have to create the stunnel user in order for any of this to work. It looks like FreeNAS tends to run its services as root, as evidenced by the fact that basically everything in `/var/run` is owned by `root:wheel`, but that's more of an implementation detail for if this actually gets worked in officially.

Also, there are issues with the `/usr/local/etc/rc.d/stunnel` file. For one, you need to change the pidfile line to match the one you configured. Currently, I'm still having issues where I can issue `service stunnel start` and it will start, but then `service stunnel status/stop/restart` all think that stunnel isn't started, so there's still an issue there.

Anyway, having done all of that, trying to run inadynd manually with the parameters you posted just gives me an error

```
[root@freenas] /var/run/stunnel# inadynd-mt --dyndns_system default@domains.google.com --ip_server_name localhost:8081/
--update_period_sec 60 --background --syslog --username SwiZ0hXKbb1L6Ygo --password iIBs9zi1molYoH9C --alias test1.qwertymodo.com
Wed May 11 12:41:57 2016: W:LANG: Cannot open language file. Will use english defaults, or default override (--lang_file <path/file_name>...)
Wed May 11 12:41:57 2016: S:INADYN: Could not open default servers_additional.cfg. Will try svr_add_cfg option, if set...
Wed May 11 12:41:57 2016: W:GETCMD: Error parsing option 2 ('--dyndns_system')
```

and then displays the usage, which then clearly lists `--dyndns_system` as a valid option

```
Parameters:
...
'--dyndns_system': [NAME] - optional DYNDNS service type. SHOULD be one of the following:
...
-For domains.google.com: default@domains.google.com (requires SSL bridge, like stunnel)
```

so I'm not sure why it won't take it. I'm running the latest FN 9.10-STABLE.

#15 - 05/11/2016 11:50 PM - Anonymous

Hi Ben,

Ravi Tripathi will reply in this defect.

Rajesh

#16 - 05/11/2016 11:56 PM - Anonymous

Hi Ben,

We need to create the stunnel user first from FreeNAS itself before stunnel configuration. We created a stunnel user in our setup too. But, we missed to mention this in our last update over the bug.

Yes, it requires the permission (0722) so that it can create the PID file. But, we skipped this pid file creation in our testing to make things work initially.

PID file creation is the ideal way to configure the setup, which we have mentioned in our document for this defect. We will share it once this feature is complete.

Can we have your setup and details over an email so that we can look into these issues you are having? Since this was working in our setup, surely we can fix this and provide further detailed document.

Just a thought- Since Google DDNS mandate to have stunnel setup & configuration, we can provide the configuration options from FreeNAS UI itself to make the things more user-friendly, please suggest.

Regards,
-Ravi

#17 - 05/18/2016 02:35 AM - Anonymous

Hi Ben,

Please let me know if i can help in this, Thank you !!

-Ravi

#18 - 10/02/2016 05:39 AM - Ravi Tripathi

Hi Ben,

I have done the configuration already, Please do let me know if i can provide the details, Thanks

-RT

#19 - 10/07/2016 09:56 PM - Steve Seaney

Please let me know if I can assist with testing, etc. I would like to see the feature request implemented.

#20 - 10/10/2016 08:08 AM - Kris Moore

- Priority changed from No priority to Nice to have

- Target version changed from 49 to 9.10.2

#21 - 11/17/2016 12:20 PM - Kris Moore

- Target version changed from 9.10.2 to 9.10.2-U1

#22 - 12/23/2016 06:03 AM - Kris Moore

- Target version changed from 9.10.2-U1 to 9.10.3

#23 - 03/14/2017 06:20 PM - Kris Moore

- Target version changed from 9.10.3 to 9.10.4

#24 - 03/16/2017 02:51 AM - Ravi Tripathi

@Jordan , @Kris, Can you assign the ticket to me, if feasible. I had configured and tested this long back, Please suggest, Thanks

#25 - 03/18/2017 10:37 AM - Kris Moore

It won't let me assign to you, however you are welcome to submit a pull request and we'll get it in for you!

#26 - 03/18/2017 11:01 AM - Ravi Tripathi

Sure Kris, I will create the config document and pull request for the fix, Thanks so much :)

Regards,

-RT

#27 - 03/21/2017 01:22 AM - Ravi Tripathi

Ravi Tripathi wrote:

Sure Kris, I will create the config document and pull request for the fix, Thanks so much :)

Regards,

-RT

Oops , Seems that test1.qwertymodo.com provided by Ben is not working now or gone.

@Ben , @Mathew Keith or anyone share if he has Google domain registered?

Regards,

-RT

#28 - 03/21/2017 07:06 AM - Ben Whitman

Shoot me another email and I'll set it back up. My address is listed above.

#29 - 04/02/2017 01:04 PM - Kris Moore

- Assignee changed from Anonymous to Suraj Ravichandran

#30 - 04/19/2017 07:57 AM - Kris Moore

- Target version changed from 9.10.4 to 11.1

#31 - 08/23/2017 06:29 AM - Dru Lavigne

- Assignee changed from Suraj Ravichandran to William Grzybowski

William: please load balance between Vladimir and Nikola.

#32 - 08/23/2017 06:42 AM - William Grzybowski

- Status changed from Screened to Unscreened

- Assignee changed from William Grzybowski to Vladimir Vinogradenko

- Target version changed from 11.1 to 11.2-BETA1

inadyn-mt seems to support google domains but I dont think it can handle https.

We may investigate switching inadyn-mt with <http://troglobit.com/inadyn.html>

This is a low priority ticket though.

#33 - 08/27/2017 01:58 AM - Vladimir Vinogradenko

- Status changed from Unscreened to Screened

#34 - 09/08/2017 12:27 PM - Vladimir Vinogradenko

- Status changed from Screened to Fix In Progress

#35 - 09/25/2017 10:20 AM - Vladimir Vinogradenko

- Status changed from Fix In Progress to Ready For Release

#36 - 09/25/2017 10:22 AM - William Grzybowski

- Target version changed from 11.2-BETA1 to 11.1

#37 - 09/26/2017 04:04 PM - Dru Lavigne

- Subject changed from Google Domains as DDNS provider to Use inadyn as DDNS backend to support more providers

- Target version changed from 11.1 to 11.1-BETA1

#38 - 10/24/2017 04:48 AM - Dru Lavigne

- Status changed from Ready For Release to Resolved

#39 - 11/06/2017 12:35 PM - Joe Maloney

- Needs QA changed from Yes to No

- QA Status Test Passes FreeNAS added

- QA Status deleted (Not Tested)

Files

DDNS_log.png

57.7 KB

05/02/2016

Anonymous