



User Guide

BlackBerry Version 1.70

CEDESSOFT



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Introduction

CedeSMS is a powerful and easy to use SMS encryption application designed for your mobile device which uses CedeSoft's powerful CyberCede encryption algorithm to encrypt and decrypt sensitive text messages.

CedeSMS allows you to send and receive encrypted text messages between BlackBerry, Windows Mobile, Nokia, Sony Ericsson and many other Java enabled smartphones.

Features

- **Password based message encryption**

Encrypt your outgoing text message using a single password per text message. The same password must be used on the recipient's handset to decrypt.

- **Address Book integration**

Lookup mobile numbers directly from your mobile address book.

- **Trusted Contacts**

Exchange passwords securely using trusted contacts, and associate a password to each of your trusted contacts. This eliminates the need to enter a password for each message.

- **Contact Groups**

Group multiple trusted contacts together in order to send encrypted text messages to groups of contacts with a single command.

- **Multiple Encryption Methods**

Choose between fast encryption or powerful multilayered encryption ensuring your messages are protected against even the most persistent of attacks.

- **Encrypted Message Storage**

Encrypted text messages and contact information are encrypted before being stored on your handsets memory. This secures each of your messages on your handset against tampering should a handset be lost or stolen.

For help installing CedeSMS, please see the CedeSMS Installation Guide.



Further technical support is available from techsupport@cedesoft.com.

Working with CedeSMS

Once CedeSMS has been installed on your BlackBerry it will start up automatically every time your BlackBerry is switched on or restarted, this ensures CedeSMS is always ready to receive incoming encrypted text messages.

NOTE: Encrypted Text Messages are treated separately to conventional (unencrypted) text messages. Standard text messages sent to your Blackberry will continue to be received by the BlackBerry SMS application. Only encrypted messages will be received by CedeSMS.

Starting CedeSMS for the first time

To start CedeSMS, select the  icon. Once CedeSMS has been run for the first time you will be prompted for your license key. If you have purchased CedeSMS from CedeSoft you will be given a 26 digit license key. Enter this key here and press the  key.

If you have downloaded CedeSMS for trial purposes you will be given a trial license key. Enter this key here and press the enter key.

CedeSMS - Licensing
Please enter your license key.

License key:
|

Once CedeSMS has been properly licensed, you will be prompted for your name and to create a password. Your name is used by the Trusted Contacts feature (explained later).

CedeSMS - Authorisation
Your name is required before you can gain access to CedeSMS.

Firstname:
|

Lastname:
|

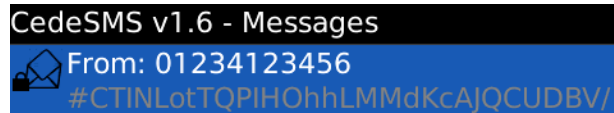
Create a password:
|

Confirm password:
|

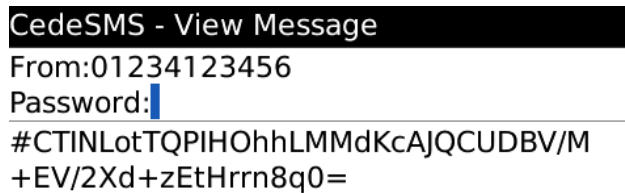
The password you specify at this screen will be required whenever you open CedeSMS.


Using your encrypted inbox

Once CedeSMS is opened you will be presented with your message inbox screen.




Both received messages and sent messages will be listed here sorted with the most recent items on top. A sample message will be created for you by default. To open this message single click on it, and you will see the contents of the message in encrypted form (see below).




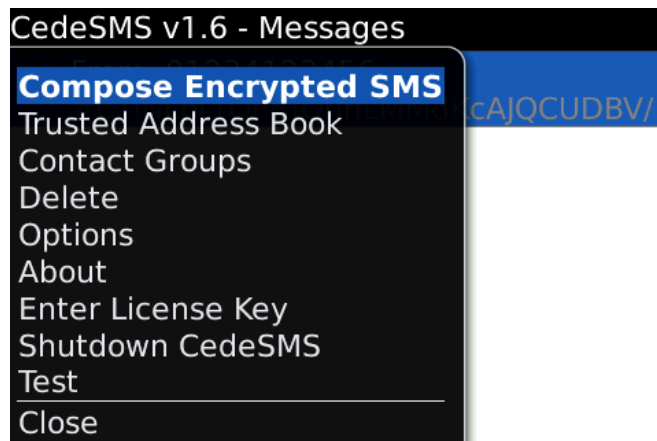
The password for this sample message is **password**. Type this in the password field and select **Decrypt SMS** from the Blackberry menu by pressing the  key. The message will then be decrypted to read “This is a sample encrypted message”.

