

About Nokia Data Gathering

Overview

Nokia Data Gathering (NDG) offers a fast, accurate, and cost effective way to collect data using mobile phones. It consists of a server module for questionnaire creation and a mobile client for data entry in the field. Nokia Data Gathering is an open source software created by Nokia and developer partners.

Location data collected via this application and submitted to the Nokia Data Gathering server can be used for data plotting on Nokia Maps and as data exports by the user.

The use of NDG for collecting and transmitting information by cell phone can replace the current paper and pen method, thus guaranteeing greater precision in results. Use of the software can extend to different cases, such as:

- Health: isolation of diseases, monitoring, vaccination;
- Security: police, borders, military;
- Disasters: environmental phenomena, earthquakes, etc.;
- Monitoring of elections, censuses;
- Data collection activities in the field that need real time information.

History

The program emerged in the beginning of 2007 in response to queries from public, private and non-governmental organizations about developing a technological solution that could be used on a global scale, focused on the quick and precise collection of field research data in their systems for analysis and decision making. The objective of the project is to optimize the data collection process, reducing collection time, and increasing precision and the providing of information and consequently reducing operational costs.

Current Version

This user guide covers the operation of Version 4.04 of Nokia Data Gathering for Windows Phone 7.5 (Mango).



Using Windows Phone Buttons in NDG



All Windows Phones have three buttons across the bottom of the screen: Back, Start, and Search.

BACK – Each time you press **Back**, Windows Phone will bring you to the previous screen within NDG. If you use the back key from the main screen it will close the app altogether.

You can press and hold the Back button to open the App switcher, which shows you all the apps you currently have open on your phone. Tap any app to go straight there, while leaving the NDG running.

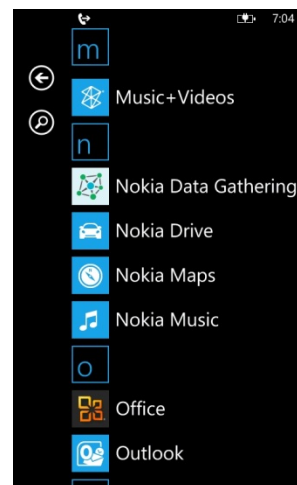
START – When you press **Start**, you go back to your phone's homescreen. NDG will continue to run in the background. To return to your NDG session, you press and hold the **Back** button to open the App switcher.

SEARCH – Pressing **Search** opens Bing, allowing for various types of web searches.

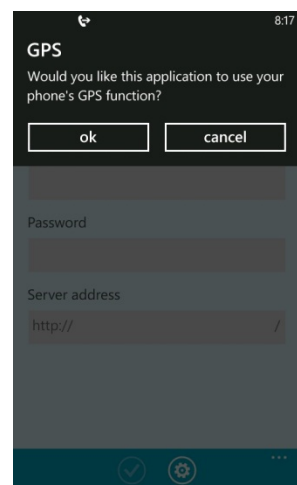
The **Search** button will not search within the NDG app. To search within NDG, users should use the app's own search icon.

Nokia Data Gathering Walkthrough

1. From the Windows Phone home screen, swipe left to access your App List, and select **Nokia Data Gathering**.



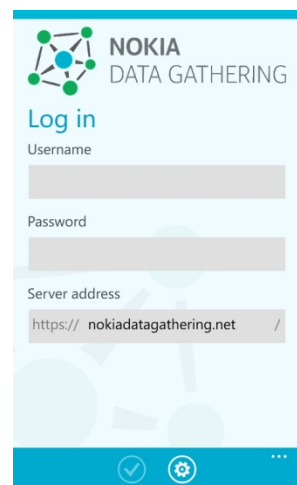
2. The first time you start the app, you will see the NDG splash screen followed by a context menu that gives you the option to allow the application to use your phone's GPS Location. This selection can be changed on the settings page.



3. The **Log in Screen** requires a username and password that must be created on the Nokia Data Gathering server prior to use of the cell phone client.

