

RDM+



Remote Desktop for Mobiles

For Windows Mobile 2003 / 2005 (5.0) / 6

Introduction

RDM+ (Remote Desktop for Mobiles) is a communication tool that gives you the unique ability to connect to your desktop computer through the handheld and interact with it remotely. With Remote Desktop for Mobiles you can not only observe the remote desktop on the screen of your mobile device but perform different usual keyboard and mouse commands using instead joystick or buttons of your handheld.

While using **RDM+** you are able to send and receive mail, browse the Internet, edit files copying, cutting, pasting documents from one folder to another and to do hundreds regular things that you usually do sitting at your computer at home or in the office. The naturally and transparent interface, simple navigation and the list of commonly used options compensate to the full inconveniences of mobiles. On top of all this is the strong encryption algorithm that guarantees the highest level of data transfer protection.

Main features of application

- Compatibility with Windows 98/ME/NT4.0/2000/XP/2003/Vista;
- Both TCP/IP and HTTP protocols are supported;
- Ability to execute any console command (like ping, netstat, ipconfig) on your computer very quickly getting a result to your handheld. For that you don't need to access desktop of your computer. Additional history feature lets you to find and to re-send stored commands;
- Time saving built-in option letting you to reboot or shutdown computer remotely, control running applications and system services by one operation not being connected in remote screen mode;
- Address book for saving computer numbers and logins for several desktops. In addition you can specify the description of desktop that will help you to find needed computer in a large list;
- Advanced security option for assignment of a password at client startup. Address book is encrypted with this main password;
- Direct input mode – you can use the keyboard of your device for direct text input in remote desktop applications;
- Full-screen view and zooming modes. In full-screen mode you can see the remote desktop on the entire screen of your device. Zoomed mode lets you to enlarge desktop and to scroll it to review all fragments in details;
- Desktop orientation feature letting you to turn desktop on your screen for more convenient work with handheld;
- Setup options for choosing the default desktop pallet of connected desktop;
- **NEW** Virtual keyboard is now available for more quick and convenient work with text and screen management.

System Requirements

Supported devices:

The Remote Desktop for Mobiles client can be used on all devices which run Windows Mobile 2003 / 2005 (5.0) / 6 OS.

Network requirements for client:

The mobile device should support GPRS, EDGE or 3G technology. Also the operator of your mobile network should provide you with one of these services. Make sure that your mobile device has correct settings for the Internet access point (APN) for applications. **Internet APN** settings (which usually differ from WAP APN) you can get to know from your mobile network operator.

Requirements for desktop part of software:

The desktop part of software (**RDM+ Local Service**) will work on any Windows-based PC with minimal requirements to hardware resources. The desktop part will work on Microsoft Windows 98 / NT 4.0 / 2000 / XP / 2003 / Vista. Some internal control commands will work only starting from Windows 2000 / XP and higher. Most of internal commands use WMI (Windows Management Instrumentation) functions for operating. We recommend installation of all latest OS service packs and updates for correct work of the internal commands.

Security:

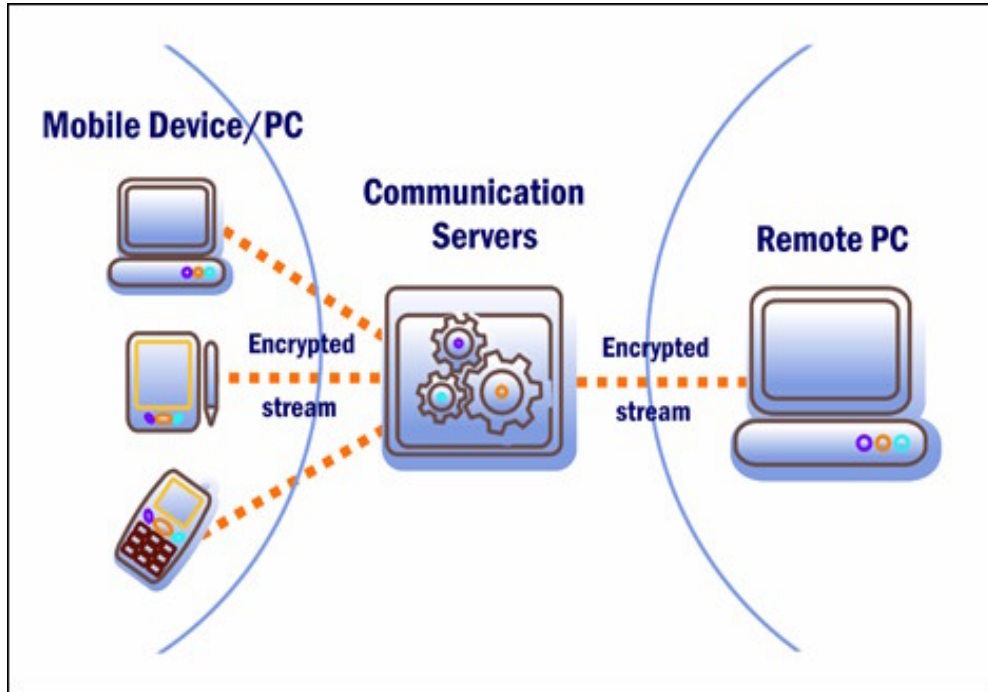
Remote Desktop for Mobiles works in encrypted mode where all data, screen images, mouse movement and keys are encrypted by 3DES (Triple DES) algorithm with 128 bits key. The 3DES key is generated by randomly each time at opening a session. This provides the most secure remote access solution. Server on remote computer has a logging feature where all connections are written to the log file.