NOTE: When viewing received messages by contacts in your Trusted Address Book, the password field will be completed for you automatically. This negates the need to remember passwords from people who are listed in your Trusted Address Book. (Trusted Contacts are explained later.)

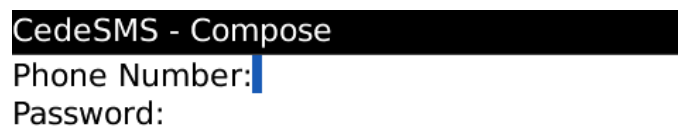
Composing an encrypted SMS


To compose an encrypted SMS, first ensure you are at your encrypted inbox screen. (If not, press the  button to get back to your encrypted inbox).

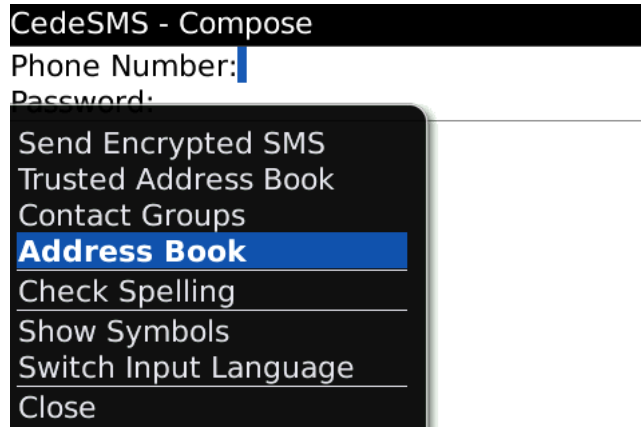
Select **Compose Encrypted SMS** from the Blackberry menu by pressing the  key.



You will then be presented with the compose sms screen (shown below)



To fill in the phone number field, you can type this in or you can select from one of the contact lookup options listed below. Press the  key to view the Contact lookup options.

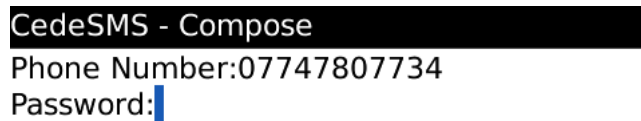


To lookup contacts from your BlackBerry Address book select **Address Book**.

To lookup contacts from your Trusted Address Book select **Trusted Address Book**. (Creating trusted contacts is explained later).

NOTE: When selecting contacts from your Trusted Address Book, the password field will be filled in automatically as passwords will be associated with your trusted contacts.

To send an encrypted text message to multiple contacts at once, select the **Contact Groups** option (creating contact groups is explained later).



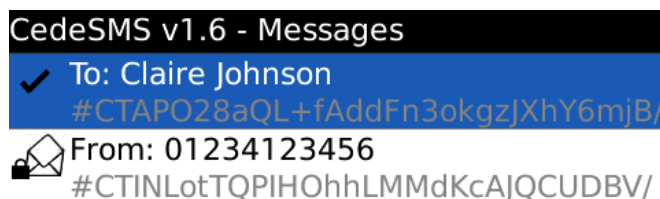
If you have chosen a contact from your BlackBerry address book, you will have to enter a password manually. The password you choose here must be known by the recipient in order for them to decrypt your message.

Once the password field has been completed, type a message in the message body field.

To send the encrypted message, press the  key and select **Send Encrypted SMS**.

Once the message has been sent you will be returned to your encrypted inbox with your outgoing message listed at the top of the message list with an appropriate status icon.

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If the message was sent successfully, it will have a tick icon. If the message failed to send, it will have an X icon. If the message failed to send, you can open up the message and select **Re-send Encrypted SMS** from the Blackberry menu.


Trusted Contacts


CedeSMS maintains a separate address book known as trusted contacts. This address book contains the same fields as your conventional blackberry address book with one additional important field – the **password** field. Setting up trusted contacts ensures you don't have to remember passwords when sending encrypted messages to recipients. When composing an encrypted sms, the password field will be filled in for you automatically when you select a contact in your trusted address book.