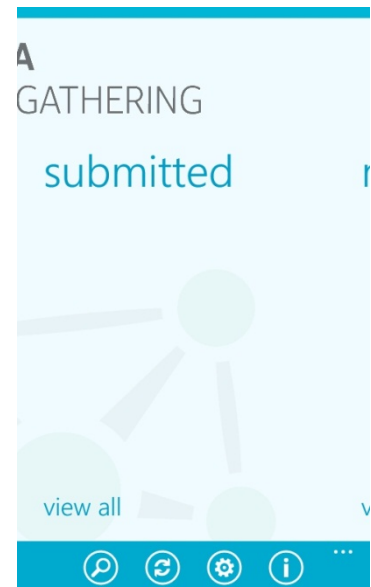
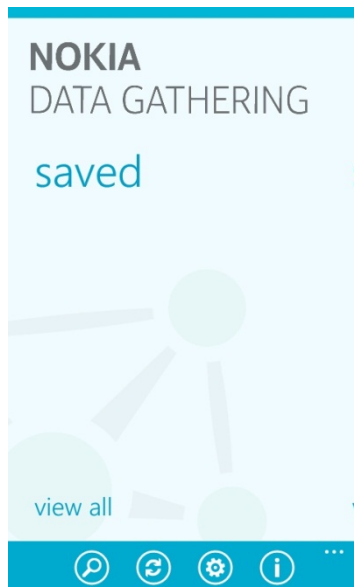
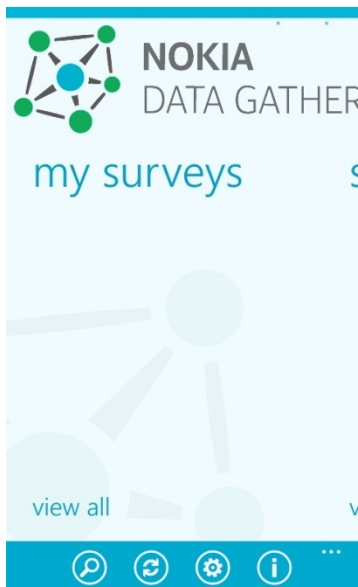
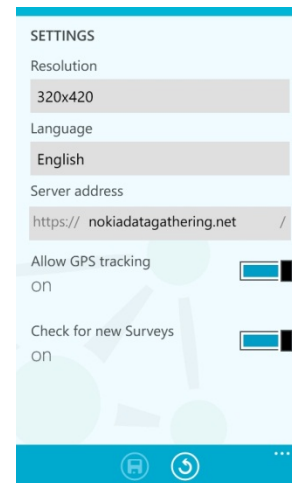
The **server address** is set to the default server and can be changed to a local instance on the login screen. The user can switch between **https://** and **http://** by pressing the url prefix.

The **check** icon submits log in credentials to the server. The **gear** icon opens settings page.



- In addition to entering a new server address and turning GPS tracking on and off, the **Settings Screen** also allows for photo resolution control, language pack selection (English, Finnish, and Portuguese), and whether to search for new surveys on start.

The **disk** icon will save any settings changes. The **back arrow** icon will reset the app to the default settings.



- Once the user logs in, NDG opens on its panoramic **main page**. Swiping the screen left switches changes the view from the **my surveys** screen to the **saved** screen. Another swipe to the left changes the view to the **submitted** screen. Another swipe to the left brings returns the user to the **my surveys** screen.

Note: Within the NDG app the term **survey** is used to refer to the blank questionnaire that is sent to the phone to be completed by the user. Once a user begins to enter data into a survey is becomes a **response set**. Response sets can be submitted directly to the server or saved on the phone to later submission.

6. By default, the NDG app will check for new surveys on start. Once the app is open, you can check for new surveys by pressing the **refresh** icon.

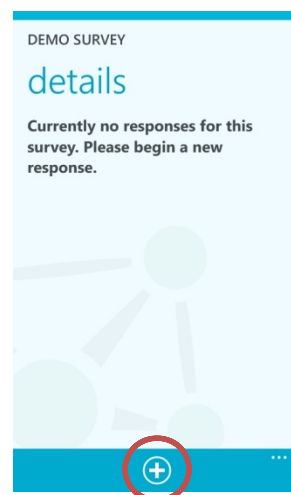
Surveys will appear on the **my surveys** screen with the date that they were downloaded from the server.



