

2X Manual

2X Client iPad & iPhone
v10.1





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INSTALLING 2X CLIENT FOR IPAD & IPHONE

The instructions and procedures for installing and configuring 2X Client for iPad and iPhone are the same. The only notable difference is the size of the display screen.

Any other differences will be noted in this manual.

Downloading the 2X Client App

There are several ways to download the 2X Client app for your iOS device.

Click on the link provided below, visit our website at www.2x.com or visit the [itunes](#) store online.

The screenshot shows the iTunes store page for the 2X Client app. At the top, it says "2X Client By 2X Software Ltd" with a "View More By This Developer" link. Below this is a "Description" section with the text: "Stay connected to your home or office Windows PC with the free 2X Client for iPad & iPhone. 2X Client allows you to simply connect, via RDP (Remote Desktop Protocol), to your remote Windows desktop & applications at work or home. 2X Client also connects to 2X VirtualDesktopServer to seamlessly run published Windows applications such as... More". There are links for "2X Software Ltd Web Site" and "2X Client Support".

The "Screenshots" section shows two images. The left one is a red racing car with the 2X logo on the front. The right one is a screenshot of the app's "Connections" screen, which lists three connections: "2X Work", "2X Mom's Office", and "Home Server", each with an "Edit" button and a right-pointing arrow. The bottom of the app screenshot shows a dock with icons for "Connections", "Settings", and "About".

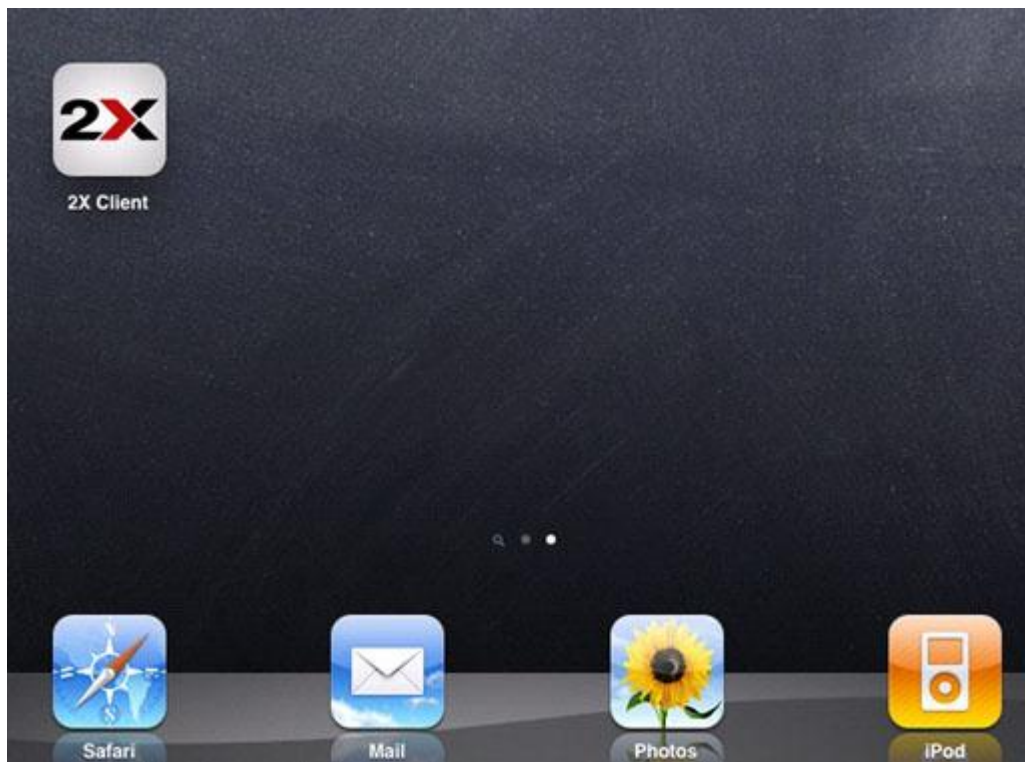
On the left side of the app page, there is a "View In iTunes" button and a note: "This app is designed for both iPhone and iPad". Below that, it says "Free" and lists details: "Category: Business", "Released: Dec 02, 2010", "Version: 9.0.1010", "9.0.1010 (iOS 4.0 Tested)", "4.1 MB", "Language: English", "Seller: 2X Software Ltd", "© Copyright 2005-2010 2X Software Ltd", and "Rated 4+".

Under "Requirements", it says: "Compatible with iPhone, iPod touch, and iPad. Requires iOS 3.1.3 or later".

Under "Customer Ratings", it says: "Current Version: ★★★★★ 5 Ratings".

Click [here](#) to download the 2x Client app now!

Desktop of iPad Device



2X Client for iPad Desktop

After you have installed the 2X Client, you can now launch the program so that you are able to access your published applications.

To launch the app, tap on the icon for the 2X Client icon located on the desktop of your iOS device.

Desktop of iPhone Device

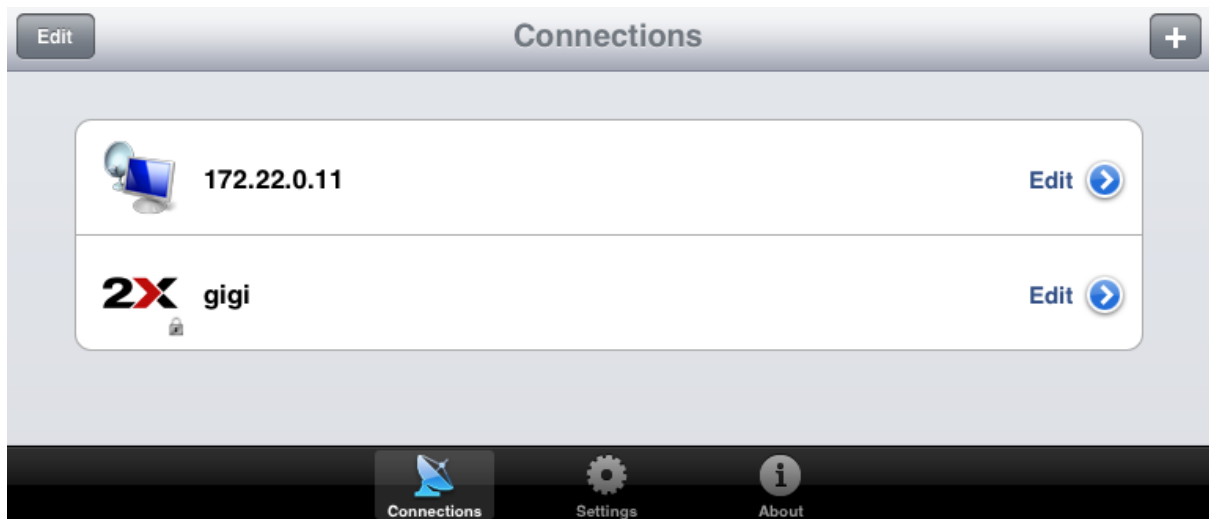


2X Client for iPhone Desktop

2X Client for iPhone works just as seamlessly as it does for the iPad device.



CONNECTIONS



2X Client for iPad Connections

The connections screen lists all of your 2X and RDP connections. You can add a new connection, edit an existing connection or delete an existing connection on the Connections screen.

To add a New connection, tap on the '+' icon.

To delete a connection, tap on the Edit button in the upper left hand corner of the screen.

To edit an existing connection, tap on the Edit function on the connection in the list.

Adding a New Connection



2X Client for iPad – Connections

The very first time that you open the 2X app for iOS, no connections will be detected. You will be prompted to tap on the '+' icon to add a new 2X Connection or a new RDP Connection.



2X Client for iPad – New Connection

Choose to configure a new 2X Connection or a new RDP Connection.



Adding a New 2X Connection

The screenshot shows the 'New 2X Connection' screen on an iPad. At the top, the status bar shows 'iPad', signal strength, '15:46', and '49%' battery. The screen has a 'Back' button on the left and a 'Save' button on the right. The main content area is titled '* Items are required' and contains the following settings:

Alias	>
Address*	>
Port* 80	>
Username*	>
Password	>
2X Mode Gateway Mode	>

Below this is the 'Additional Settings' section:

Display	>
Local Resources	>
Experience	>

2X Client for iPad – New 2X Connection

Alias

Enter an Alias name that describes your iOS 2X connection. The 'Alias' will give the connection a display name for better readability.

*Address

Enter the primary server name or IP address of the connection. This should be the name or IP where the 2X Secure Client Gateway resides.

*Port

Enter the port number. For all 2X Connections the Default port is 80 or 443. In order to connect through the 2X Secure Client Gateway you will need to set the port number that was configured on the 2X Secure Client Gateway Port on the Connection Settings page.

*User Name/Password

Enter your account user name, i.e.: user@domain. For a iOS 2X connection the Password is not required, but for best security you should enter a password during login. Your user name and password should not exceed 127 characters.

* denotes 'Required'

2X Modes



2X Client for iPad - Gateway Mode

Gateway Mode: Clients are connected with the 2X Secure Client Gateway and the session connection is tunneled through the first available connection. This mode is ideal for servers which are only reachable via the gateway and do not require a high level of security.