Advanced security option lets you to assign main password at startup of the client. Without this password no one can access your client address book. Address book is encrypted by main password.

1. Overview

RDM+ software is ideal remote access solution for those who wants to have a remote access to the home or office computer but can't open a direct access to the computer for some reason.

In other words RDM+ is a hosted service made up of three components.



First of them is special middleware (local service) is installed on the computer you want to have access to, e.g. to your home or office PC that has always-on internet access. This computer registers and authenticates itself in RDM Online Service (second component). Local service initiates communication with server issuing HTTP requests (as usual Web browser) to check for new connections. Mobile client, the last constituent in this chain, is installed on your mobile.

RDM Online Service provides the most secure access to remote computer. There is no need to allow direct access to computer from Internet, punch holes through corporate firewall or make any special router settings. It works with both dynamic and static IP addresses, network and port address translation and firewalls that block incoming sessions.

RDM+ is launched on mobile. After connection to selected address RDM+ will send encrypted request to the communication server. The RDM communication server is a matchmaker - it listens to connection requests and mapping them to registered computers. When a match occurs, the server opens session between client and remote computer and allows the client to access the remote computer.

2. Desktop part

RDM+ software consists of **Desktop part (Local service)** for remote computer and **Client module** for your mobile device. To work with your computer from the mobile device, you should install both these components.

The **Desktop part** of RDM+ software contains two main applications. It is the **Local service** which waits for client connections and serves current connections and **RDM+ Control Panel** which is intended for control of the local service. Only control panel has visual user interface.

At installation of RDM+ on your computer the system service calling **RDM+ Local Service** will be installed and started automatically. You can find it in "My Computer" - "Manage" - "Services and Applications" - "Services". This service will be started under "Local system" account by default and with enabled option "Interact with desktop". The Local service must have a local system rights for properly work.

2.1. Installation

You should install the desktop part of RDM+ on all computers which you're going to use for remote access. Run the installation executable file "rdmplus_wm.exe" and follow instruction of installation wizard to completely install the product.

You can download this file from our site:

https://rdmplus.com/rdm/page.jsp?pr=rdm&p=rdm_download

Note: For correct work of the local service, you should install this software with the account having administrator privileges on the local computer. All previous versions should be removed before installation.

Run the file on your PC and follow all required steps.

At the final stage of installation you will be prompted to fill out the form to register your computer in RDM Online service. Please enter all necessary information and press "OK" button to finish the installation. If you are registering your computer for the first time, you should just denote your name and valid e-mail address.

Note: Please specify existing e-mail address in registration form exactly. You will receive automatic notification about registration to this email address. You should confirm or cancel your registration in RDM Online Service, by choosing one of web links in this email. Without confirmation you can't be connecting to the service in future.

RDM+ :: Register in RDM Online Service

Your computer should be necessarily registered in RDM Online Service. Please specify your name and email address.

Your name:
Smith_John

Your email:
Smith@gmail.com

Re-type email:
Smith@gmail.com

I already have registered computer number in RDM Online Service, and I want to assign it to this computer.

Enter Computer Identification Code:
[Empty field]

Note: The confirmation request will be sent to your email address. You should confirm your registration for the service. Please, make sure in accuracy of email you denote.

Cancel OK

If you're already registered in RDM Online Service and remember the CIC (Computer Identification Code) given you at registration, please check the corresponding checkbox and enter your Computer Identification Code.

Your computer's code assigned after registration in RDM Service can be discovered if clicking on the icon of RDM+ in system tray and choosing in pop-up menu **Details** item.

After the installation is finished Remote Desktop for Mobiles item will be created in the Windows menu. **Control Panel**, **Help** and **Uninstall** shortcuts can be discovered if choosing **Start / Programs** from the menu.

The icon of RDM+ control panel is also appeared on your taskbar. Local service is running right after successful installation. After clicking on the Control panel icon a pop-up menu is displayed. The information about your computer number can be discovered if you select the menu item **About**.

Important! To be able to connect with your computer, you need to create a new account in RDM+ Control Panel and to denote afterwards the same account in address book of the handheld client. You can get more detailed information on this point at [Account creation section](#).

2.2. Display driver

RDM+ can use the video hook driver for fast and efficient notification of screen changes. The driver uses a mirroring technology for the Windows OS family. It makes a mirror of the video buffer memory inside local service memory. Using this technology eliminates use of the CPU for intensive screen blitting, resulting in a big speed boost and very low CPU load.

