

SAN BUSINESS SOLUTIONS

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Telegram Messenger Microsoft Dynamics NAV

# User manual

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The Telegram messenger has been gaining more and more popularity lately due to its high speed, security, and convenience.

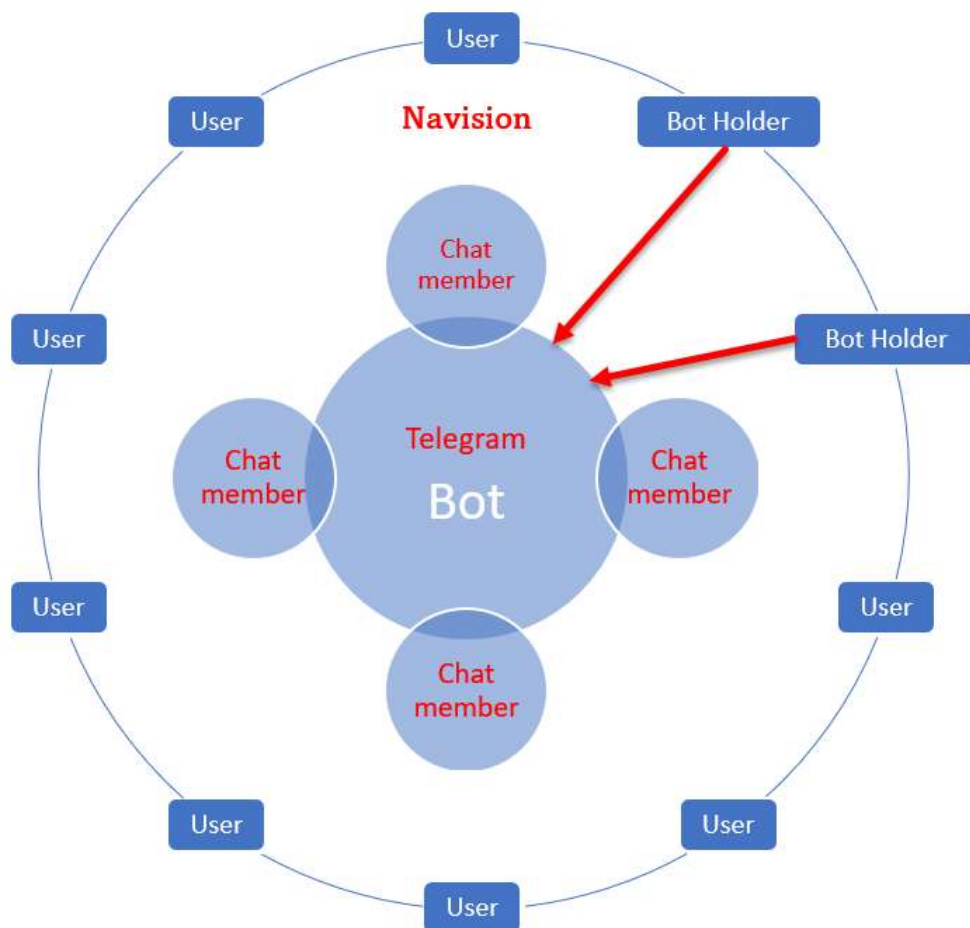
Telegram delivers messages faster than any other application, lets you access your chats from multiple devices, and keeps your messages safe from hacker attacks.

Here is presented Telegram integration in Microsoft Dynamics NAV 2009 Classic client.

Using the Telegram messenger in Navision gives you the opportunity to directly communicate with mobile gadgets.

The core of the development is an own automation server, created in the DotNet C# environment without use Telegram NuGet packages.

Integration with other versions Microsoft Dynamics NAV and Business Central are in process.



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# Installation

1. Create a new folder **Navi-Telegram**.
2. Copy DLL and BAT files to this folder:
  - NavTelegramApi.dll,
  - Newtonsoft.Json.dll,
  - RestSharp.dll
  - NavTelegramReg.bat
3. Insert <Path to Nav-TG folder> in the bat file NavTelegramReg.bat
4. Run bat file as administrator.

Bat file assumes you have the following tools on your system:

  - Gacutil ("C:\Program Files (x86)\Microsoft SDKs\Windows\v10.0A\bin\NETFX 4.6.2 Tools\x64")
  - Regasm ("C:\Windows\Microsoft.NET\Framework\v4.0.30319")

Successful completion of the process is accompanied by messages "Types registered successfully" and "Assembly successfully added to the cache".

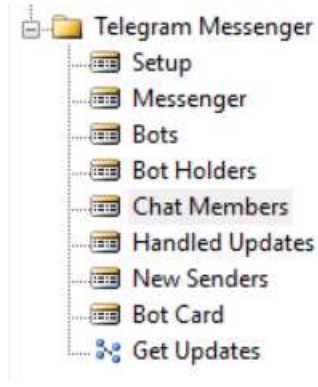
**In the absence of these messages, it will be necessary to download and/or clarify the location of the Gacutil and Regasm tools.**

5. Import FOB file of the Navision objects and compile.

FOB file has 12 tables (ID range 50350...50361), 22 forms (ID range 50350...50371), and 1 codeunit (50350).