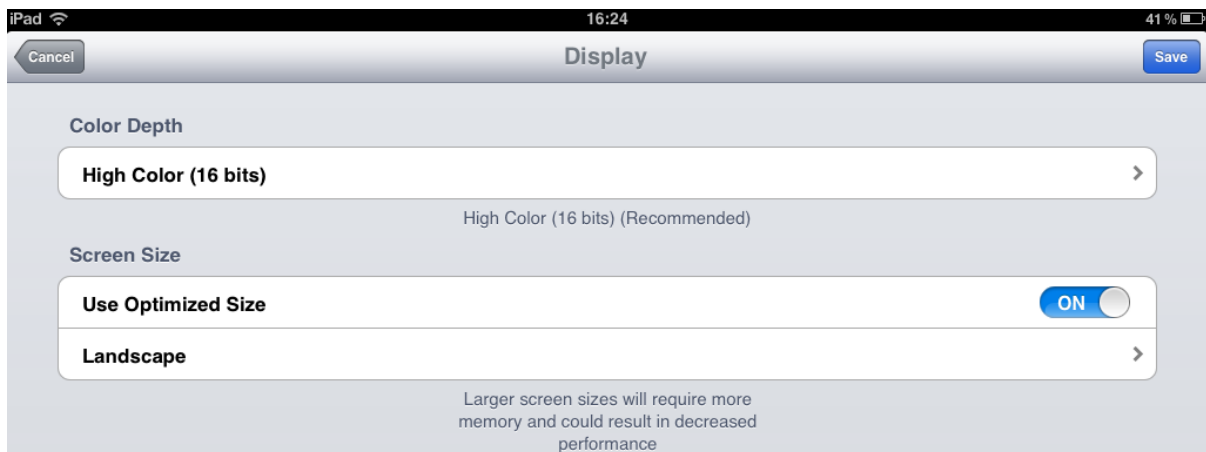
Direct Mode: Clients first connect to the 2X Secure Client Gateway for the best available Server and then connect directly with that particular Server. This is best used when the client and the server are on the same network.

Direct Mode is the most efficient connection mode, since the gateway is temporary with a minimal data load.

Gateway SSL Mode: This connection is created as in the Direct Mode option, but the connection to the 2X Secure Client Gateway is encrypted.

Direct SSL Mode: Clients first connect to the 2X Secure Client Gateway for the best available with an encrypted connection. Server and then connect directly with that particular Server.

Display Settings



Display Settings for iPad

Color Depth

Select your preferred color resolution by choosing from the options available below (High Color or 16-bits is recommended)



Color Depth Settings for iPhone

Screen Size

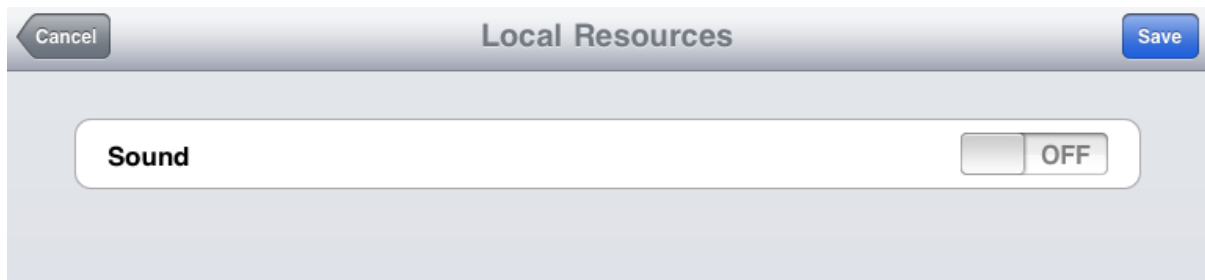
Switch 'Use Optimize Size' ON, in order to use the most suitable screen resolution.

You can choose between screen orientation between Landscape and Portrait.



Screen Orientation Setting

Local Resources

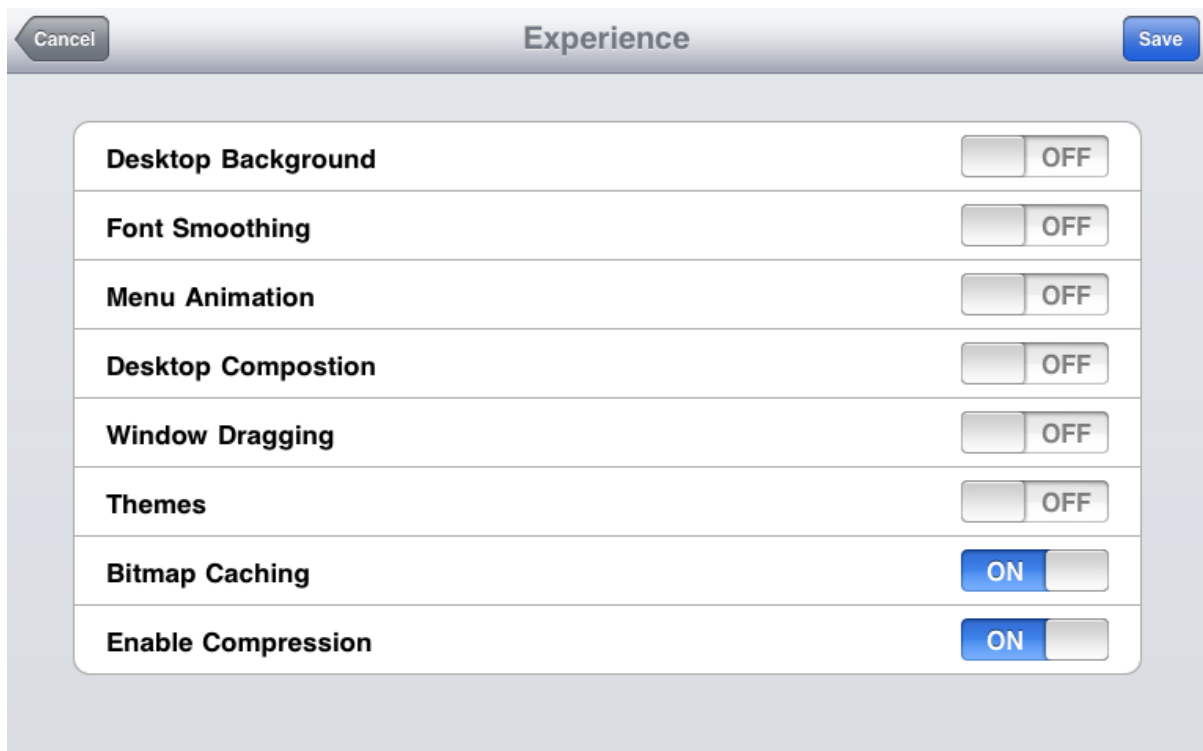


2X Client for iPad - Local Resource Settings

Choose to have the sound turned on or off.



Experience Settings



2X Client for iPad - Experience Settings

Desktop Background: When enabled, this setting shows the desktop background image.

Font Smoothing: This setting smoothes out all fonts for improved readability.

Menu Animation: When set to 'OFF', the menus will show instantly.

Desktop Composition: Desktop composition changes the way windows are drawn on the screen.

Window Dragging: Shows content when dragging.

Themes: Use the terminal server 'themes' when enabled.

Bitmap Caching/ Enable Compression: It is recommended to enable compression and bitmap caching which allows you a more efficient connection.

Note: If you are using a connection to a remote computer in a local network that runs at 100MBit or up, it is usually safe to have all of the experience options turned on.

Adding a New RDP Connection



The screenshot shows the 'New RDP Connection' interface on an iPad. At the top, there's a status bar with 'iPad', signal strength, '16:12', and '43%' battery. Below that is a navigation bar with 'Back' and 'Save' buttons. The main content area has a title '* Items are required' and a list of input fields: 'Alias', 'Address*', 'Port*' (with '3389' entered), 'Username', and 'Password'. Below these is a section titled 'Additional Settings' with three options: 'Display', 'Local Resources', and 'Experience'. At the bottom, there's a 'Connect To Console' toggle switch which is currently turned ON.

2X Client for iPad - Adding a New RDP Connection

2X Client for iOS is able to connect to multiple terminal server desktops using an RDP connection. To add a new RDP connection, tap on the “+” symbol and then choose ‘RDP Connection’.

Alias

Enter an Alias name that describes your RDP connection. The ‘Alias’ will give the connection a display name for better readability.

*Address

Enter the primary server name or IP address of the connection. This should be the name or IP where the 2X Secure Client Gateway resides.

*Port

Enter the port number. For all RDP Connections the Default port is 3389.

In order to connect through the 2X Secure Client Gateway you will need to set the port number that was configured on the 2X Secure Client Gateway Port on the Connection Settings page.

*User Name/Password

Enter your account user name, i.e.: user@domain. For an iOS 2X connection, the Password is not required, but for best security you should enter a password during login. Your user name and password should not exceed 127 characters.

** denotes ‘Required’*

Connect to Console

You can choose to connect to the RDP desktop as console by turning on this feature.

Additional Settings for RDP Connections

The additional settings of Display, Local Resources and Experience, look and perform exactly the same as when you are configuring a 2X Connection. Please click [here](#) to view those settings.



Editing an Existing Connection



On the Connections screen tap on *'Edit'* to make changes to the alias name, IP address, port, username or password.

For an existing 2X Connection you are also able to edit or change the 2X mode.

You can also edit the Display, Local Resources and Experience settings.

Deleting an Existing Connection



To delete an existing 2X connection or an existing RDP connection tap the 'Edit' icon located in the upper left hand corner of the Connections screen.



2X Client for iPad – Editing an Existing Connection

All of your connections will appear with a red icon next to them.





2X Client for iPad – Editing an Existing Connection

Select which connection you want to delete, and the red icon next to that connection turns.