The video hook driver will be installed and used with RDM+ software by default. But you can disable this driver through RDM+ Control Panel or uninstall it at all. Without video hook driver RDM+ will be capturing the screenshots in usual way for Windows OS using standard blitting function.

You can completely uninstall the video hook driver without uninstalling RDM+ software. For that, open the directory in which RDM+ software has been installed (the default installation directory is "\Program Files\RDM+") on a system disk) and run file "uninstall_driver.exe".

Note: After uninstalling the driver, you should reboot your computer to complete uninstalling process.

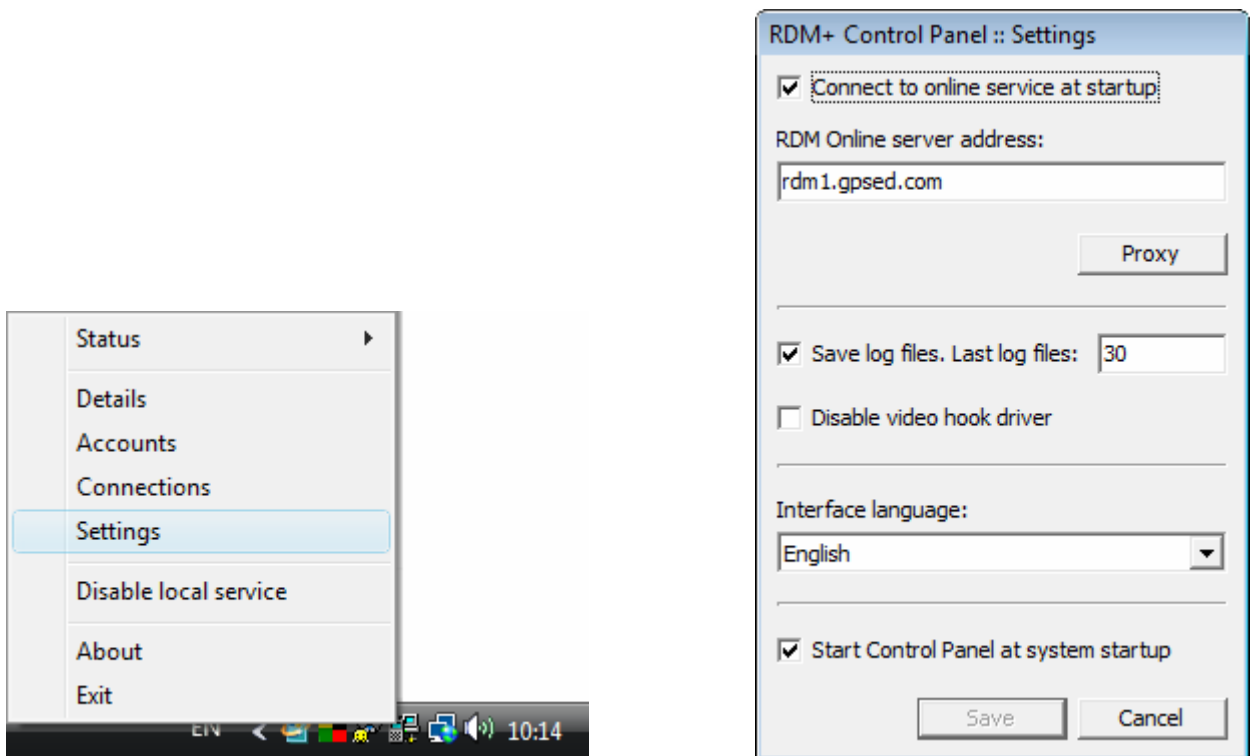
3. Control Panel Application

All control and settings parameters for the desktop part are performed through RDM+ Control Panel application. The Control panel can be called up if clicking to the icon of RDM+ Control panel on the task bar. You can use RDM+ Control Panel for checking the state of the local service, control of current client's connections, managing of accounts, setting parameters for online service and setting the local service options.

Note: RDM+ Control Panel is the separate application. It is intended only for control of the local service. All connections from the clients and connection to the online service is implemented in the local service. You can stop the control panel, but the local service will continue work.

3.1. Settings

To make any Local service settings through RDM+ Control Panel, click on menu item **Settings**. After changing any settings, you should save it and restart the local service.



The following local service settings are available in given section:

- **Connect to online service at startup**

If this checkbox is marked with a flag RDM local service will connect to online service automatically at start up. By default this option is marked.

- **RDM online server address**

The address of RDM online server can be specified in this string. Usually the address is already denoted by default and you should not make any changes.

If in your local network the proxy server is used, you should specify the proxy settings before connecting to RDM Online Service. For that, click the button "Proxy" and enter all required

information. Details about proxy settings, you can get to know from your network administrator.

- **Save local service logs & Last log files**

This option enables or disables storing of all local service operations in log files. In 'Storing last log files' option you can define the quantity of log files which will be stored. Each new log file will be created daily. Old log files will be automatically deleted to set free space for new logs.