**If object identification numbers are not free, then contact us for renumbering of the Navision objects.**
  6. Create sub folders in folder **Navi-Telegram**:
    - Images,
    - Incoming Files,
    - Avatars.
  7. Copy bmp pictures to **Images** folder:
    - Audio
    - Contact
    - Document
    - Image
    - Keyboard
    - Location
    - Text
    - Venue
-

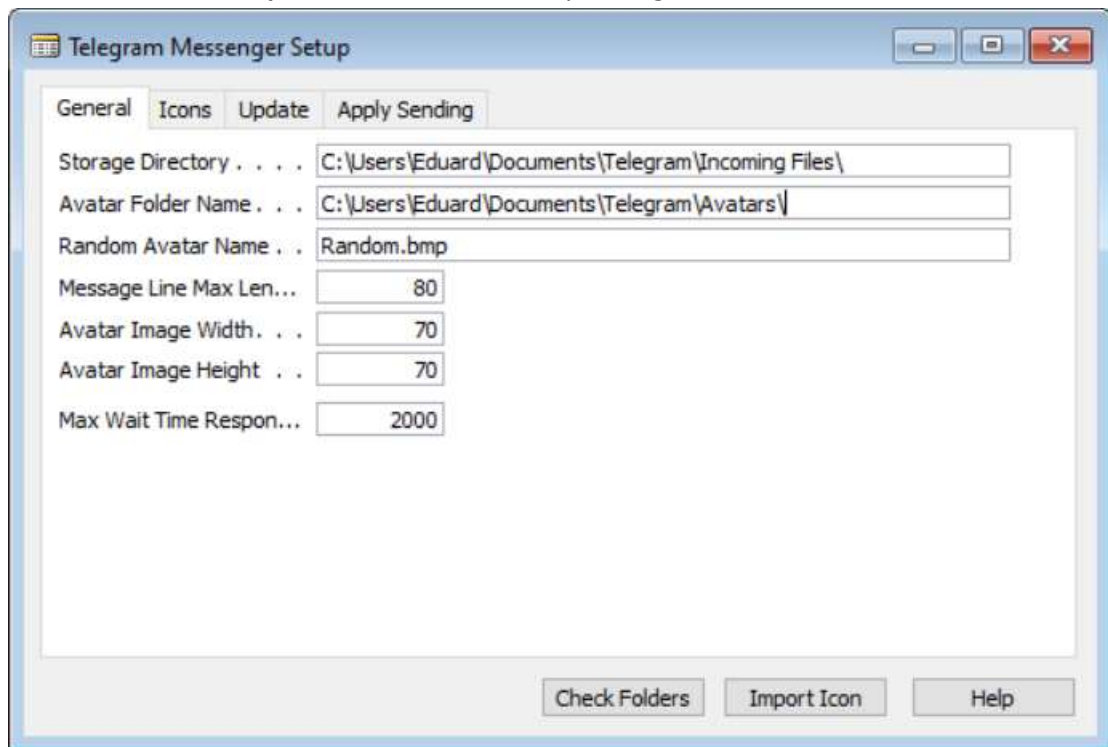
1. Create **MenuItems**:



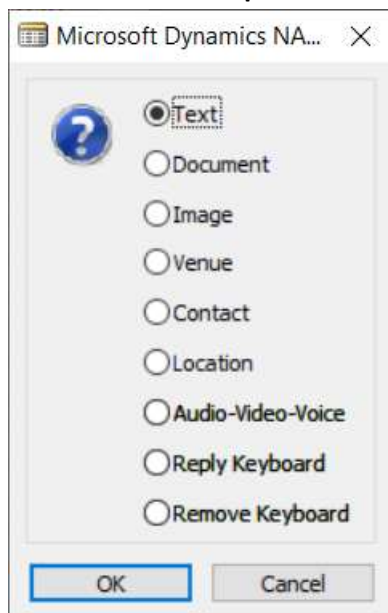
The following objects are used in the MenuSuite:

- |                   |                         |                  |
|-------------------|-------------------------|------------------|
| • Setup           | - TG Messenger Setup    | (Form 50351)     |
| • Messenger       | - TG Messenger          | (Form 50366)     |
| • Bots            | - TG Bots               | (Form 50354)     |
| • Bot Holders     | - TG Bot Holders        | (Form 50367)     |
| • Chat Members    | - Chat Members          | (Form 50357)     |
| • Handled Updates | - TG Updates            | (Form 50353)     |
| • New Senders     | - TG New Senders        | (Form 50363)     |
| • Bot Card        | - TG Bot Card           | (Form 50352)     |
| • Get Updates     | - TG Message Management | (Codeunit 50350) |