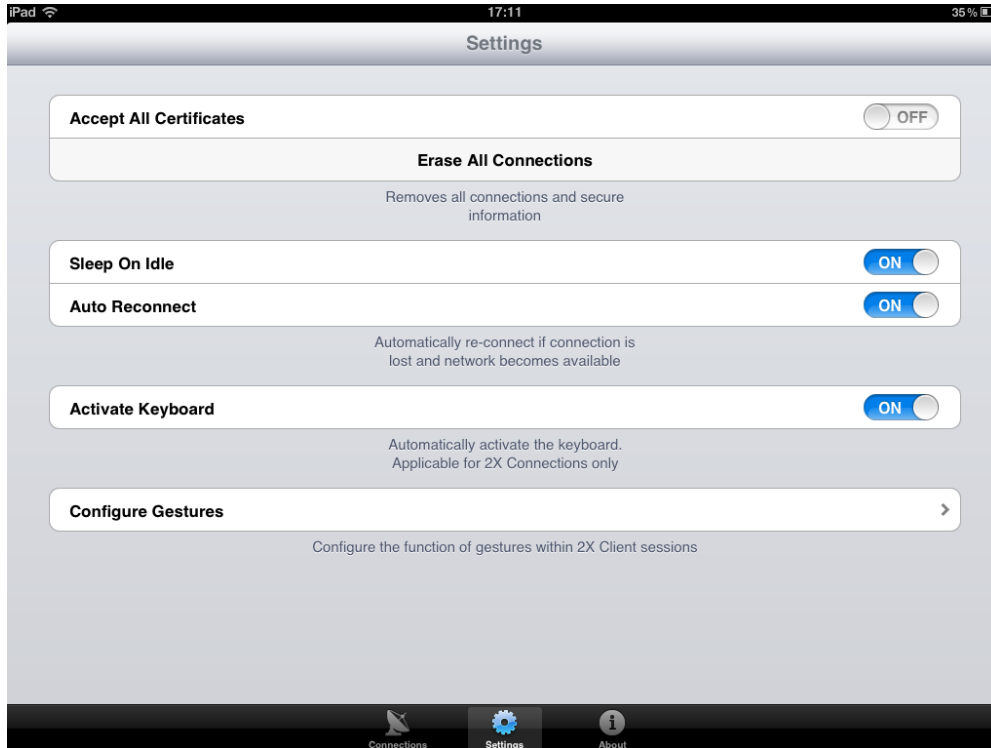
Then tap on the *'Delete'* button to permanently delete the connection.

Tap on *'Done'* when finished.



DEVICE SETTINGS

Settings



2X Client for iPad -Settings

Tap on the 'Settings' icon to configure the settings for your iOS device when using 2X Client.

Accept All Certificates

When set to 'ON', all certificates will be accepted automatically.

Erase all Connections

This setting will remove all connections and secure information. You will be prompted to erase or cancel if you choose to remove all connections and secure information.

Sleep On Idle

If set to 'ON', and the device is not used for a specific amount of time, the device will go into sleep mode if the connection is lost.

Auto Reconnect

If set to 'ON', your device will reconnect automatically if your connection is lost and then the network becomes available.

Activate Keyboard


When set to 'ON', the keyboard will be activated automatically when entering information. This feature is only available if 2X Agents are installed on the server.



Configure Gestures


The actions for available gestures can be configured using this option.


The following gestures are supported by the 2X Client:

Please note that some of the action cannot be configured.

1 Finger Gestures		
		
Swipe		
Gesture	Default Action	Configurable
Swipe Up	Pan Desktop Up	No
Swipe Down	Pan Desktop Down	No
Swipe Left	Pan Desktop Left	No
Swipe Right	Pan Desktop Right	No
Tap	Left Mouse Click	No
Long Press	Right Mouse Click	No

2 Finger Gestures		
 		
Swipe Pinch		
Gesture	Default Action	Configurable
Swipe Up	Mouse Wheel Up	Yes
Swipe Down	Mouse Wheel Down	Yes
Swipe Left	Toggle Keyboard	Yes
Swipe Right	Toggle Mouse	Yes
Pinch In	Zoom In	No
Pinch Out	Zoom Out	No

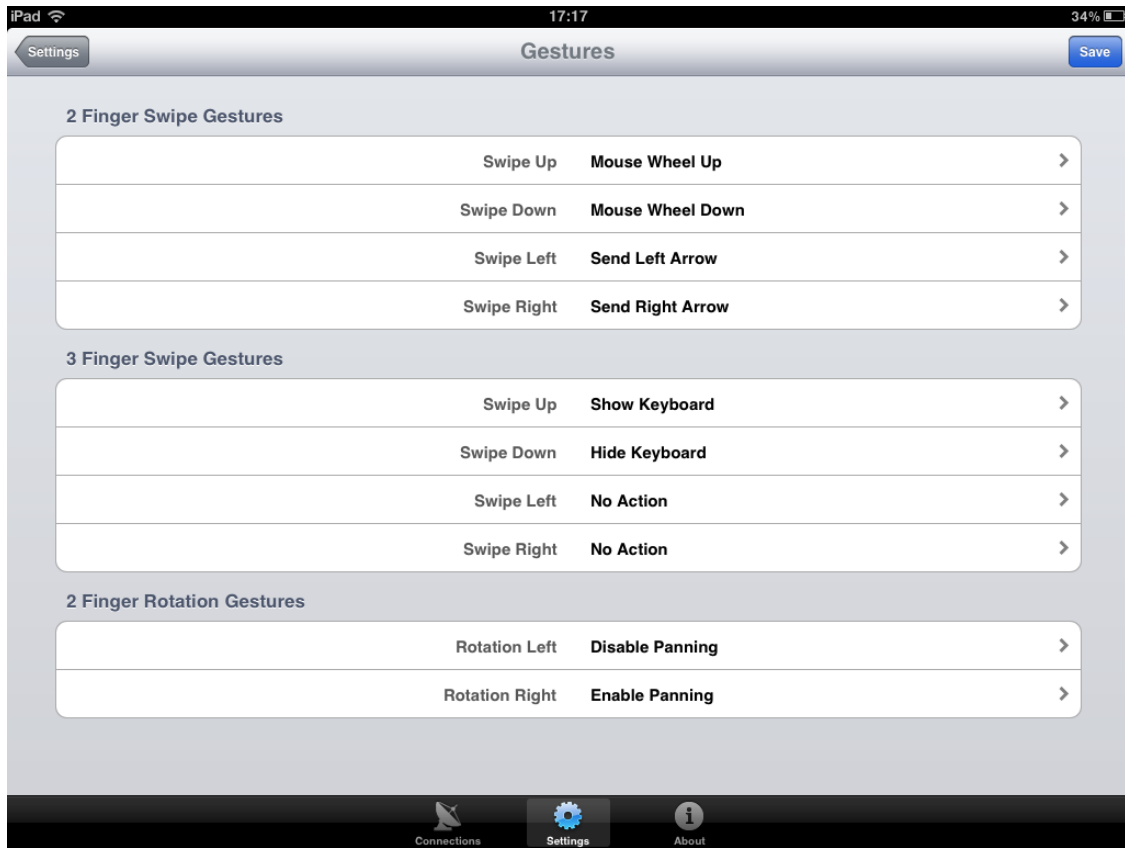
2 Finger Rotation Gestures		
		
Rotate Left Rotate Right		
Gesture	Default Action	Configurable
Rotation Left	Enable Panning	Yes
Rotation Right	Disable Panning	Yes

3 Finger Gestures		
		
Swipe		
Gesture	Default Action	Configurable
Swipe Up	Show Keyboard	Yes
Swipe Down	Hide Keyboard	Yes
Swipe Left	No Action	Yes
Swipe Right	No Action	Yes

All the configurable gestures can be set to one of the following actions:

Actions Available
No Action
Toggle Keyboard
Show Keyboard
Hide Keyboard
Toggle Mouse
Show Mouse
Hide Mouse
Send Page Up
Send Page Down
Send Up Arrow
Send Down Arrow
Send Left Arrow
Send Right Arrow
Mouse Wheel Up (Scroll Windows Contents)
Mouse Wheel Down (Scroll Windows Contents)
Enable Panning
Disable Panning

Please see below for a typical example of typical gesture configuration settings applied:



2X Client for iPad – Gestures



About 2X



2X Client for iPad - About

Tap on the 'About' icon to access information about 2X Client application.

Email To Sales

Link to the 2X sales team.

Sales Website

Use this link to the 2X website if you need to order any 2X products.

Email To 2X

Use this link if you need to provide information to 2X.

2X Website

A link is provided to the 2X website.

Tell a Friend About 2X

An email link is provided should you want to let a friend or colleague know about 2X products and services.