- **Disable video hook driver**

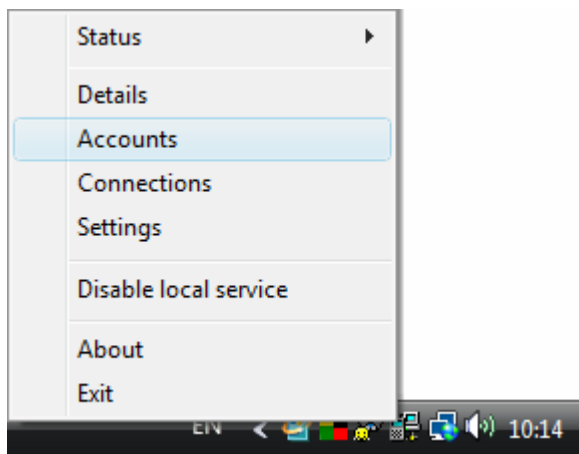
The video hook driver will be installed and used with Remote Desktop for Mobiles software by default. You can disable the work of this driver or uninstall this driver at all if any problems occur with its work. Without video hook driver RDM service will capture screenshots in usual way for Windows OS (uses BitBlit function).

- **Starting Control Panel at system startup**

When this option is enabled, an RDM+ Control Panel application will be starting at every system startup and user logon. Control Panel application will be starting minimized and its icon will be placed in system tray.

3.2. Account creation

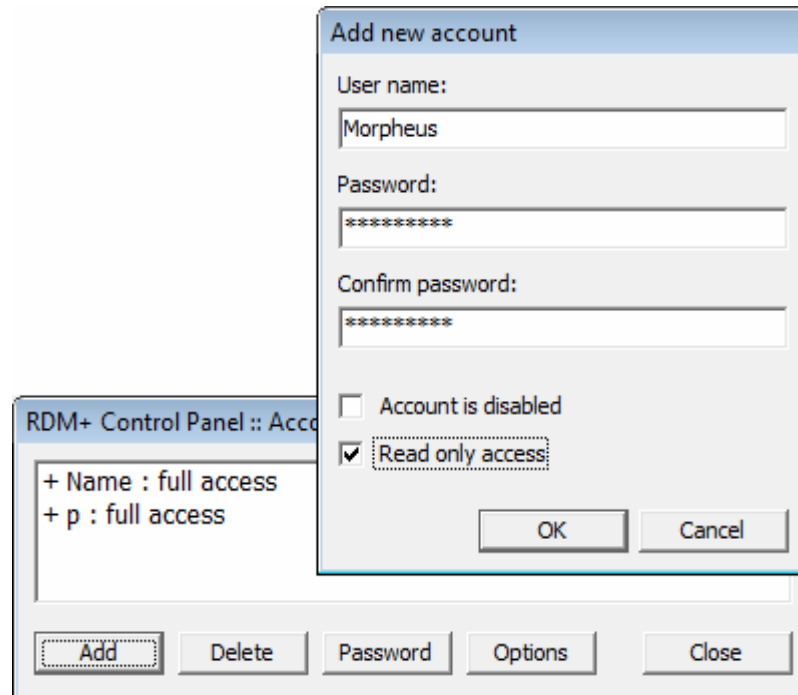
To be able to connect with your computer, you need to create a new account in RDM+ Control Panel and to denote afterwards the same account in address book of the mobile client. In order to create new account, click on icon of RDM+ Control panel on your task bar and select **Accounts** from menu:



An account section of control panel will open. Push **Add** button and enter the required information into appeared form.

In the dialog window, you should enter a new user name and password. The user name must be unique! The password will be masked by asterisks at entering and you should enter the same password twice for confirmation.

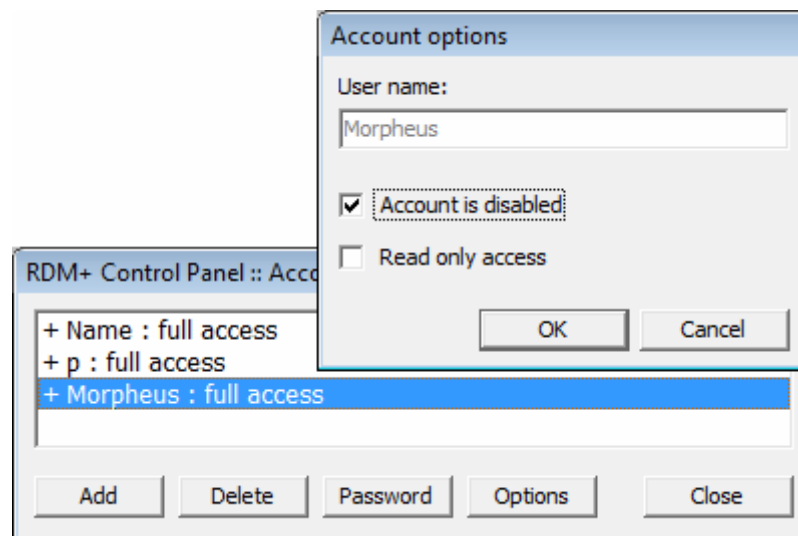
Note: The user name is case-insensitive. But the password is case-sensitive! In the address book of the client module you should enter the password exactly as it was specified in control panel.