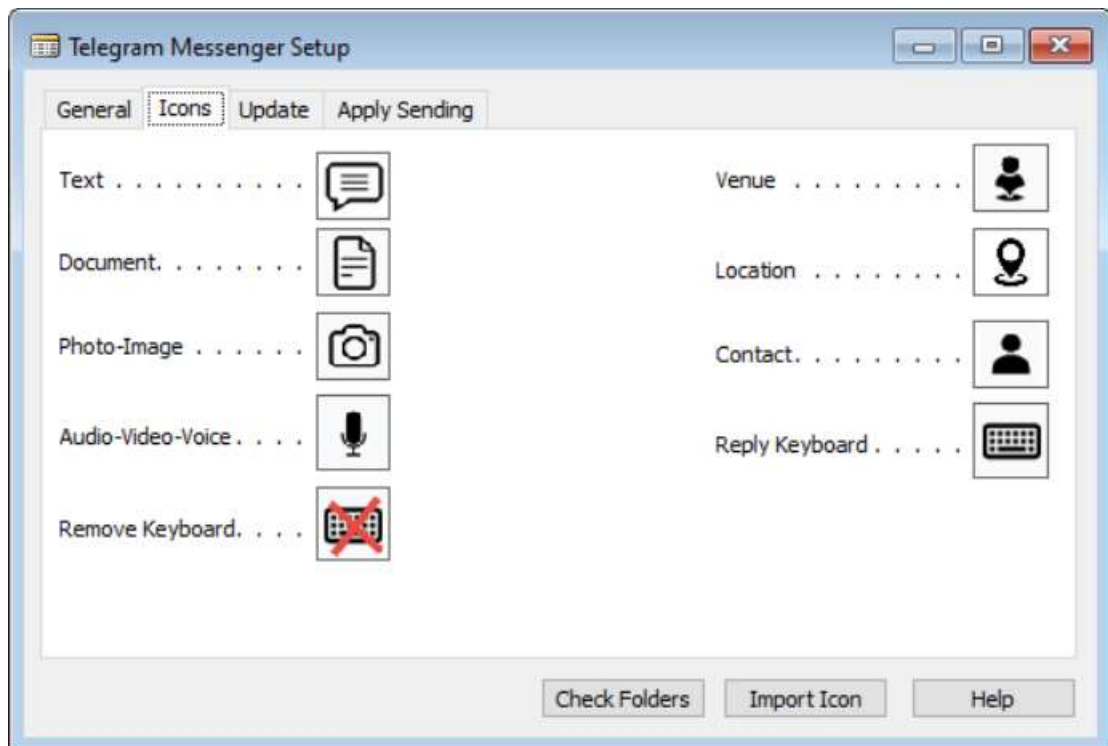
2. Run **Form 50351 Setup** and make the necessary settings on tab General:



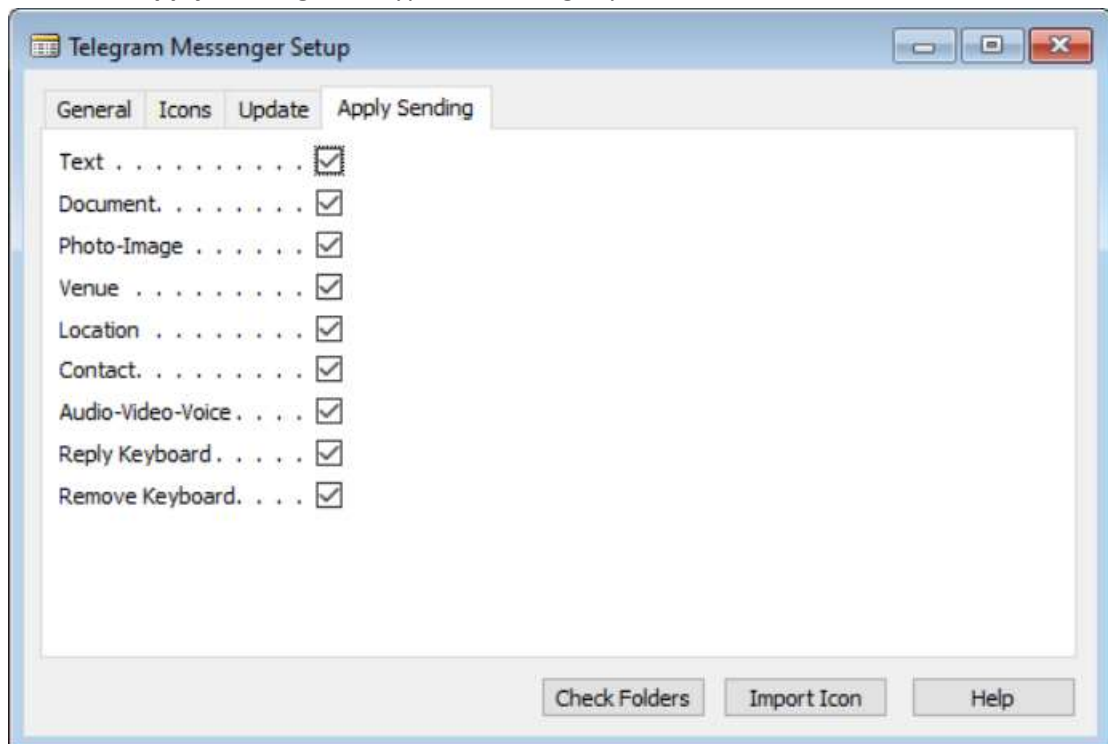
3. Press the button **Import Icon** and then select one by one all options:



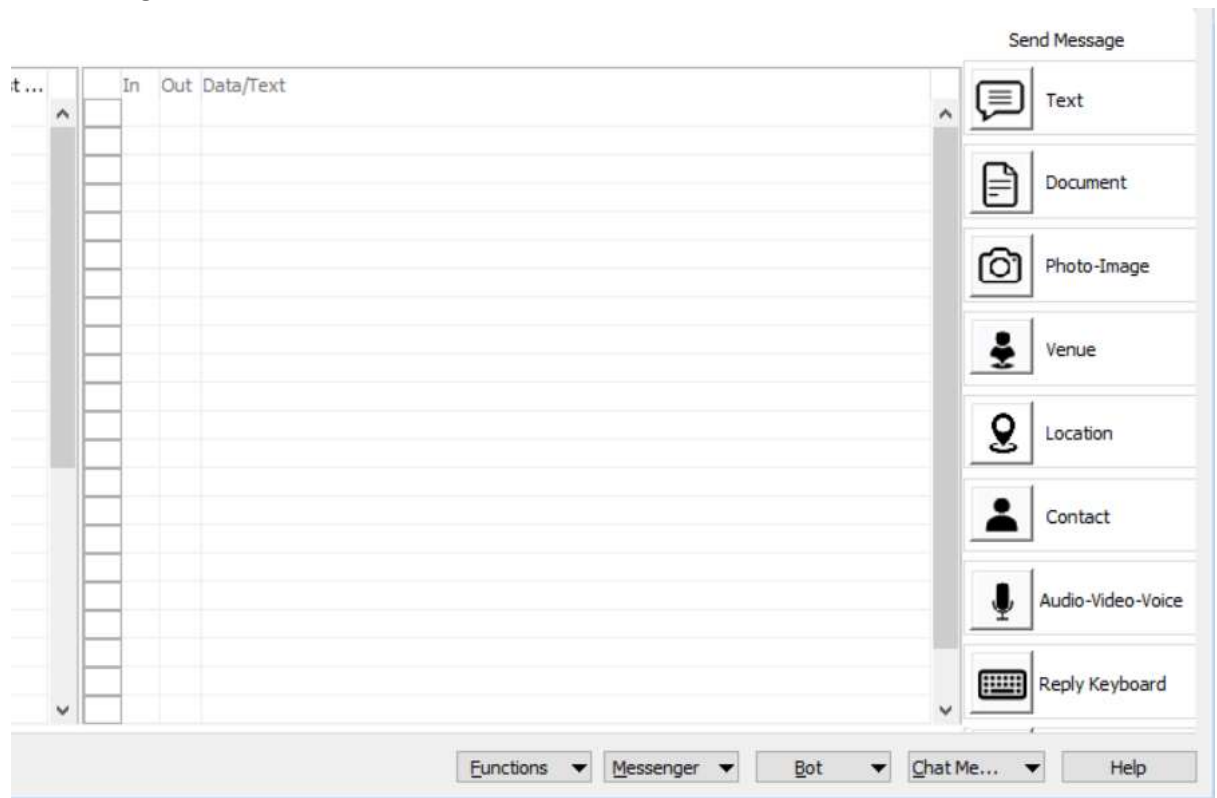
Import images from folder **Navi-Telegram/Images**:



4. Set on tab **Apply Sending** what types of messages you would like to send:



When you turn these options on or off, the buttons for sending emails will appear or disappear on the messenger. The first three options are always present: **Text**, **Document**, **Photo-Image**.



5. Press button **Check Folders** to check if the folders are accessible and folder paths are correct.
6. Define a Chat communication Bot (Bots).



Open an empty **Bot Card**, click on the **Edit** button, and set the bots **Access Token**.

Unknown - Telegram Bot Card

General Chat Members

Enabled. . . . . ☐

Access Token . . . . . 1234567890qwertyuiopasdfghjZXCVBNM

ID . . . . .

User Name . . . . . Unknown

First Name . . . . . Unknown

Language Code . . . . .

Storage Folder Name . . . . . ☒

Created on . . . . . 15/07/22

Created by . . . . . EDUARD

Last Changed on . . . . .

Last Changed by . . . . .

Last Update Check . . . . .

Last Update . . . . .

Edit Functions Bot Help

Press on the button **Functions** -> **Get Bot Info** and if a Bot with such a token exists, then all information about the bot will be loaded.

Specify a **Storage Folder Name** to be able to receive updates.

7. If you don't have your own Bot, then create it in Telegram:
  - a. Start a new conversation with the @BotFather.
  - b. Send **/newbot** to create a new Telegram bot.
  - c. When asked, enter a name for the bot.
  - d. Give the Telegram bot a unique username. ...
  - e. Copy and save the Telegram bot's access token for later steps.