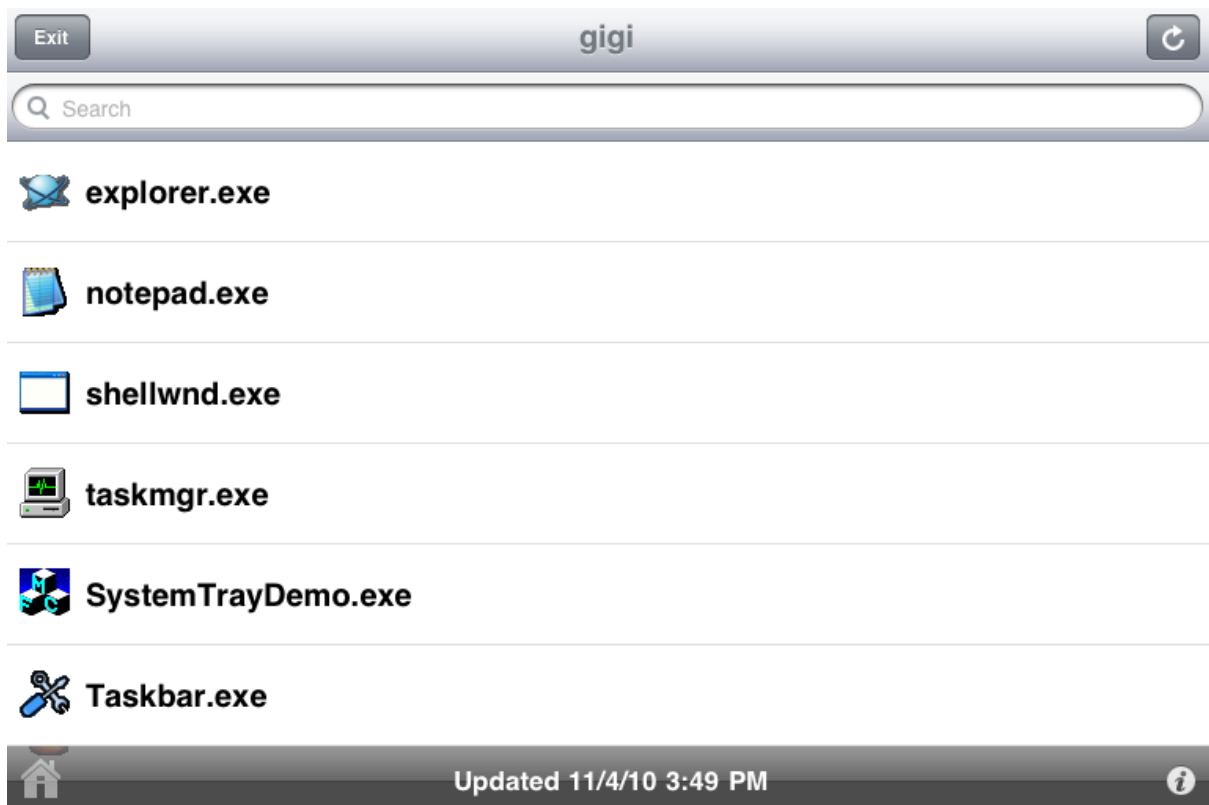
Application Help

The Application Help link directs you to the help section on the 2X website.

USING 2X CLIENT

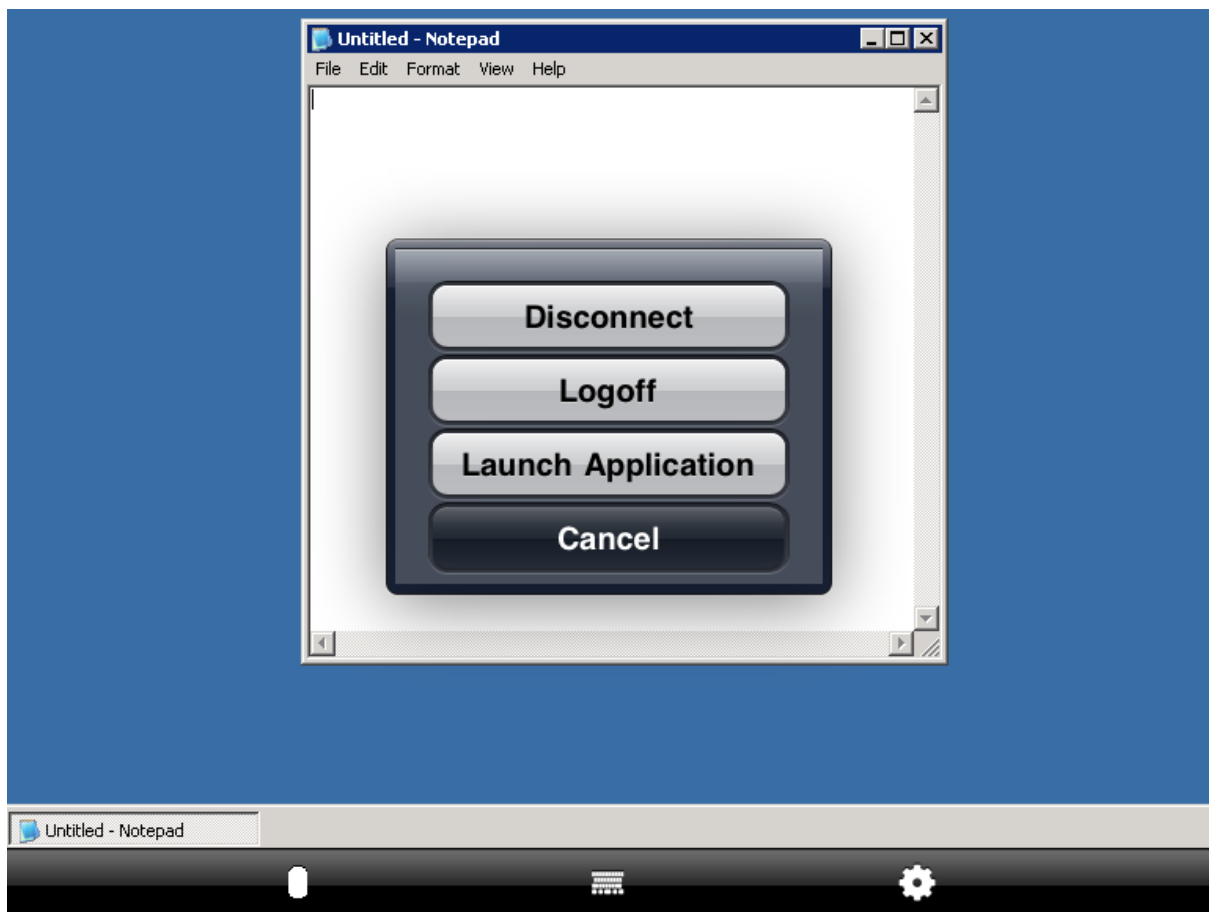
2X Client Connection

Select the 2X Client connection that you have set up on your iOS device. A list of published applications and desktops will appear.



2X Client for iPad – Application List

Tap on a published application to open.



2X Client for iPad – Settings icon

To end your current application or session, tap on the 'Settings' icon.

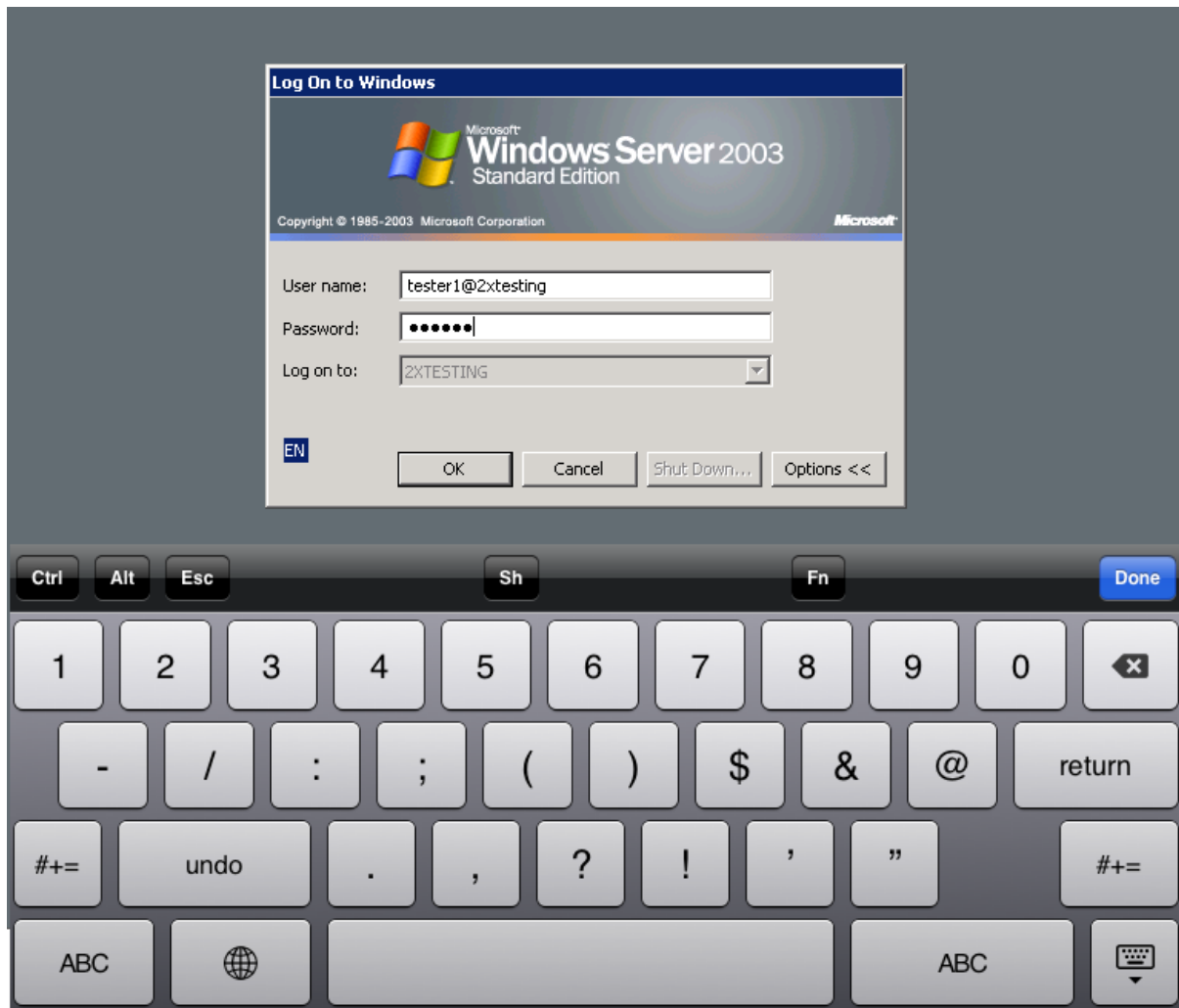
Choose '*Disconnect*' end your session from the server.

