



go anywhere communication and data transfer



eSAM

DDNS USER GUIDE



INTRODUCTION

When using a device as a server, it needs to be assigned a static and public IP Address. This means that IP Address must not change – if it does, then any clients trying to connect to it will be unable to find the device at its new address.

However, many ISP's do not offer a fixed IP Service, or they do not offer it at a competitive price. When it is necessary to access a device with a dynamic IP, we can use a Dynamic DNS (DDNS) service to track the changing IP.

DDNS Services function by assigning a domain to your IP address. The modem will then routinely contact the DDNS Provider to advise them of its current IP Address. If the address changes, then the next time the modem contacts the DDNS provider the provider will notice the changing IP and adjust its records.

There are multiple DDNS Service available on the market. eSAM has been confirmed to work with DynDNS, which is one of the most popular service, and has been tested with some others. If in doubt, feel free to contact intercel@intercel.com.au for support on DDNS Services.

MODEM CONFIGURATION

1. First, we must ensure that this eSAM has been assigned a public IP. A DDNS Service is able to make a Dynamic IP appear static, but it cannot make a private IP become public.

The IP Address can be read from the 'Status>Modem' Window

The screenshot shows the 'Status' menu on the left with 'Modem' selected. The main area displays the following modem status information:

modem	
Modem Select	0
Up Time	2466 seconds
Modem Status	connected
Network Type	LTE
Signal	(31)
IP Address	120.157.100.168
DNS	10.4.130.164
SIM Status	ready
SIM ICCID	89610185001917598063
SIM IMSI	505013506992663
LAC	12447
CELL ID	135911169

An orange arrow points to the IP Address field. At the bottom right is a 'Refresh' button.

Public IP Addresses are any addresses that are not in any of the following ranges:

10.x.x.x
192.x.x.x

If your device has not been assigned a Public IP Address, you may need to adjust your APN Settings or to contact your ISP

2. Open the 'Application>DDNS' window to configure a DDNS Service.

DDNS Service

Basic Settings

Service Provider

custom ▼

Server IP or Domain

* Max length is 64

Server Port

1-65535

Username

* Max length is 64

Password

* Max length is 64

User Domain

* Max length is 64

Update Interval

120-86400 s

3. Enable the service if it is not yet enabled, and enter your settings as described:

Parameter	Setting
Service Provider	Select from the dropdown box.
Basic Settings	
Server IP or Domain	(if custom) The Domain or IP of your DDNS Provider
Server Port	(if custom) The Port Specified by your DDNS Provider
Username	The Username registered with your DDNS Provider
Password	The Password registered with your DDNS Provider
User Domain	As configured with your DDNS Provider
Update Interval	How often the device should contact the DDNS to update its IP. Please note that if your IP changes, it could take up to this long for the DDNS to be updated.

Note: The eSAM currently DynDNS natively within the modem itself and does not have built in support for services such as No-IP or DuckDNS. If the eSAM is going to be connected to a separate computer, it is possible to install a client onto this computer in order to use these services.

4. Press 'Save' once configured. You should now be able to access the eSAM using your DDNS Address.

DESKTOP CLIENT CONFIGURATION – No-IP (OPTIONAL)

If you want to use a Dynamic DNS Service not supported within the eSAM, you can install DDNS software onto a Windows or Linux based computer in order to update the DDNS provider whenever the IP of your modem changes.

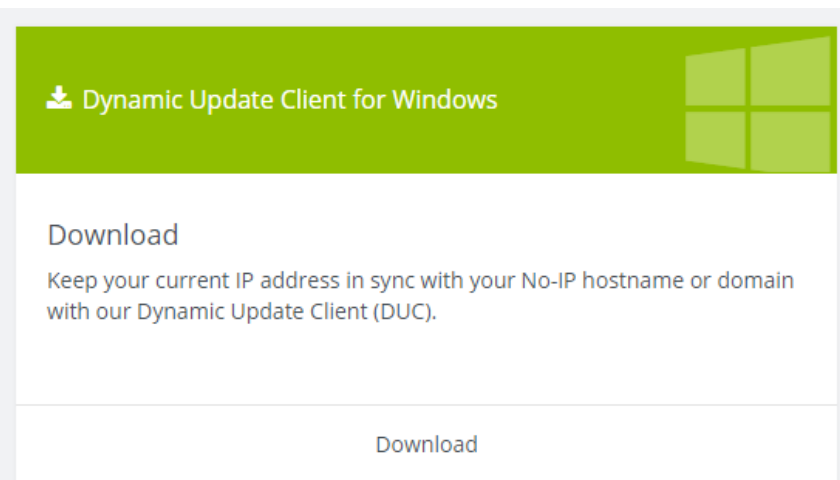
The example steps given here are for the No-IP Service, but similar steps would be required to support other DDNS Providers, such as DuckDNS or ChangelP. Please note that these services are not provided by Intercel, and so we cannot guarantee their uptime or performance.

1. Register an account with your DDNS provider of choice.
2. Create a hostname with your DDNS provider. This is the hostname you will use to access your modem.

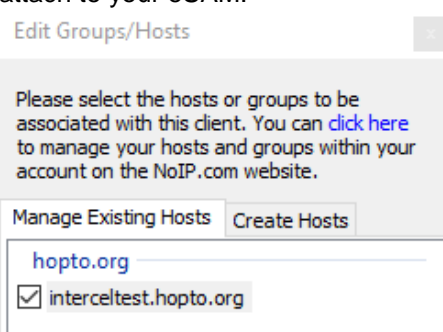
Hostnames

Hostname	Last Update	IP / Target	Type
interceltest.hopto.org <small>Expires in 22 days</small>	Apr 24, 2018 10:32 AEST	203.45.1.236	A

3. Download a Dynamic Update Client (also called a Homing Beacon) onto the computer connected to your eSAM.



4. Launch the Update Client, and log into your DDNS Service. When prompted, select the hostname you want to attach to your eSAM.



5. Your IP will be automatically synced with the host. The IP Address listed should be the same as the one used by your eSAM (list under the status>modem screen).

modem

Modem Select	0
Up Time	4 seconds
Modem Status	connected
Network Type	LTE
Signal	(31)
IP Address	120.157.92.253
DNS	10.4.130.164

DUC v4.1.1
 File Edit Tools Help
Status
 ✓ Client ID: C3A36596740
 ✓ Account: james.witney@intercel.com.au
 ✓ Updating: 0 Groups & 1 hosts
 ✓ IP: 120.157.92.253
 Next Check: 4m 33s
 10:01 AM: Updated 1 items successfully. 0 Notices, 0 Alerts

Once the correct IP is synced with the DNS Provider, you should now be able to enter this hostname and access the modem from any computer with an internet connection.

If you are unable to access your eSAM at this hostname, please confirm that remote Web access is enabled in the security settings of your Modem. Please also confirm that you have followed the first part of this guide, and that your modem has been assigned a public IP address.

Remote Access Control.

SSH	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
TELNET	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
WEB	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable

If you encounter any problems or have any feedback, feel free to contact Intercel at InterCel@intercel.com.au

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