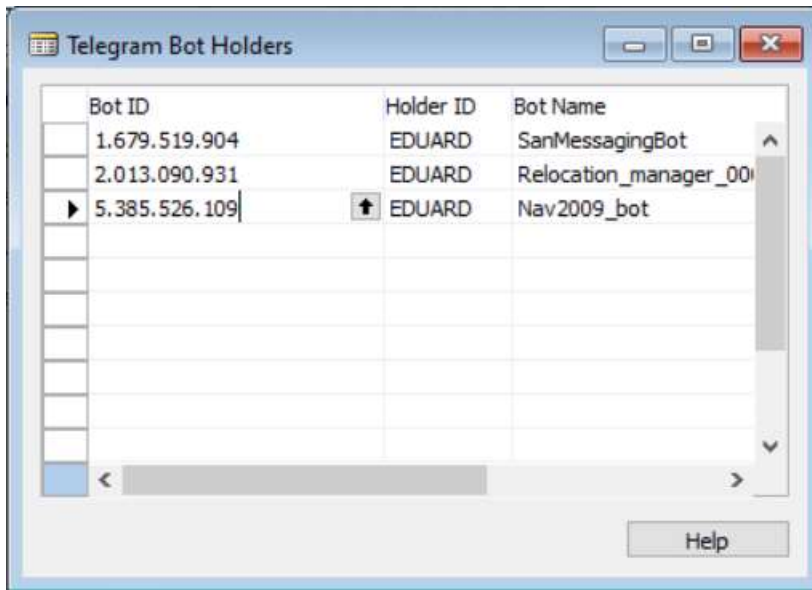
One of the fragments of Telegram Messenger documentation:

["What can I do with bots?"](#)

[Do virtually anything else. Except for dishes — bots are terrible at doing the dishes."](#)

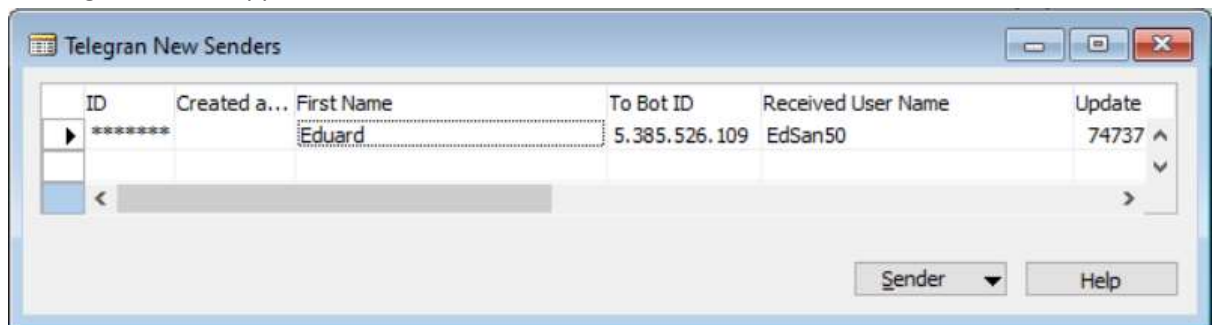
8. Open the Form **Bot Holders** and select a bot holder from Navision users.

The same Navision user can be the holder of several bots and vice versa, one bot can have several holders.



## How to use Messenger

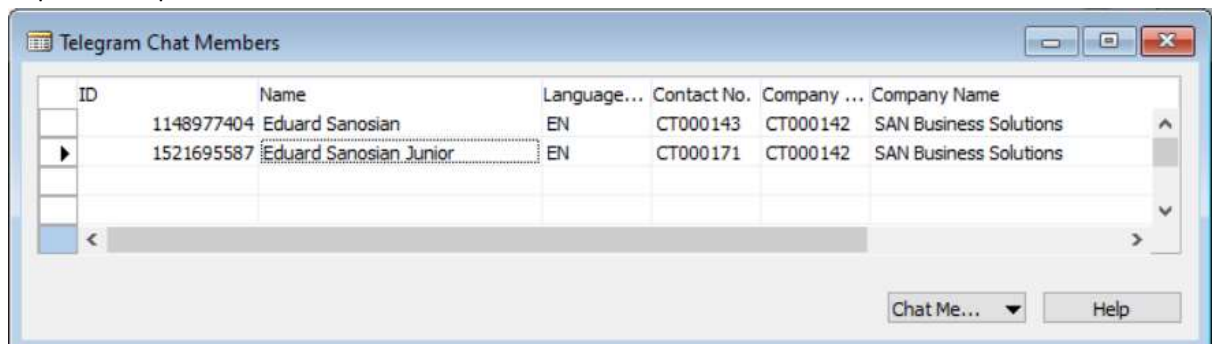
1. Senders of messages to your Bot become members of the chat.  
Tell your contacts the name of your Bot and ask them to send the first message.  
Press on the button **Get Updates** and if there are new messages then the sender of these messages will also appear in the **New Senders** form.



ID	Created a...	First Name	To Bot ID	Received User Name	Update
▶ *****		Eduard	5.385.526.109	EdSan50	74737 ^

Sender ▼ Help

2. Press on the button **Sender** -> **Create as Chat Member**
3. Repeat this operation for each new sender.



ID	Name	Language...	Contact No.	Company ...	Company Name
▶ 1148977404	Eduard Sanosian	EN	CT000143	CT000142	SAN Business Solutions
1521695587	Eduard Sanosian Junior	EN	CT000171	CT000142	SAN Business Solutions

Chat Me... ▼ Help

4. Open created **Chat Member Card**.  
Here you can use the following functions:
  - 4.1 Create an Avatar
    - Create Avatar from an Image
    - Generate random Avatar
    - Import Avatar
  - 4.2 Transform the chat participant to Navision Contact
    - Add to Navision Contacts
    - Link to existing Contact
5. Fill in the form fields for each Chat member.