Choose '*Logoff*' to log off from your current application.

Choose '*Launch Application*' to open another application.

Choose '*Cancel*' to close the dialog box.

RDP Connection

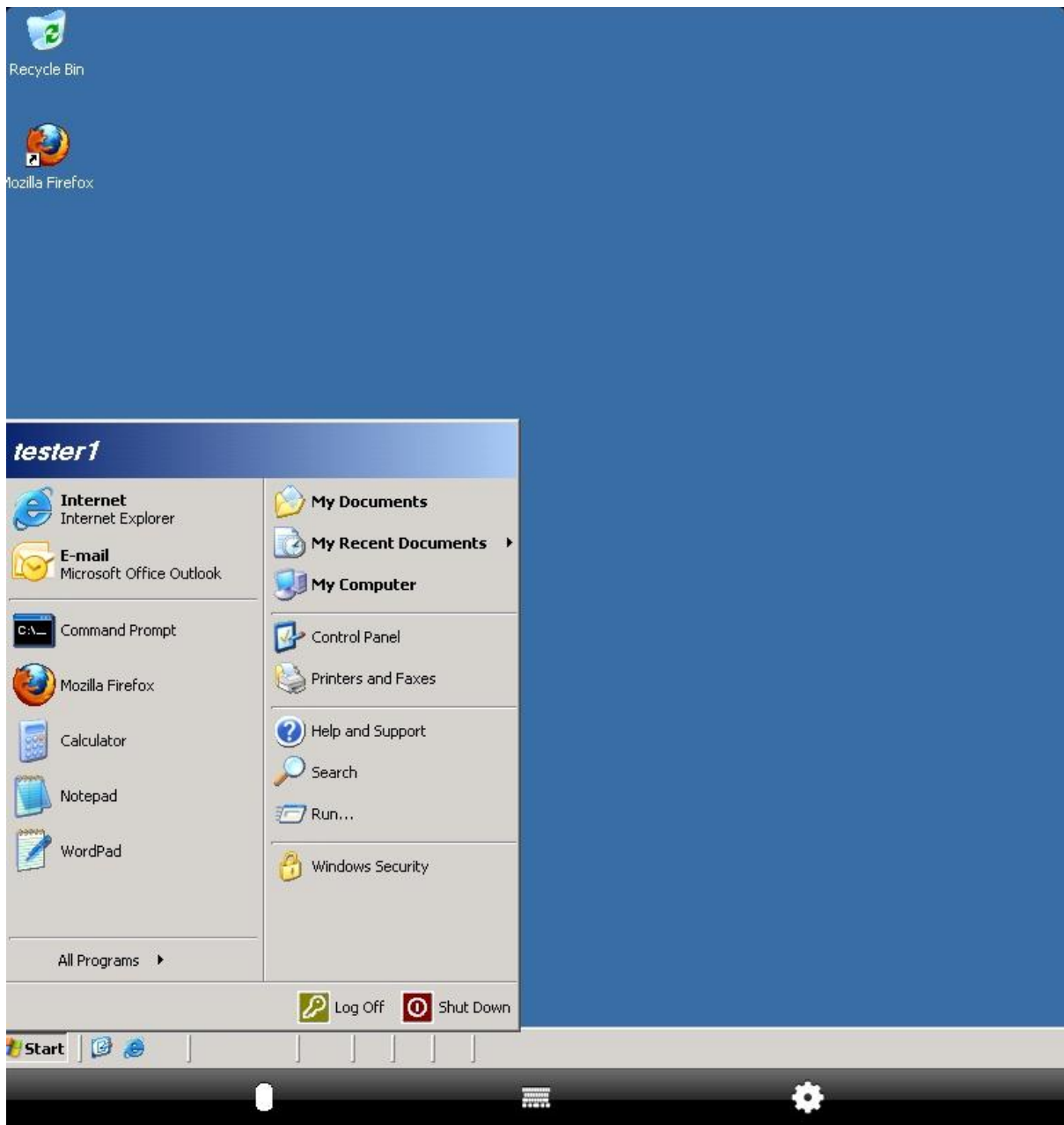


2X Client for iPad – Using a RDP Connection

Select your configured RDP connection to open the interface.

Enter your User name and password to access your server.

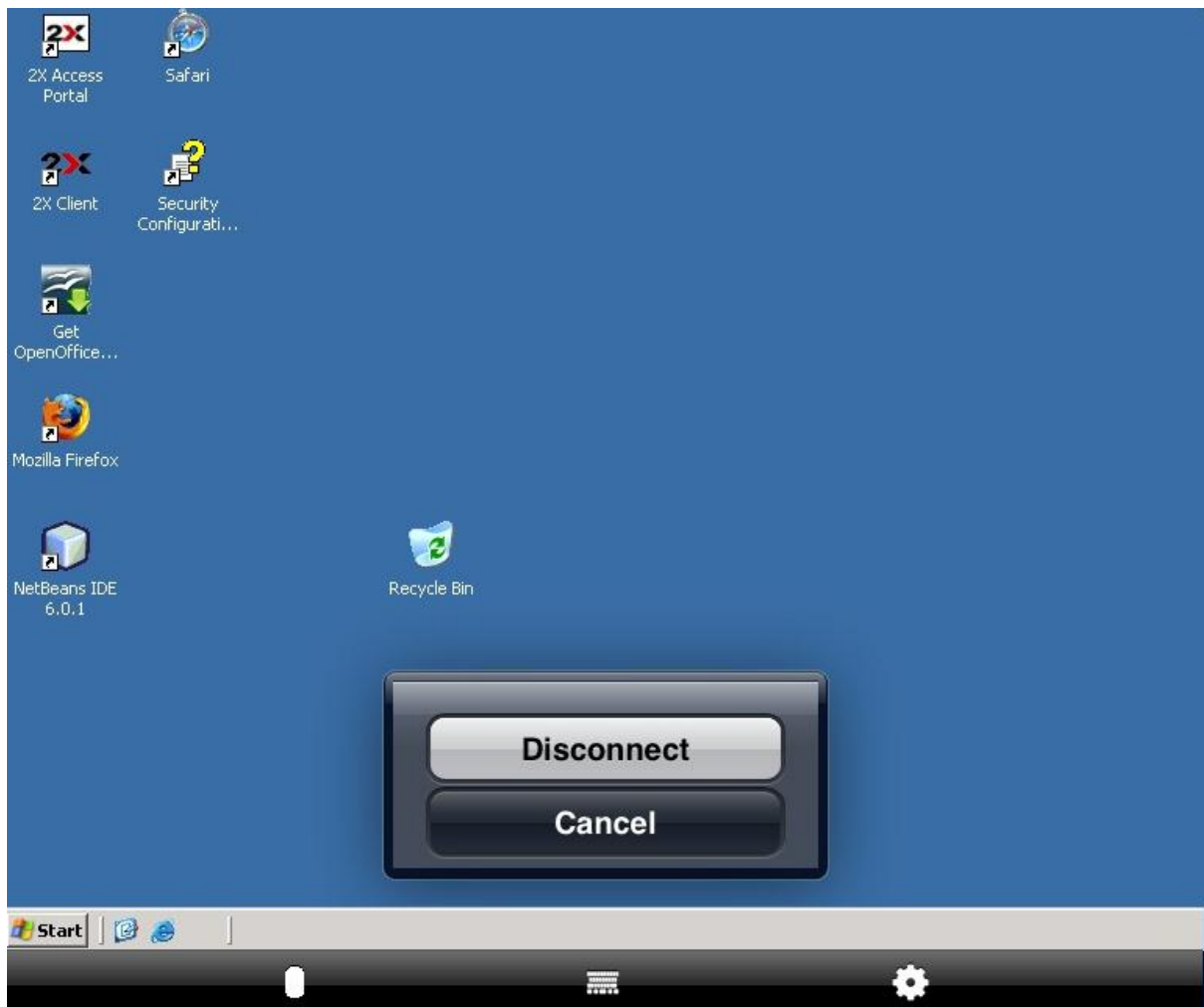




2X Client for iPad – Using a RDP Connection

Tap on Start on your configured RDP connection to access published applications.





2X Client for iPad – Using a RDP Connection

To end your current application or session, tap on the 'Settings' icon.