7. Pressing the survey name will open the details page for that particular survey.

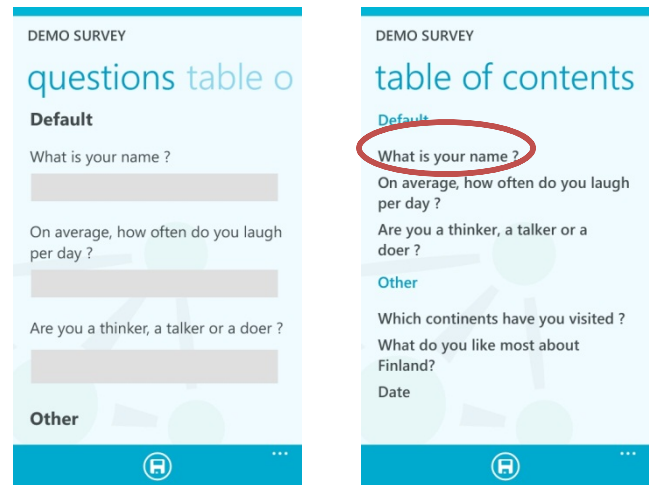


8. If you have not created a response set for the survey the details page will not have any content to display. To begin entering data into the survey press the **plus** icon.

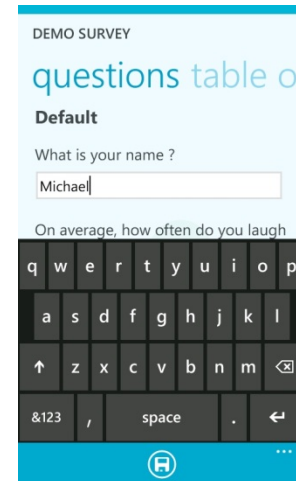


9. The survey is a panoramic view screen. It opens with a scrolling list of questions.

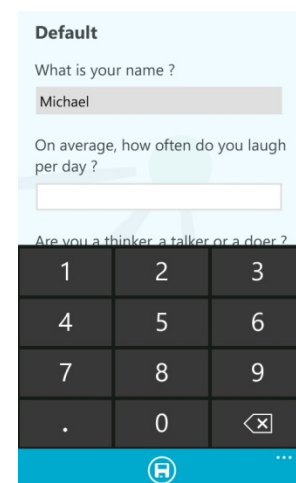
Swiping the screen to the left changes the view to the Table of Contents, which contains a list of all questions included in the survey. Pressing a question in the Table of Contents will jump to that question within the survey.



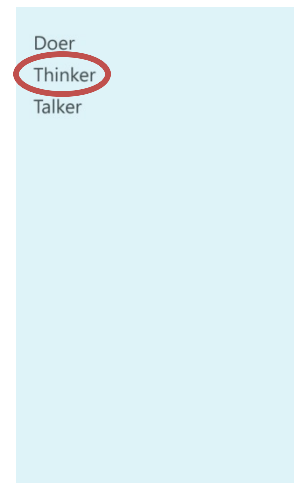
10. The **descriptive** question category provides for text entry. The keyboard will automatically appear when the response box is pressed. Touching the enter key will enter your response.



11. The **integer** and **decimal** question categories provide for numerical entry. The appropriate number keyboard automatically appears with the response box is pressed.



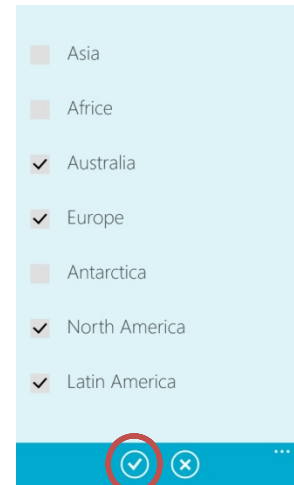
12. Touching the response set box with an **exclusive choice** question category produces a list of potential responses. The user touches the appropriate response to enter it.



13. Touching the response set box with a **multiple choice** question category produces a check box list of potential responses.

The user selects all appropriate responses and presses the **check** icon to submit them.

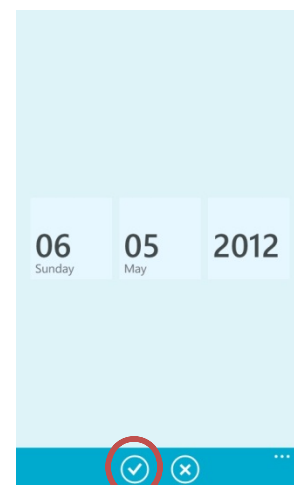
The **X** icon will cancel response submission.