**Eduard Sanosian - Telegram Chat Member Card**

Linked to Contacts . . . ☒

ID . . . . . 1148977404

Telegram Contact Name.

First Name . . . . . Eduard

Middle Name . . . . .

Last Name . . . . . Sanosian

Name . . . . . Eduard Sanosian

Mobile Phone No. . . . . 0612345678

Contact No.. . . . . CT000143

Company No. . . . . CT000142

Company Name . . . . . SAN Business Solutions

Avatar Chat Me... Help

**Eduard Sanosian Junior - Telegram Chat Member Card**

Linked to Contacts . . . ☒

ID . . . . . 1521695587

Telegram Contact Name.

First Name . . . . . Eduard

Middle Name . . . . .

Last Name . . . . . Sanosian

Name . . . . . Eduard Sanosian Junior

Mobile Phone No. . . . . 0687654321

Contact No.. . . . . CT000171

Company No. . . . . CT000142

Company Name . . . . . SAN Business Solutions

Avatar Chat Me... Help

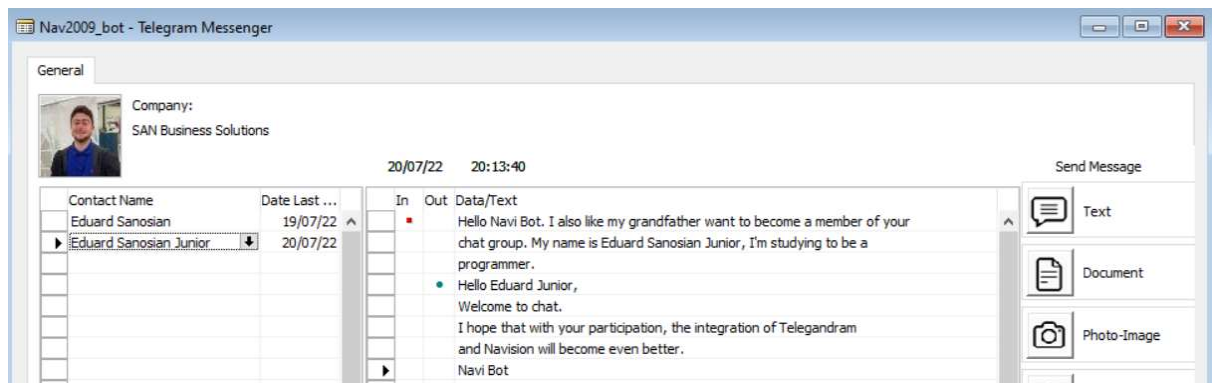
Now you can launch **Messenger** and start chatting with a **Chat Member**.

- If you are the holder of several bots, then before starting the Messenger you will be asked to select a bot.

Besides text messages you can send various other types of messages by clicking on the corresponding buttons.

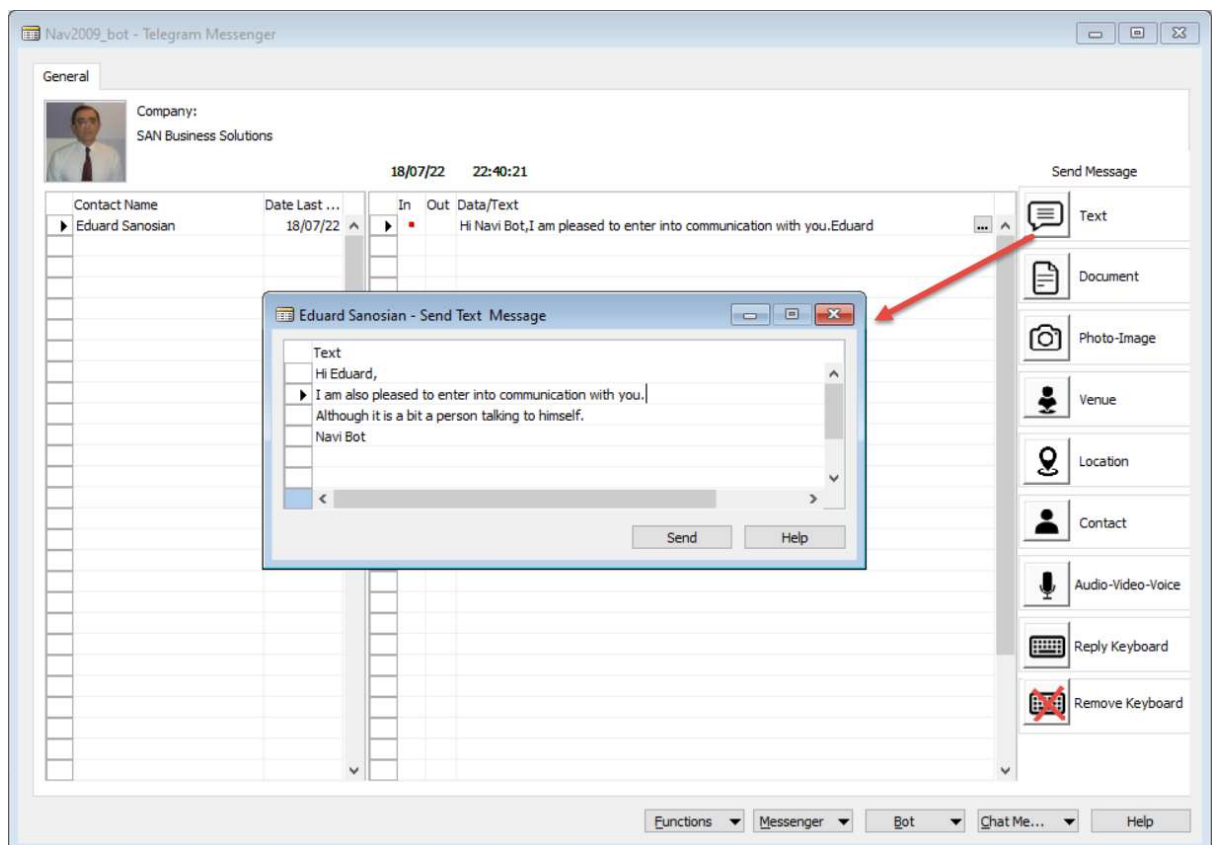
Chat members are located on the left side of the messenger.