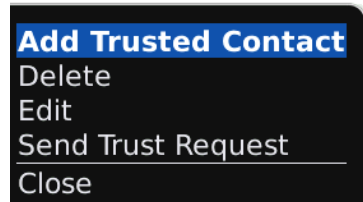
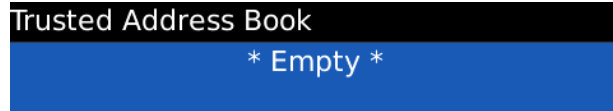
When setting up a trusted contact you have 2 options when deciding how to setup a password. You can setup a password yourself manually or CedeSMS can generate a password automatically by sending a **Trusted Contact Request** to your recipient.

Option 1 – Setting up a Trusted Contact with a manual password

To setup a trusted contact, first ensure you are at your encrypted inbox screen. (If not, press the  button to get back to your encrypted inbox).

Press the  key and select **Trusted Address Book**. You will then be presented with a list of your trusted contacts. If this is the first time you are using this feature, your trusted address book will be empty.

To add a trusted contact, press the  key and select **Add Trusted Contact** (as shown below).



You will then be presented with the trusted contact creation screen (shown below).

Add Trusted Contact

Title:

Firstname:

Lastname:

Mobile:

Password:

Company:


Job Title:

Email:

Work:

Work 2:


Home:

If the contact you are adding is already present in your conventional Blackberry address book you do not have to type in their details, instead you can select **Pick from Address Book** from the Blackberry menu by pressing the  key. If this contact is not in your Blackberry address book then you can type in their details manually.

The Password field

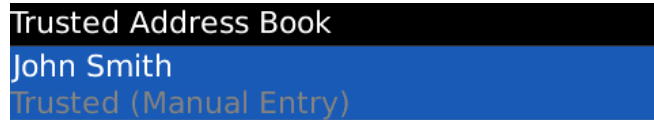
The important field when setting up a trusted contact is the password field. You can choose and enter a password in the password field, however this contact you are setting up must also have **the same** password set up in their trusted address book with **your details**.


When setting up a trusted contact manually it is generally recommended that this is done face to face with the contact you are setting up so that you both decide on the same password to use for sending encrypted text messages.

Once you have completed filling in your contact details, select **Save** from the Blackberry menu by pressing the  key.

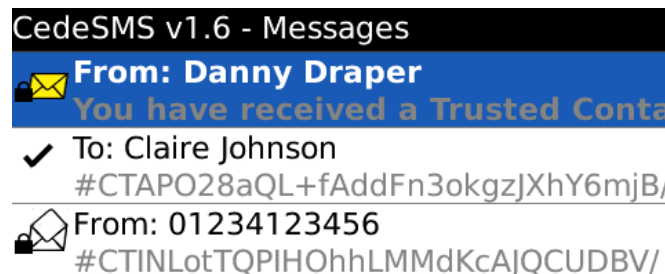
Option 2 – Setting up a Trusted Contact automatically


To setup a trusted contact automatically, follow the same procedure as in Option 1, but leave the password field **blank**. Once your contact has been saved, you will be returned to your Trusted Address book screen (shown below).



Press the  key, and select **Send Trust Request**. This will send a special encoded sms to the contact you have select called a **Trusted Contact Request**.

Your recipient will then receive this Trusted Contact Request in their encrypted inbox (shown below).



Your recipient must then **accept** the Trusted Contact Request by opening the Trusted Contact Request and selecting **accept** from the Blackberry menu by pressing the  key.




NOTE: If your recipient **does not** have your mobile number in their address book, your name will still be displayed when they have received your trusted contact request (This is the reason why you enter your first name and last name when setting up CedeSMS for the first time). This helps recipients identify who sent a trusted contact request even if their blackberry does not have the mobile number stored.

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CedeSMS - Trust Request
From: +441122887887
 This contact would like to setup secure messaging with you. If you accept, select 'Accept' from the main menu.



Once your recipient selects **Accept** from the Blackberry menu, this will send another encoded sms back to the sender known as a **Trusted Contact Acceptance** (shown below).


CedeSMS v1.6 - Messages
 **From: Danny Draper**
Trusted Contact Request accepted
 From: Danny Draper
 You have received a Trusted Contact Re
 ✓ To: Claire Johnson
 #CTAPO28aQL+fAddFn3okgzJXhY6mjB/
 From: 01234123456
 #CTINLotTQPIHOhhLMMdKcAJQCUDBV/


This completes the automatic password generation process. Once this trusted request-trusted accept process is completed, both the sender and receiver will have an identical password automatically generated in their trusted address book associated with your contact.