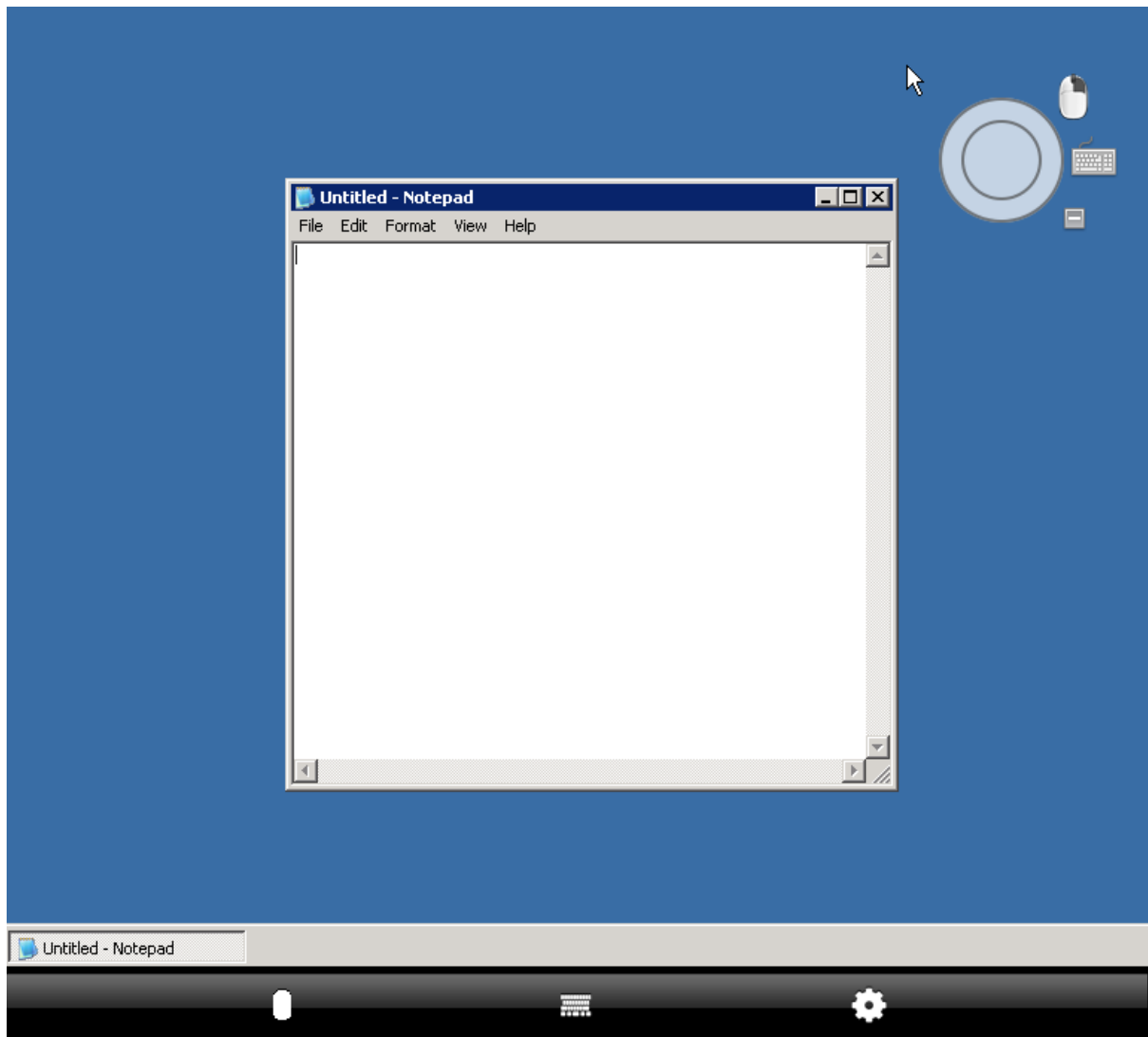
Choose '*Disconnect*' end your session from the server.

Choose '*Cancel*' to close the dialog box.



2X CLIENT CUSTOM MOUSE & KEYBOARD FOR IPAD

Custom Mouse



2X Client for iPad – Keyboard and Mouse Settings

From the published application list we have opened Notepad. There are three icons located at the bottom of the screen.

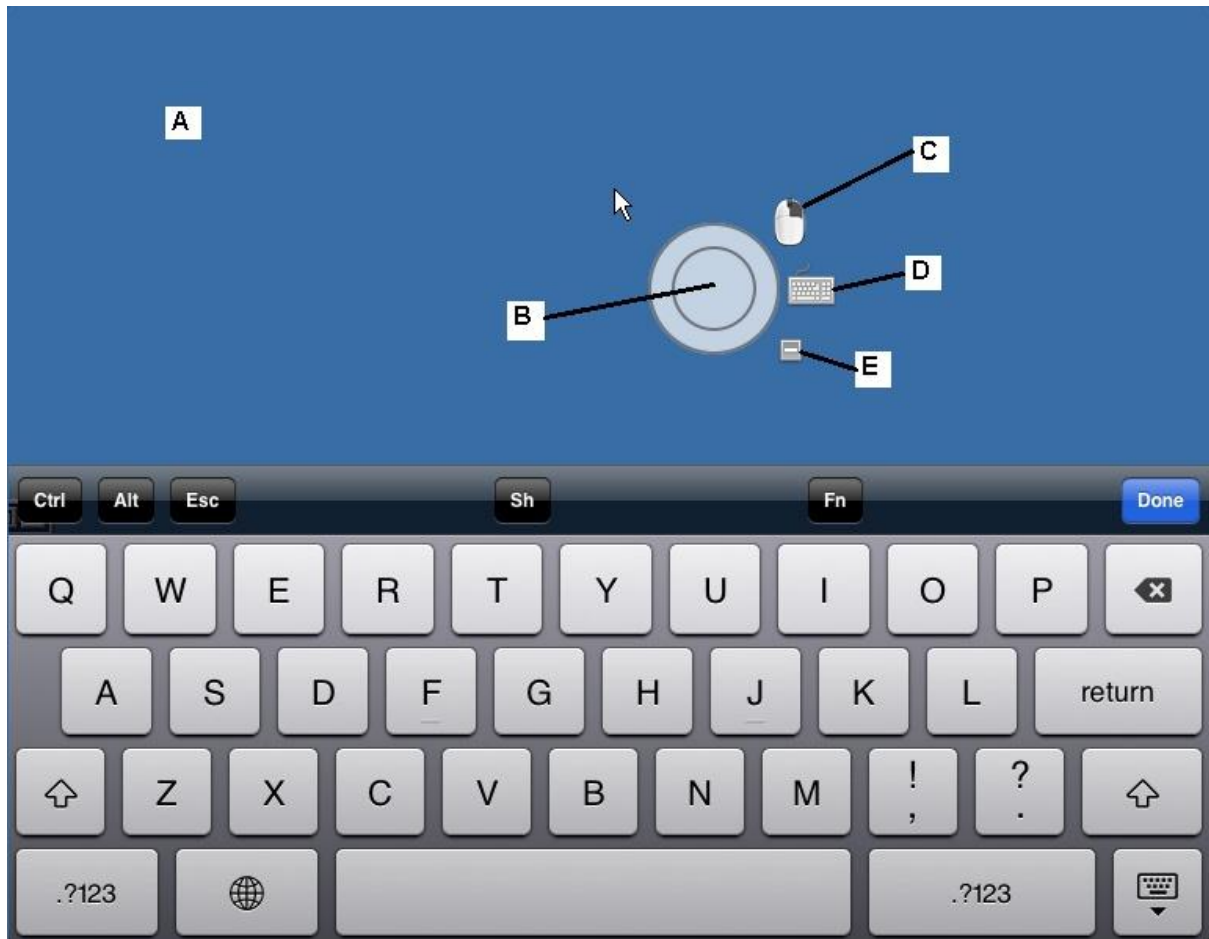
Tap on the first icon which represents a mouse; and the 2X custom mouse app opens.

Tap on the '+' and a keyboard icon and a 'right-click' mouse appears.

Tap on the '-' and the right-click mouse and keyboard is hidden. Drag the circle icon (pointer) for ease of use within all applications. To close the satellite mouse option, tap on the mouse icon (below).

NOTE: This feature is only available with 2X Client for iPad.

Custom Mouse Properties



Above is a representation of the 2X Client for iOS with the custom mouse and activated keyboard.

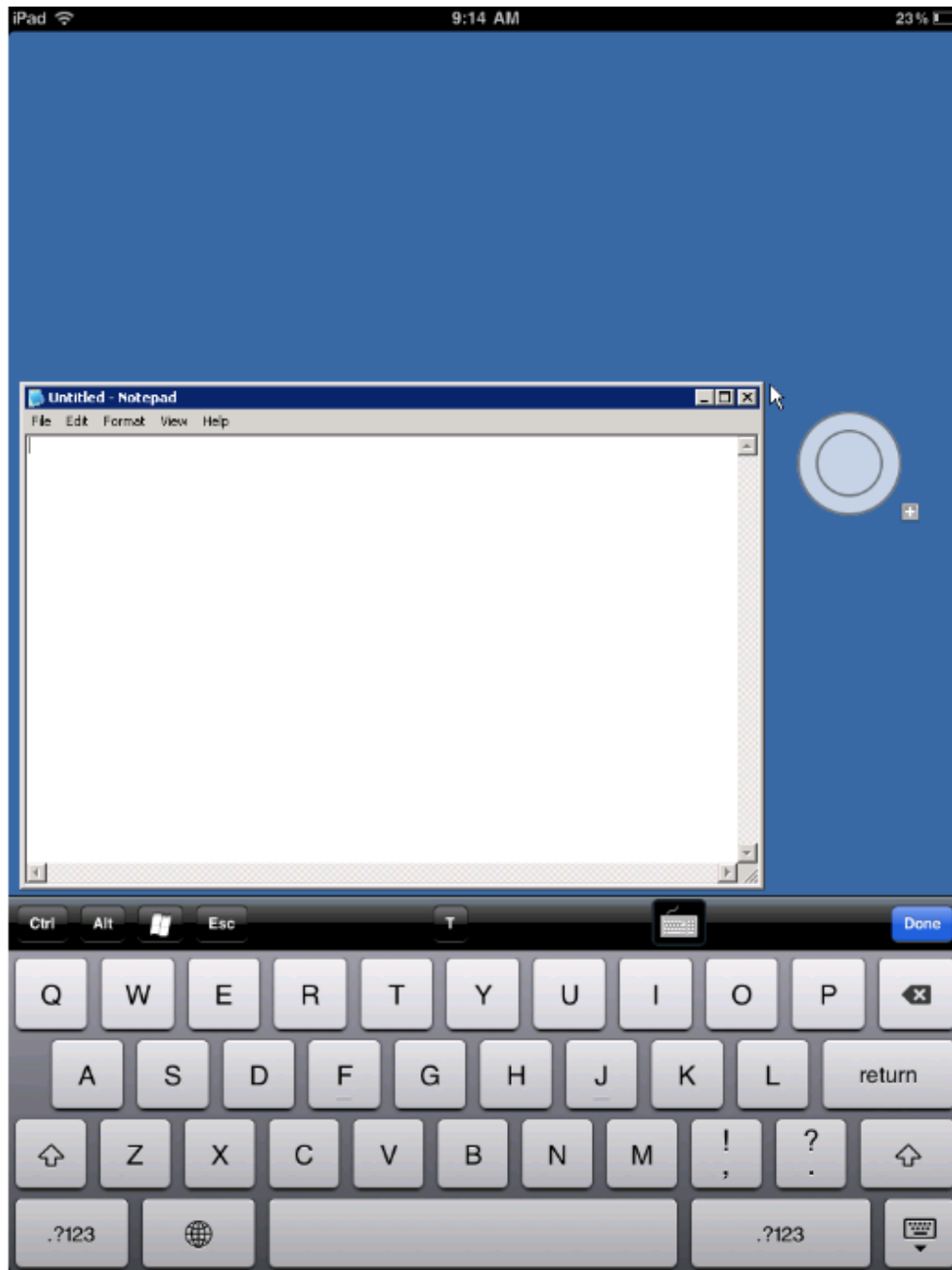
Position Descriptions	
A	Anywhere on the screen where the mouse cursor is not positioned.
B	2X Custom Mouse Main Area
C	Right-Click Mouse – tap to right-click in any application
D	Keyboard – Tap on keyboard to show keyboard
E	Open/Close Other Options (Keyboard, R-Mouse)