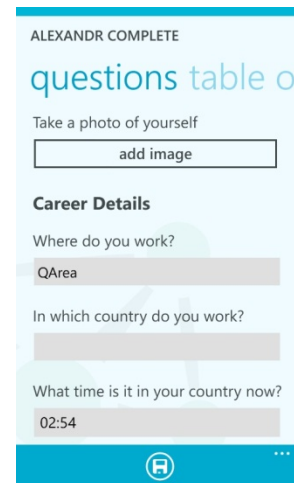
14. Touching the response set box with a **date** or **time** question category produces a scrolling menu to select the correct information.

The user selects all appropriate responses and presses the **check** icon to submit them.

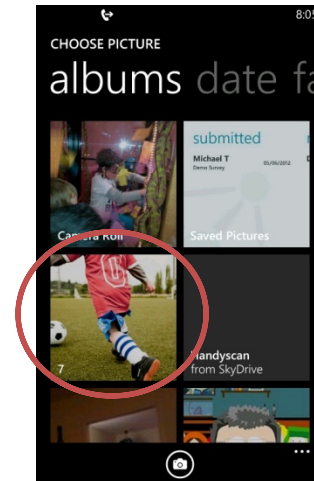
The **X** icon will cancel response submission.



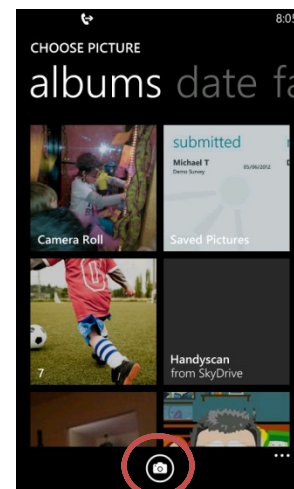
15. The **image** question type allows the user to submit a photo as a response. Pressing the **add image** button will open the picture gallery on the phone.



16. The user can select the image from previous taken photos stored in an album, by pressing on the album and then selecting the photo.

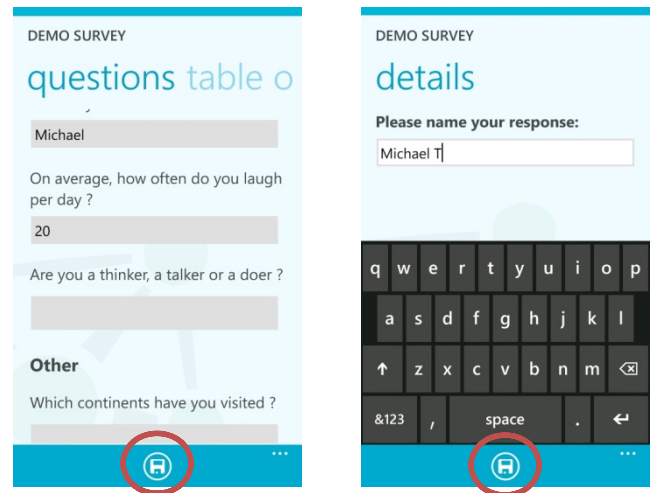


17. Alternatively, the user can press the camera icon, and take a picture to submit as a response.



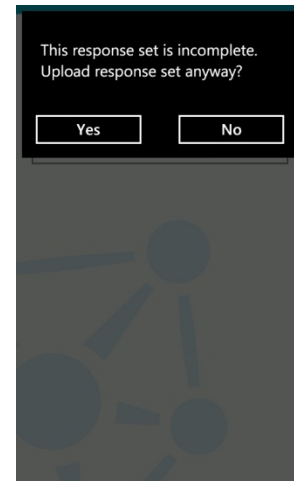
18. Pressing the **disk** icon will save a response set to the phone.

Users are prompted to enter a file name for the response set. Pressing the **disk** icon will enter the file name.



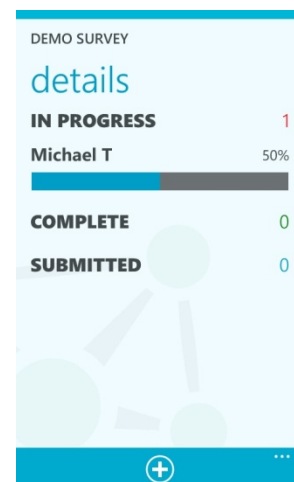
19. The user will be prompted whether or not to submit the response to the server at this time. Selecting **Yes** sends the response set to the server. Selecting **No** saves the response set to the phone.