In the address book of the client module you can add one of existing accounts which were added before in the RDM+ Control Panel.

3.3. Account options

To change options of existing account open the page **Accounts** in RDM+ Control Panel, select an account and click the button **Options**.



The following options are available for existing accounts:

- **Account is disabled**

If marking the checkbox with this option the selected user account will remain in accounts list and all its settings will be stored, but the user won't be able to connect with remote computer using this account.

- **Read only access**

If you mark **Read only access** option you won't be able to make changes or control anything on remote desktop, only view of desktop is allowed. Any commands from the client will be ignored. Mouse and keyboard control are disabled.

3.4. Active connections

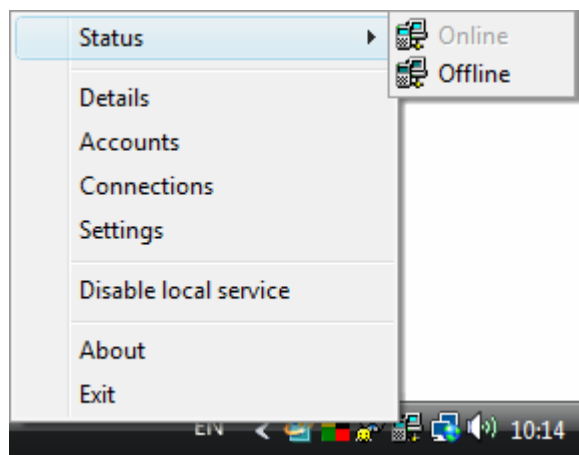
You can discover how many clients are simultaneously connected to your computer choosing from Control panel application **Connections** menu item. You can send a message to the connected client or disconnect it choosing the corresponding button in Connections window.

3.5. Local service status and connection

Local service is running right after successful installation. You can disable it choosing in control panel **Disable local service** menu item. In this case online service won't be running at computer start.

You can also change the status of Local service to Offline if your current status is online. That's you will be disconnected from RDM Online service. The icon of the Local service in system tray will change.

The status can be set in **Status** menu section of the Control panel application.



4. Client part

Installation

The client module is included into installation file of the desktop part. The default installation directory is "C:\Program Files\RDM+\". Exe file for your device is in subdirectory "Client". Install it on your device using special management software for your device. More details about installation of the applications on handheld you can find in user manual of your device, or you can get to know it on Web site of device manufacturer.

You can download the client directly to your mobile device. The WAP download location is: **wap.shapeservices.com**

Open the page 'Download' and choose the right client module for your device.

If for some reason you can't download the client module directly, or error occurs at download, you can download files from our site. Open the page 'Download' in your computer browser: https://rdmplus.com/rdm/page.jsp?pr=rdm&p=rdm_download

5. Registration and trial

There is no difference between trial and commercial version in work and design. The difference is in term of use: **You may use trial version for full 7 days.**

After the first launch of **RDM+** you will be asked to insert the registration key, which you have received with the purchase of the program.



If you want to use **RDM+** in trial mode, click **Trial** button.

If you want to register RDM+ insert the registration key in the corresponding field and choose the item **Register** in the menu. If you have inserted the right registration key, the program will register and there will be no need to insert the license code once more. If the registration key is wrong, the program will show the corresponding message and will not be registered.

If you delete the program and then install it once more, or reinstall the program to another mobile device, your registration key will not be valid any more.

If you have changed your mobile device for a new one, please contact rdmsupport@shapeservices.com to reset your registration key in this case.

6. Address book

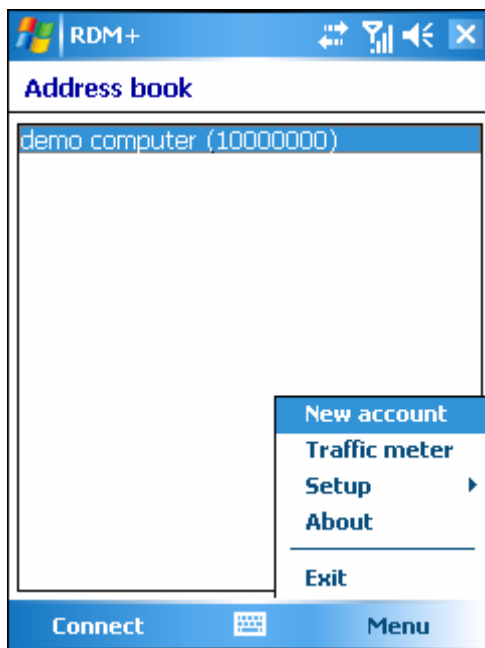
At RDM+ launch the window with address book opens. The address book contains the list of computers which you used to connect to.

At first start the address book is empty. You should select the menu item **New account** to add a new record into address book.

In the new record dialog you should enter the number of computer which you received at registration of RDM+ service while installing the desktop part. Then you need to enter your account (user name and password) which you created in RDM+ control panel.

In Description field you can specify a short description text for computer with this number, which will help you to find a certain computer in large list of records. If the description field remains unfilled only the computer number and user name will be displayed.