The following table lists each mouse movement as it relates to the positions described above.

Position	Action	Result	Windows Messages
A	Short Press & Move	Pan Screen	N/A
A	Tap	Left Click at Position	Lbutton down + Lbutton up
A	Double Tap	Double Left Click at Position	(Lbutton down + Lbutton up + Lbutton down + Lbutton up)
A	long press	start drag	(LButton down
A	long press move	drag	mouse Move
A	long press release	end drag	Lbutton up
B	Short Tap	Left Click at Position	Lbutton down + Lbutton up
B	Double Tap	Double Left-Click at Position	Lbutton down + Lbutton up + Lbutton down + Lbutton up
B	Short Press and Move	Move Cursor	N/A
B	Long Press	Start Drag	LButton Down
B	Long Press and Move	Drag	Mouse Move
B	Long Press Release	End Drag	Lbutton up
C	Short Tap	Right Click at Position	Rbutton down + Rbutton up)
C	Double Tap	Double Left Click at Position	Rbutton down + Rbutton up + Rbutton down + Rbutton up
C	Short Press and Move	Move Cursor	N/A
C	Long Press	Start Right Drag	Rbutton down
C	Long Press Move	Drag	Mouse Move
C	Long Press Release:	End Drag	Rbutton Up
D	Tap	Open Keyboard	N/A
E	Tap	Open/Close Other Options	N/A



Custom Keyboard

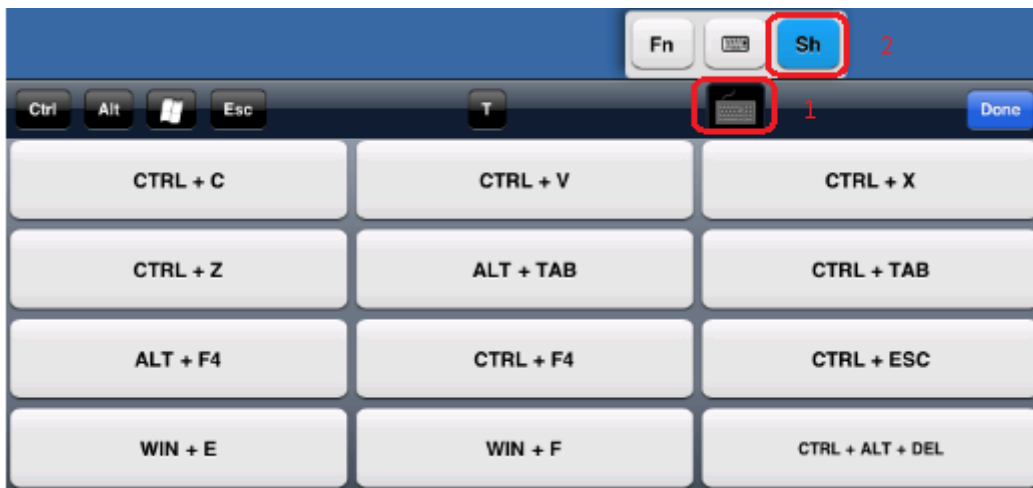


2X Client for iPad – Keyboard Icon

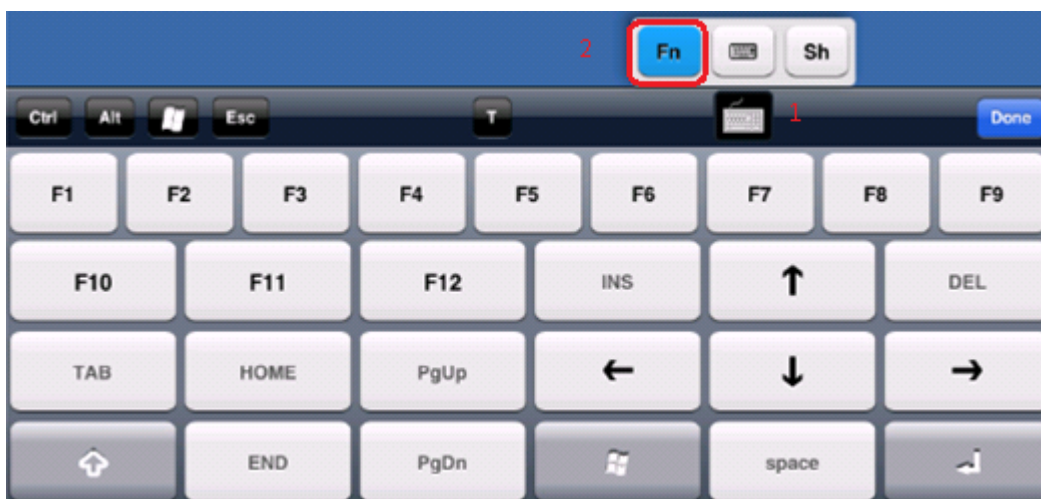
Tap on the keyboard icon to activate the keyboard.

Note: Tapping on the custom mouse keyboard icon or the keyboard icon located at the bottom of the screen will both activate the keyboard.

Notice that there are two custom icons located above the first row of letters on the keyboard.



Tap and hold the keyboard icon [1], and move your finger on 'Sh' [2] to show a list of shortcuts as shown.



Tap and hold the keyboard icon [1], and move your finger on 'Fn' [2] to switch to alternate function keys.

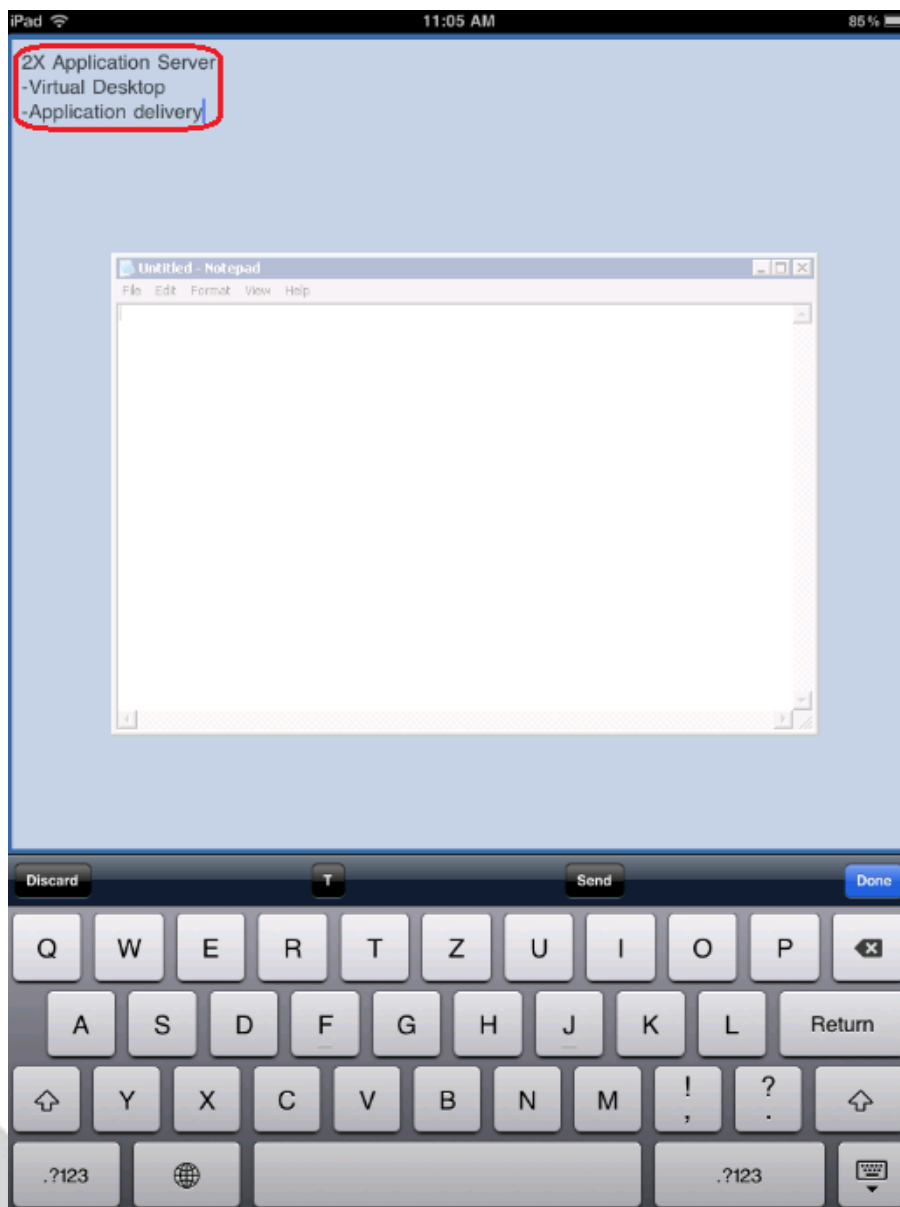
Note that to switch back the normal keyboard keys, please tap once on the keyboard icon [1].