NOTE: If any of the questions have not been answered, the user will be reminded that the response set is incomplete.

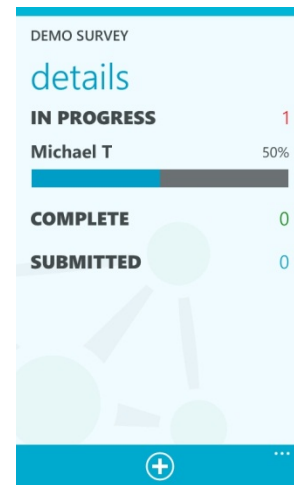


20. Upon completion of the saving and submission options, the user is returned to the **survey details** screen. The details page tracks response sets in three categories.

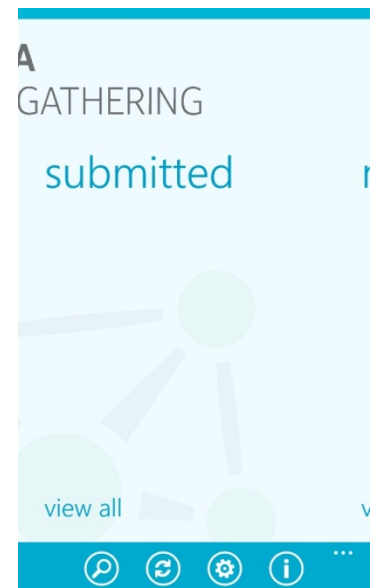
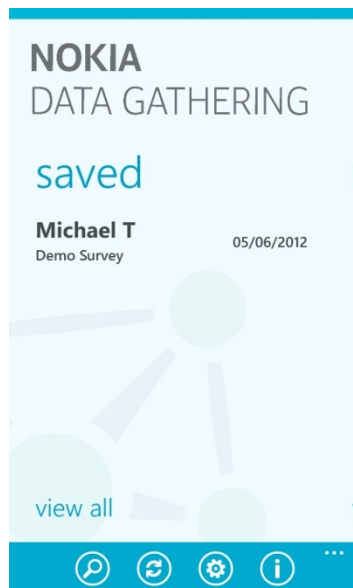
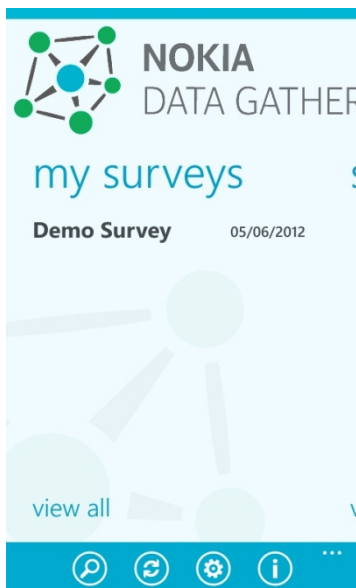
- Response sets saved to the phone before they are completed are listed under **IN PROGRESS**, with a status bar.
- Response sets listed as **COMPLETE** have been finished and saved to the phone but not submitted to the server.
- **SUBMITTED** response sets have been sent to the server, whether or not they are complete. Once submitted a response set cannot be altered.



21. Pressing the **plus** icon opens a new response set for the same survey. The user can also return to the main page by touching the phones **BACK** button.



Managing Surveys and Response Sets

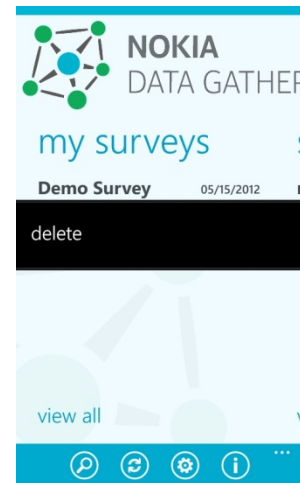


1. The main page automatically updates to reflect the addition of response sets that are either saved to the phone or submitted to the server, including information on when it was saved or submitted.