Please, save your record clicking **Save** button.



7. Test connection

You can test the work of the Remote Desktop for Mobiles application connecting to our test server. You will make sure that the client can work on your mobile device and will see a simple demonstration of the client abilities.

The test server entry is already added into the client address book by default. If not, you can add the computer number "10-000-000" to address book of the client and specify the user name as "demo". No password is required.

Choose the menu item **Connect** for connection to the test server. After successful connection, the client will display the remote desktop.

The test server works in demo mode. It only shows the work with the remote desktop and displays several examples of management commands execution. The complete list of management commands, mouse and keyboard controls is disabled.

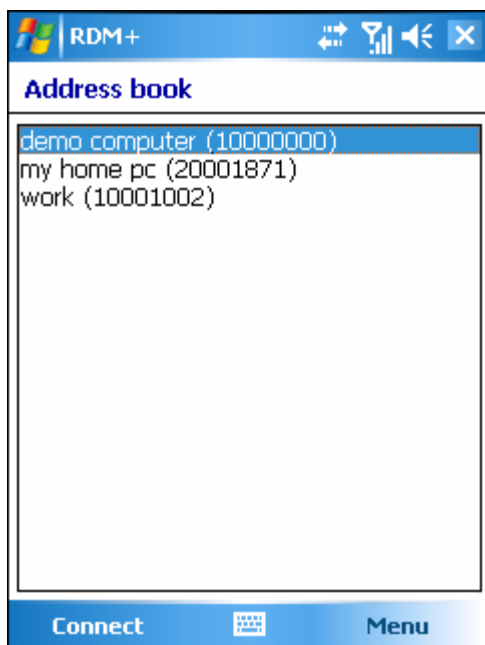
Note: The test server works with the latest version of the client. The latest version for various mobile devices can be downloaded from our site: https://rdmplus.com/rdm/page.jsp?pr=rdm&p=rdm_download

8. Connecting & Management

You can freely connect to any saved address choosing the menu item **Connect**.

In case of successful connection to the selected remote desktop you will see a notification message informing you about server readiness to start your work with computer.

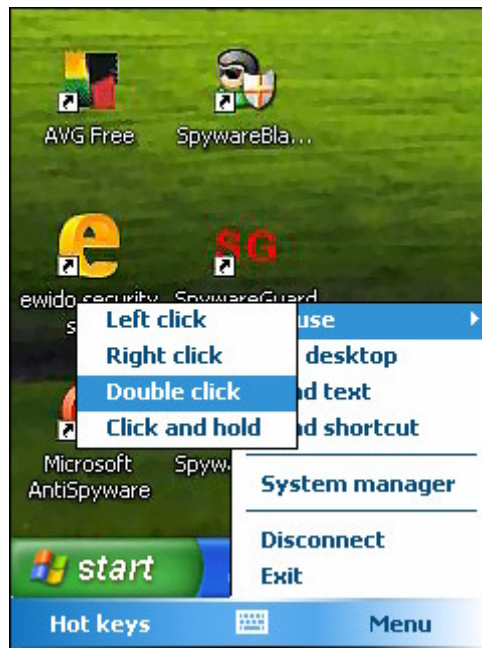
In case of unsuccessful connection you will see the error message.



9. Remote desktop control

You can control the remote desktop by using both onscreen menu and desktop mode hotkeys. Following options are available in main menu:



- **Mouse** - This menu item is used to perform left, right, and double clicks of Mouse.

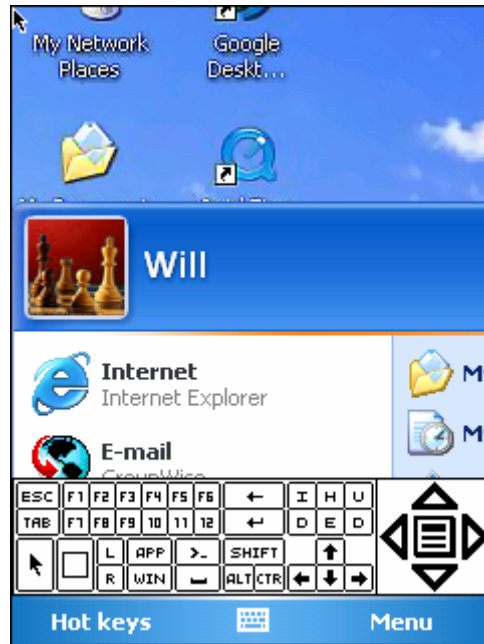


Note: To move mouse cursor you should use Right, Left, Up and Down navigation keys or joystick on your device.

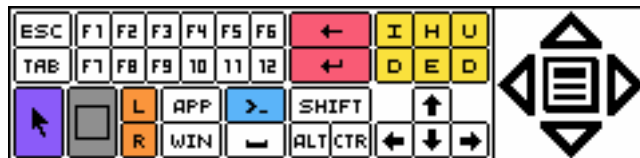
- **Zoom in**– Given menu item serves to enlarge the view of current desktop. **Zoom in** item is available if desktop size is larger then the device's screen. You can zoom in twice and also restore the initial view of the desktop by choosing **Full desktop** item in the menu.