When you select one of the chat members, the correspondence is displayed on the right side of the messenger.



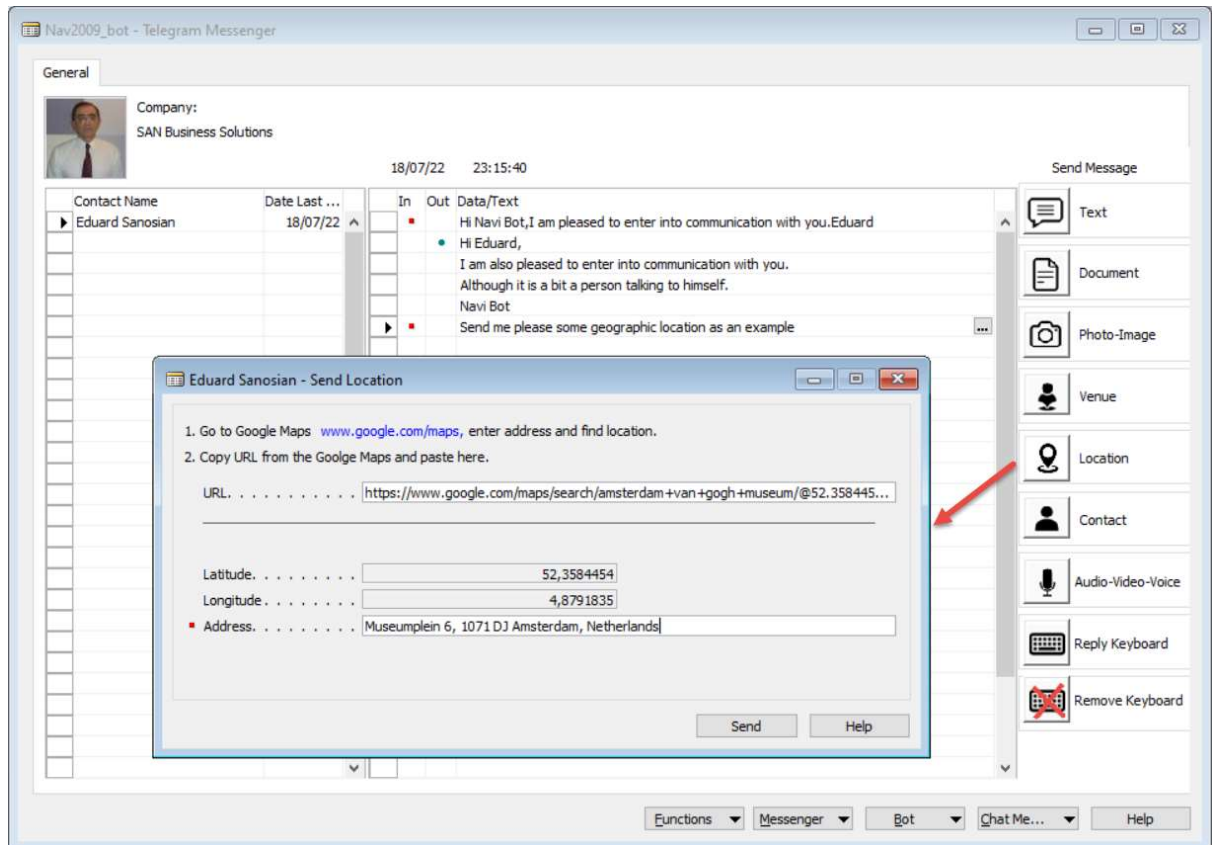
Here is an example of creating a text message.

Text messages can be multiline, maximal line length is set in the **Messenger Setup**.