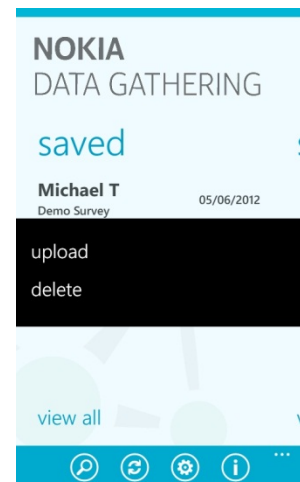
Users can manage surveys and responses from any of the screens on the main page, by pressing and holding the file name of a survey or response to bring up the context menu.

2. **MY SURVEYS Screen** – Touching a survey will open a blank response set. Pressing and holding a survey name will open a context menu with the option to delete the file from the phone.

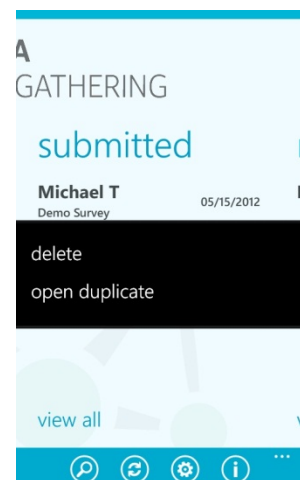
NOTE: Deleting a survey will delete all associated responses saved on the phone



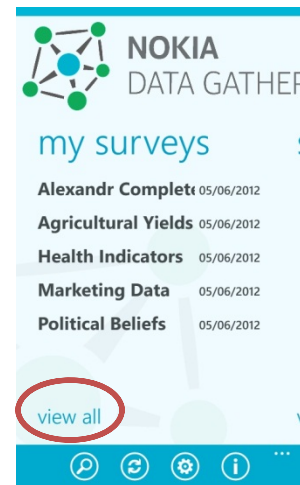
3. **SAVED Screen** – Touching a response set will reopen it and allow the user to modify or complete the data entry. Pressing and holding a response set file name, will open a context menu with the options to **delete** the response set from the phone, or **submit** the it to the server.



4. **SUBMITTED Screen** – Touching a response set will open a read only version. Pressing and holding a response set will open a context menu with the options to **delete** the response set from phone memory, or creating a **create duplicate** in the saved category for modification.



5. Surveys and response sets are listed on the main page with the most recent files at the top. When more than five surveys or response sets are listed the user can press the **view all** link to see the complete list.



6. Long lists of surveys or response sets can be further sorted, by pressing the **filter** icon.

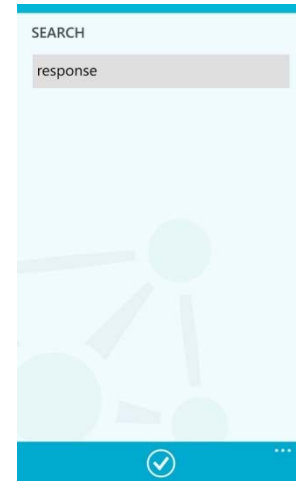


7. Surveys and response sets can be sorted over a range of dates that they were downloaded, saved, or submitted. The user sets the start and end date and presses the **check** icon to set the filter.

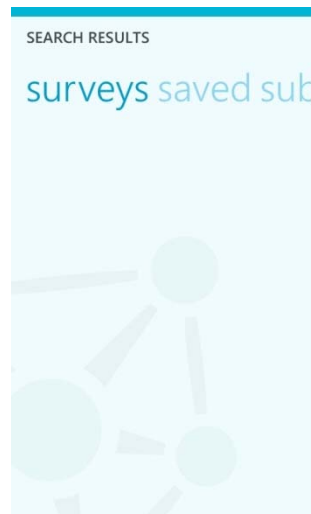


Options Toolbar on Main Page

8. **SEARCH** – Pressing this icon opens the search panorama screen that allows for search by keyword.



SEARCH results are presented on a panorama screen that shows matching results within the **my surveys**, **saved**, and **submitted** categories.



9. **REFRESH** – see entry #6 in the **Nokia Data Gathering Walkthrough** section.



10. **SETTINGS** – see entry #4 in the **Nokia Data Gathering Walkthrough** section.



11. **INFORMATION** – Pressing this icon will bring the user to the **ABOUT** page that provides an overview of NDG, contact information, and software version number.