- **Scroll mode** is available only on pocket PC. In **Zoom in** mode you can scroll your desktop without mouse cursor clicking the bottom left button on the keyboard  and using stylus.
- **Virtual keyboard** – You can use it to manage the remote screen faster and more convenient. To open the keyboard window click the center of the icon in the screen bottom right. 



Use stylus to operate with text, zoom in and out the screen and etc. This functionality also available through the **Hot keys** menu. And it is the only way for smartphones.



Buttons' meanings are as follows:

Violet button stands for entering the **scroll mode**

Gray button – zoom in and out

Orange group – Left and Right mouse buttons

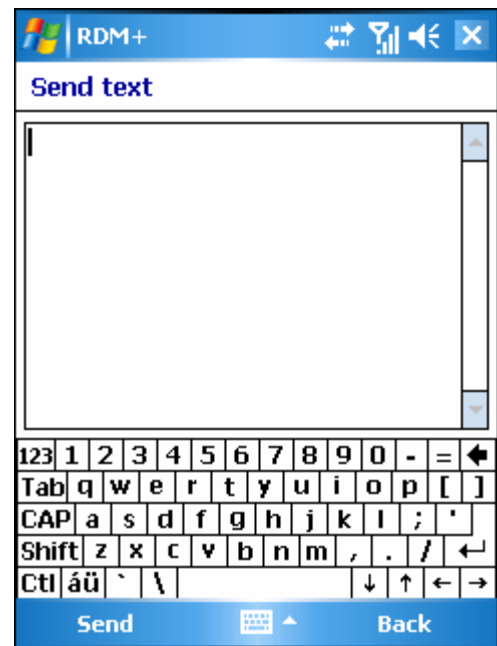
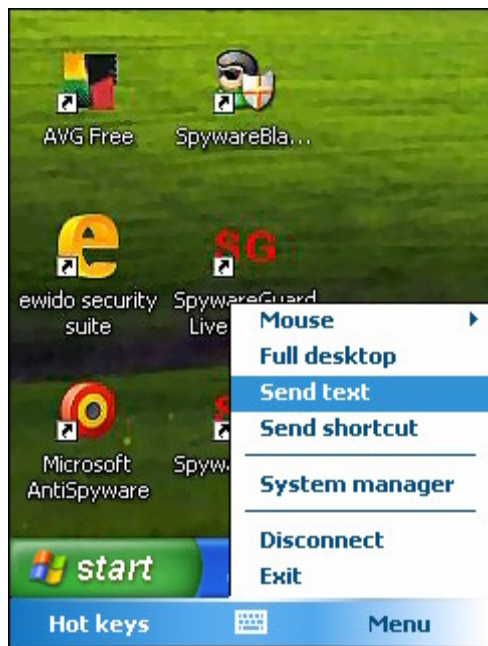
Blue button is for quick start of **Console commands**

Yellow group – Insert, Home, Page Up, Delete, End, Page Down respectively

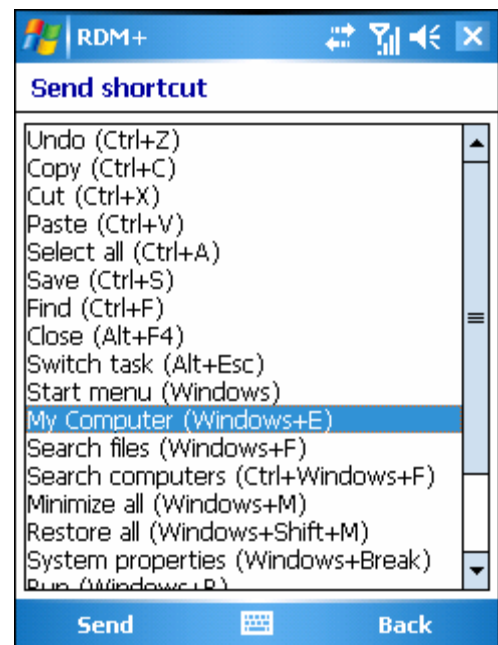
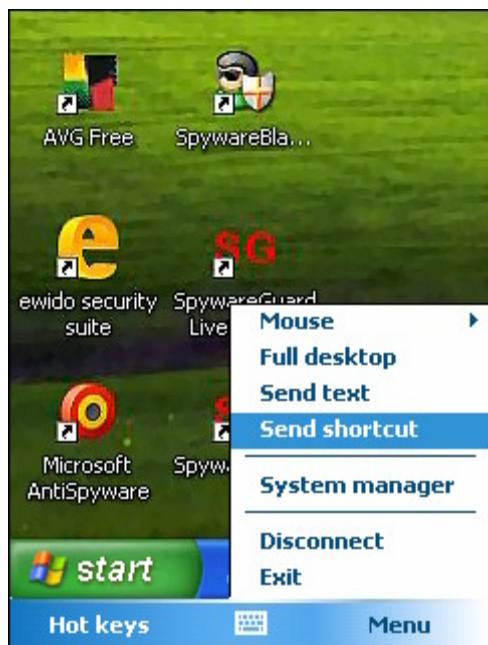
Pink group – Backspace and Enter respectively

- **Send text** - You can enter the text that will be transferred to remote host just like you enter it from a keyboard. Along with the plain text, you can also insert control keys and shortcuts (E.g. Alt+ F4).