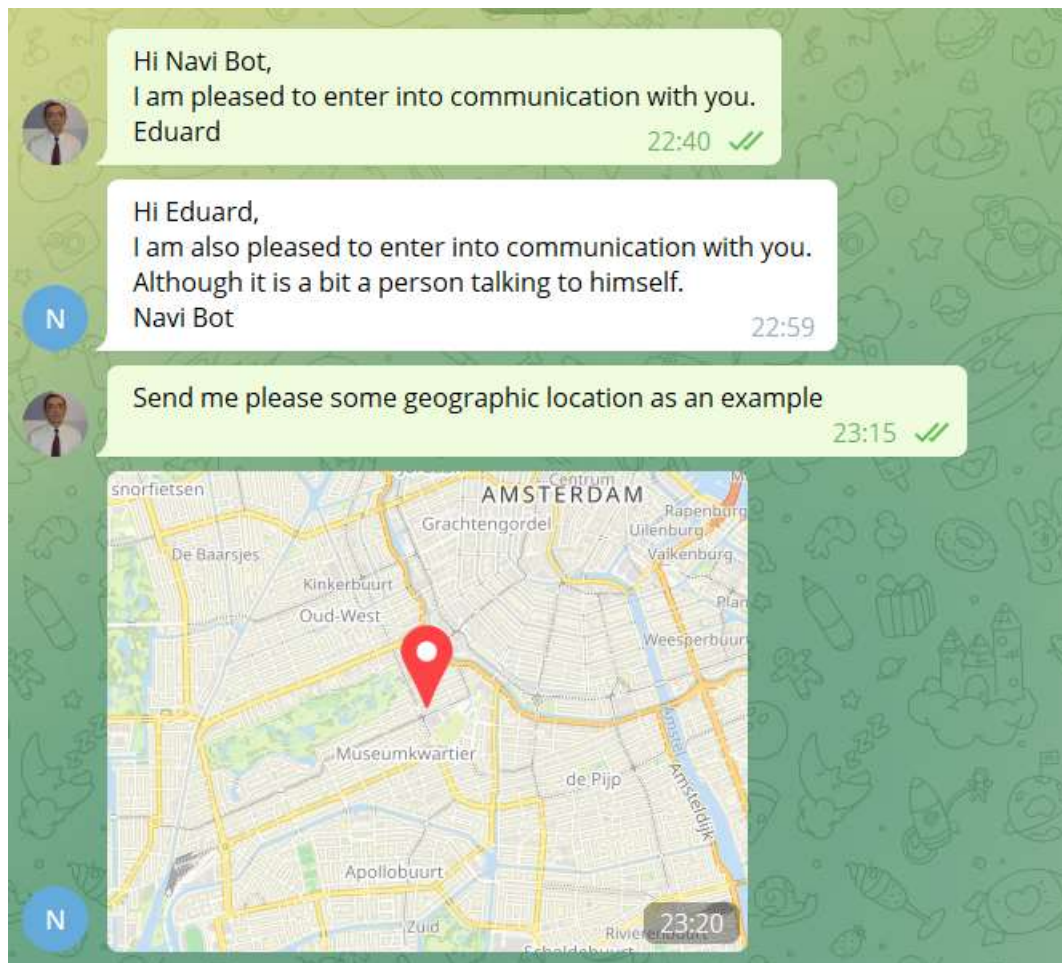


Here is an example of creating a message about a geographic location.

If you find the required geographic location in Google Maps, copy the URL, and paste it into the message form, then Navision will determine the latitude and longitude itself.







As known from the Telegram application whenever your bot sends a message, it can pass along a special keyboard with predefined reply options. You can request a contact or location information from the user with **KeyboardButton** or send a poll. Regular button will send predefined text to the chat.

By default, custom keyboards are displayed until a new keyboard is sent by a bot or the command to remove the keyboard is sent.

To send from Navision:

**Send Reply Keyboard**

Ask a question:

Text  
▶ How satisfied are you with our services?

Answer Options . . . . . 6

Answer option 1. . . . . Extremely Unsatisfied

Answer option 2. . . . . Unsatisfied

Answer option 3. . . . . Neutral

Answer option 4. . . . . Satisfied

Answer option 5. . . . . Extremely Satisfied

Answer option 6. . . . . No Opinion

▪ - Required fields

Send Help

Received in Telegram:

How satisfied are you with our services? 14:10

Write a message...

Extremely Unsatisfied

Unsatisfied

Neutral

Satisfied

Extremely Satisfied

No Opinion



## Additional features

Telegram API has rich features that are not all implemented when integrating with Navision.

- As you know Telegram allows you to create channels. **Channels** are a form of one-way messaging where admins are able to post messages, but other users are not. You can create channels for clients, contacts or employees and use Navision for broadcasting messages to an unlimited number of subscribers. You can use channels for sell educational, marketing or consulting services.
- You can also create a Telegram **Group** where chat members can interact by sending messages. In a Telegram group, unlike a Telegram channel, all members can check and see other members in the group.
- Using bots, you can get paid for your goods or services. **Telegram Bot Payments** are a free and open platform that allows sellers to accept payments from Telegram users. According to documentation Telegram doesn't collect payment information and takes no commission.
- Bots just as regular users can send **native Polls** only to groups and channels. You can optionally send a keyboard with a poll. Using a regular keyboard is shown by us above. An additional feature is to send an inline (built-in) keyboard.
- To receive Bot updates, we used the method **getUpdates**. An alternative way to get updates is the **webhook** method. Setting a webhook means that you provide Telegram an URL location where your bot listens for an update.

Any of the above features can be implemented by additional agreement.

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