

# Defining PDP Contexts and Message Service Centers

NimbeLink Corp  
January 2019



© NimbeLink Corp. 2019. All rights reserved.

NimbeLink Corp. provides this documentation in support of its products for the internal use of its current and prospective customers. The publication of this document does not create any other right or license in any party to use any content contained in or referred to in this document and any modification or redistribution of this document is not permitted.

While efforts are made to ensure accuracy, typographical and other errors may exist in this document. NimbeLink reserves the right to modify or discontinue its products and to modify this and any other product documentation at any time.

All NimbeLink products are sold subject to its published Terms and Conditions, subject to any separate terms agreed with its customers. No warranty of any type is extended by publication of this documentation, including, but not limited to, implied warranties of merchantability, fitness for a particular purpose and non-infringement.

NimbeLink and Skywire are registered trademarks of NimbeLink Corp. All trademarks, service marks and similar designations referenced in this document are the property of their respective owners.

# Table of Contents

<b>Applicable products</b>	<b>3</b>
Products requiring PDP and CSCA details	3
<b>SMS Message Service Centers(CSCA)</b>	<b>3</b>
Device Cloud Networks(DCN)	3
<b>Packet Data Protocol(PDP) Settings</b>	<b>4</b>
SIM Card Detection	4
AT&T	4
Device Cloud Networks (DCN)	5
Telit m2mAir	5

# 1. Applicable products

## 1.1. Products requiring PDP and CSCA details

NL-SW-GPRS  
NL-SW-HSPA  
NL-SW-HSPA-B  
NL-SW-LTE-TNAG  
NL-SW-LTE-TEUG

# 2. SMS Message Service Centers(CSCA)

SMS message service centers process inbound and outbound SMS messages. Provided are examples of how to configure SMS messaging on various networks:

## 2.1. Device Cloud Networks(DCN)

Example:

```
AT+CSCA=+3546500120,145 ;DCN specific CSCA
```

Response:

```
OK
```

# 3. Packet Data Protocol(PDP) Settings

Packet Data Protocol (PDP) context is a data structure that allows the device to transmit data using Internet Protocol. It includes the device's IP address, IMSI and additional parameters to properly route data to and from the network. Provided are examples of how to establish a PDP context on various networks:

## 3.1. SIM Card Detection

The Skywire® modem module includes a 3FF Standard size Micro SIM socket. The SIM socket does not have a card detect pin. Early versions of the Skywire module design did not assert the card detect input to the Telit device, so the AT#SIMDET=1 command must be used to force the Telit firmware to recognize the presence of a SIM card. The Skywire LTE products and later versions of the HSPA+ and GPRS products have been updated to always assert the SIM detect input, therefore, the SIM card always appears to be present, even when it is absent.

To determine if your module has the SIM detect input asserted or de-asserted, issue the AT#SIMDET? command.

Example:

```
AT#SIMDET? ;test status of card detect pin
```

Potential Responses:

```
#SIMDET: 1,1 ;SIM present, no commands required  
#SIMDET: 2,1 ;SIM not present, issue AT#SIMDET=1
```

## 3.2. AT&T

Example:

```
AT+CGDCONT=1,"IP","isp.cingular" ;AT&T specific details  
AT#SGACT=1,1 ;get IP address
```

Response:

```
OK  
#SGACT: xxx.xxx.xxx.xxx
```

Or

Example:

```
AT+CGDCONT=1,"IP","broadband" ;AT&T specific details  
AT#SGACT=1,1 ;get IP address
```

Response:

```
OK  
#SGACT: xxx.xxx.xxx.xxx
```

## 3.3. Device Cloud Networks (DCN)

Example:

```
AT+CGDCONT=1,"IP","dynamic.dcnm2m.com" ;DCN details  
AT#SGACT=1,1 ;get IP address
```

Response:

```
OK  
#SGACT: xxx.xxx.xxx.xxx
```

## 3.4. Telit m2mAir

Example:

```
AT+CGDCONT=1,"IP","a105.2way.net" ;Telit specific details  
AT#SGACT=1,1 ;get IP address
```

Response:

```
OK  
#SGACT: xxx.xxx.xxx.xxx
```