Note: In order to transfer # symbol, you should enter it twice (##) as # key can be involved in other control key combinations as the first symbol (E.g. my password #Enter)



- **Send shortcut** –You can select a shortcut to send it to remote host, like entering it from keyboard.



- **Disconnect** – You will be disconnected from the host, choosing this menu item.

10. Hotkeys Usage

Following hotkeys are available in program:

[Arrow Left/Right/Up/Down] – move mouse cursor

[Enter] – Left click and Left double click if push twice

[0] – Send text dialog

[1] – Left click

[2] – Left double click

[3] – Right click

[4] – Send shortcut dialog

[6] - Click & Hold

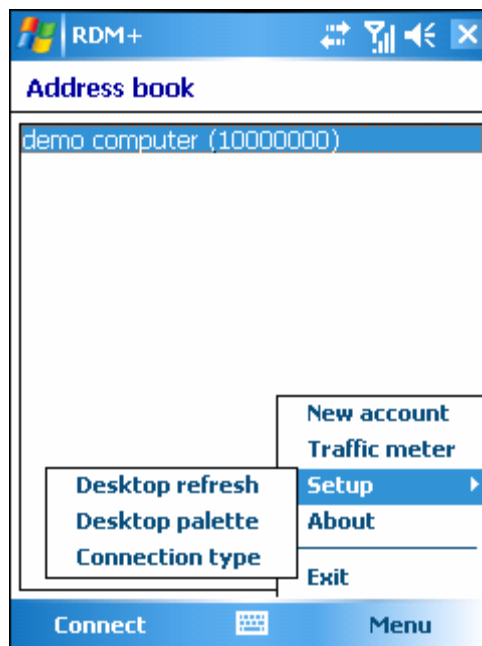
[8] – Zoom in

[9] – Full desktop

SelectKey is usually the central navigation key or Joystick on your device. The work of this key is different depending on control mode which is currently in use. That is in **Direct input mode** this key performs Enter command while in mouse cursor mode pressing of this key means a mouse click.

11. Setup menu

You can change settings of application in **Setup** menu.

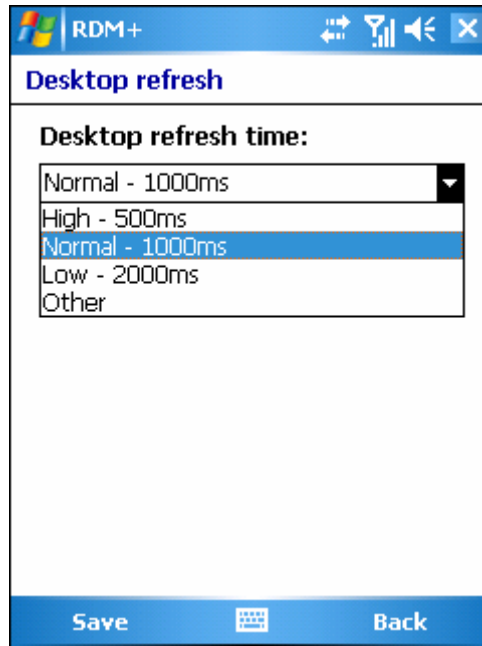


Note: After changing any parameter in Setup menu, don't forget to save your new settings by choosing a **Save** item in menu. Otherwise your changes won't be saved.

There are following subsections in Setup menu:

- **Desktop refresh**

You can change the remote desktop refresh rate. Refresh rate is specified in milliseconds, the possible value is from 200 to 30000. Increasing this value you can reduce data traffic, but the time interval between changes of remote desktop will be increasing. By default desktop refresh is 1000 ms.



- **Desktop palette**

This item defines color palette used at transferring a picture of remote desktop. By default 8 bits palette (256 colors) is used. Decreasing the palette value you can reduce the data traffic and make faster refresh of the desktop, but a picture of screen will be degraded. For best quality pictures with fast 3G connection, you can try to use a 24 bits palette (true color).

- **Connection type**

The application supports both **HTTP** and **TCP/IP** connection types. If is problematic to connect via TCP/IP connection type, please select HTTP connection type in this section:

12. Support

SHAPE Services provides online information to help your troubleshooting problems. You can download software updates and submit your problems online.

Looking for update or trial installation? See Download Page:

https://rdmplus.com/rdm/page.jsp?pr=rdm&p=rdm_download

If you need further assistance after reading this manual, please fill out our Support form:

<https://www.rdmplus.com/rdm/text.jsp?pr=rdm&j=support>

Alternatively, you can send us an email at rdmsupport@shapeservices.com

Our Support Team will answer your email within two business days. We will be glad to answer all your questions.