Contact Groups

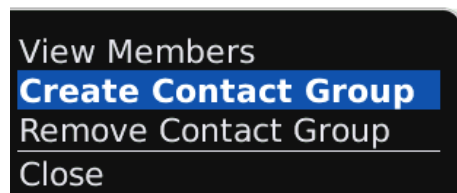
CedeSMS allows you to send an encrypted sms to multiple contacts at once. This feature will work only for contacts in your Trusted Address book, as each contact in your trusted address book will have a different password and CedeSMS must use each contacts associated password when sending an encrypted sms.

Creating a contact group

To setup a contact group, first ensure you are at your encrypted inbox screen. (If not, press the  button to get back to your encrypted inbox).

Press the  key and select **Contact Groups**. You will then be presented with a list of your contact groups. If this is the first time you are using this feature, your contact groups will be empty.


To create a new group, select **Create Contact Group** from the BlackBerry menu by pressing the  key (shown below).



You will then be presented with the group creation screen (shown below).




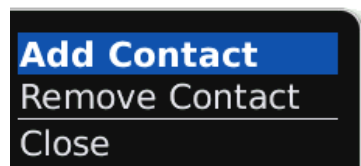
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Enter a name for this group and select **Save** from the Blackberry menu by pressing the  key. You will then be returned to your list of contact groups with your new group being shown in the list.


Adding Members

To add contacts to your new contact group, highlight the contact group and select **View Members** from the Blackberry menu. If this is a new contact group this list will initially be empty.

To add a new contact to this group, press the  key and select **Add Contact** (shown below).



Once you select **Add Contact** you will be shown a list of your Trusted Contacts. Highlight a single contact from this list and select **Select Contact** from the Blackberry menu. This will add your selected contact to your contact group. Repeat this process for each contact you would like to add to this group.


Once you have completed adding members to your new contact group, press the  key to get back to your encrypted inbox.

You will now be able to send multiple encrypted text messages to this group when composing a new encrypted sms, and selecting **Contact Groups** from the Blackberry menu.

CedeSMS options

CedeSMS allows you to configure various settings such as the password grace period, LED notification colour and whether to play a repeating alert tone when an encrypted sms is received.

Accessing CedeSMS options

To access the options, first ensure you are at your encrypted inbox screen. (If not, press the  button to get back to your encrypted inbox).

Select **Options** from the Blackberry menu by pressing the  key.

You will be presented with the options screen (show below).

CedeSMS Options	
Owner Firstname: Danny	
Owner Lastname: Draper	
Password prompt grace period:	None
LED Color - Red Amount:	0
LED Color - Green Amount:	255
LED Color - Blue Amount:	0
LED Flash - On time (ms):	500
LED Flash - Off time (ms):	250
Play notification sound:	yes
Repeat notification sound:	yes
Encryption method:	CyberCede (Fast)


Owner Firstname & Lastname

The first name and last name you entered when setting up CedeSMS for the first time can be changed here. This is used by the Trusted Contacts feature when sending a Trusted Contact Request to a recipient. If the recipient does not have your mobile number in their address book, your name will still be displayed on their handset in order for them to identify who sent the trusted contact request.

Password prompt grace period

By default, CedeSMS will prompt you for your password every time it is opened. You can change this behaviour so that CedeSMS will remember your password for a predefined amount of time before prompting you for your password. E.g if the grace period is set to 20 minutes, then CedeSMS will only prompt for your password if you have not opened CedeSMS in over 20 minutes.

LED Colour & LED Flash

When an encrypted SMS is received, the LED on your Blackberry will flash green at a predefined rate. You can change the colour the LED flashes and the rate of the flashing by altering the settings here. The LED colour is specified using varying amounts of Red, Green and Blue intensities which will produce a variety of colours when different values are specified. The range for each colour is from 0 to 255. Experimentation here is recommended to produce a desired colour. To see how your selection affects the LED flashing, select **Toggle LED On/Off** from the Blackberry menu by pressing the  key.

Play notification sound

When an encrypted SMS is received, an alert tone will be played. This can be switched on and off by altering this setting.

Repeat notification sound

When an encrypted SMS is received, the alert tone will be repeated every 7 seconds. To turn off this behaviour you can alter this setting so that the alert tone is played only once when an SMS is received.

Encryption Method

CedeSMS provides 2 encryption methods, **Fast** and **Strong**. By default, the fast method is used. The Fast encryption method uses Cedesoft's CyberCede algorithm in a single layered mode only to encrypt your message as quickly as possible.

The Strong encryption method uses Cedesoft's CyberCede algorithm in a multi-layered encryption mode to encrypt your message using the strongest encryption method, however this comes at a cost of speed. With this method selected your Blackberry will take several seconds to encrypt the text message before sending to your recipient.