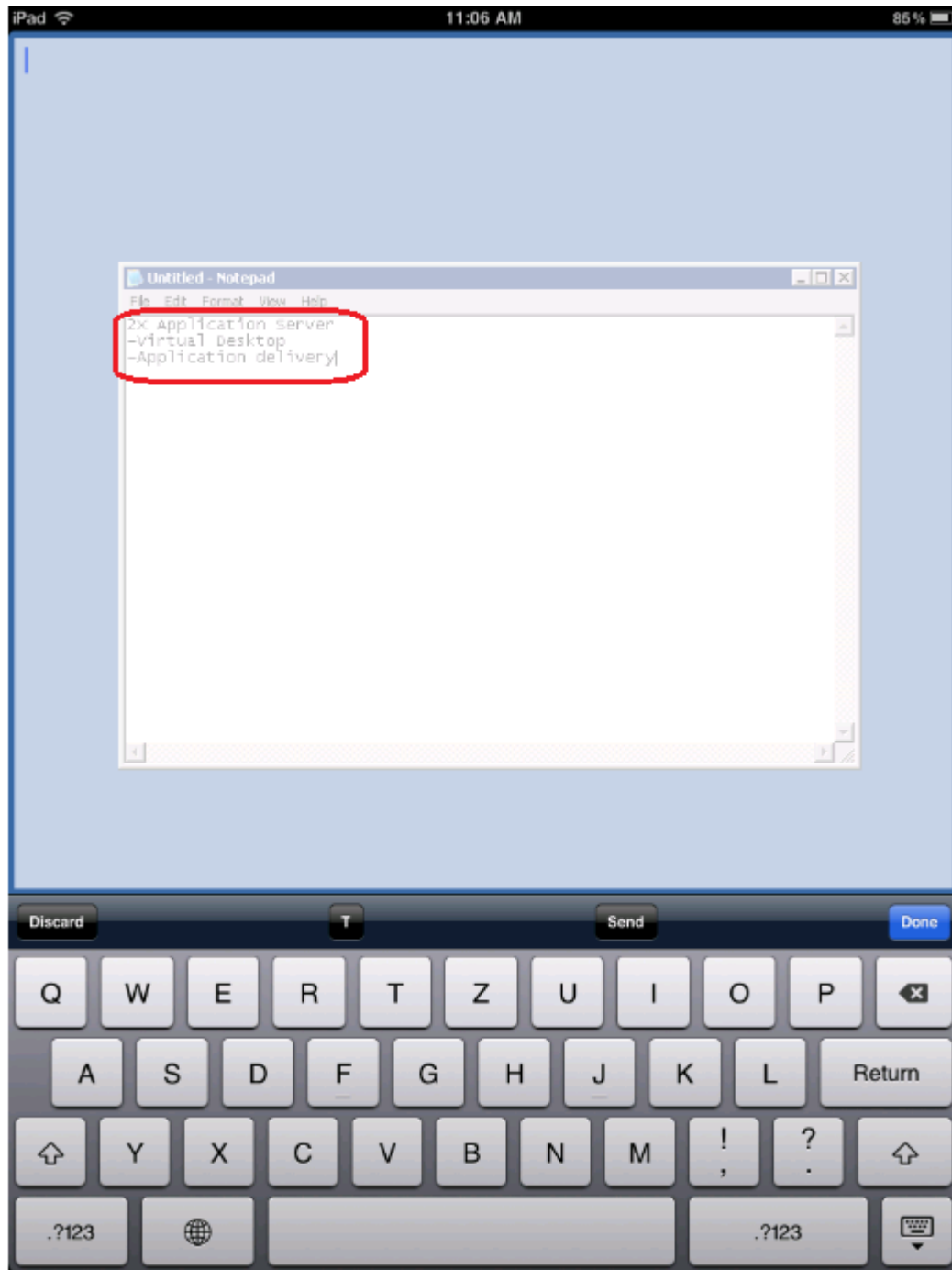
The user can type on the tablet and then by tapping 'Send' the whole text is sent to the remote computer. This is illustrated below.



Press 'T' and type text on the tablet before sending it to the remote computer as shown below:



Tap on 'Send' so as to send the text inserted above to the remote computer as shown:



Press 'T' again to be able to send text directly to the remote computer.



LAUNCHING AN IOS 2XCLIENT OR SESSIONS FROM THIRD-PARTY APPLICATIONS VIA URL

In order to launch the iOS 2X-Client a relevant URL can be sent to and opened by the iOS system.

This can be achieved by typing the URL into a browser or other application that supports the opening of URLs (e.g. Safari or Contacts).
Programmatically, this may be achieved by a system call as shown below:-

```
NSString *stringURL = @"tuxclient:";
NSURL *url = [NSURL URLWithString:stringURL];
[[UIApplication sharedApplication] openURL:url];
```

At the minimum, the URL can consist only of the following:-

tuxclient:

This URL will simply launch the iOS 2X Client in its normal default (or original) state.

For more advanced features, a set of Key/Value pairs separated by the ampersand character '&' can be added within the query of the passed URL, as the following example shows:-

tuxclient:///External_Launch=YES&Alias=AliasName&Save=YES

In accordance with Apple's "litmus test for a URL", the double slashes cannot be omitted.

Unknown Key / Value pairs will be ignored and the following Key / Value pairs are applicable.

All Values must be encoded using %escapes in the cases of the following characters:- "/?&; and SPACE.

Missing Key/Values will be replaced by default values where possible.
Invalid or irrelevant Values render that Key/Value pair ignored.
The order of the Key/Value pairs within the URL is ignored.

Valid Key/Value:

Key	Value (Default)	Example (Note)
<i>External_Launch</i>	Boolean (Always Set to True)	Always set to true
<i>Alias(*)</i>	String	Default is an empty string.
<i>ConnType</i>	Integer	Default 2 - 'Standard RDP Connection'.
	0: 2XConnection	
	2: Standard RDP	
<i>ConnMode</i>	Integer	Default is 'Gateway Mode'
	0: Gateway Mode	
	1: Direct Mode	
	2: Gateway SSL Mode	
	3: Direct SSL Mode	
<i>Server</i>	String	Default Value <i>is an empty string</i> .
<i>Port</i>	Integer	The connection port number.
	RDP Connection : 3389	
	2XConnection : 80	
<i>UserName</i>	String	Specify username.
<i>Password</i>	String	Specify password.
<i>SavePass</i>	Boolean	Default is NO.
<i>Connect</i>	Boolean	Default is YES.
<i>Save</i>	Boolean	Default is NO.
<i>ColorDepth</i>	Integer	The color depth setting of the connection. Recommended is 16-bit.
	8: 256 Colors	
	16: High Color (16 bits)	
	24: True Color (32 bits)	
<i>SoundRedirection</i>	Integer	Default setting is 'do not play sound'
	1: Do not play sound	
	2: Play sound	
<i>DesktopBackground</i>	Boolean	Default is NO.
<i>FontSmoothing</i>	Boolean	Default is NO.
<i>WindowAnim</i>	Boolean	Default is NO.
<i>DeskComp</i>	Boolean	Default is NO.
<i>ShowDrag</i>	Boolean	Default is NO.
<i>Themes</i>	Boolean	Default is NO.
<i>BitmapCaching</i>	Boolean	Default is YES.
<i>EnableCompression</i>	Boolean	Default is YES.
<i>ConnectToConsole</i>	Boolean	Default is NO.
<i>ReturnURL (**)</i>	String	Default is an empty string.

(*)An Alias for an existing connection in the 2XClient address book.

If a connection with the given Alias is not present in the address book, then a new connection is created.

If not supplied for a new connection, the Server Name string will be used.

(**)A URL that will be opened upon completion of the operations in this URL. This URL must be completely encoded with percent escape parameters.

For Further Information for NSURL Class Reference please refer to:
https://developer.apple.com/library/mac/#documentation/Cocoa/Reference/Foundation/Classes/NSURL_Class/Reference/Reference.html



TROUBLESHOOTING AND SUPPORT

Introduction

The troubleshooting chapter explains how you should go about resolving issues you may have. The main sources of information available to users are:

- The manual – most issues can be solved by reading and referring to the manual.
- The 2X support site – accessible from the 2X website. It includes a knowledge base with the most frequently asked questions.
- Contacting the 2X support department by email at support@2x.com
- Contacting our support department by telephone.

Knowledgebase

2X maintains a knowledgebase, which includes answers to most commonly asked problems. If you have a problem, please consult the knowledgebase first. The knowledgebase is continuously updated and contains the-most-up-to-date listings of support questions and patches.

The knowledgebase can be found at <http://www.support.2x.com>

Request Support via E-mail

If you are unable to resolve your issue after using the knowledgebase and referring to this manual, please contact the 2X support department.

Contact us via e-mail, and attach any references or examples of the issue you are experiencing. This will enable us to solve your issue quickly and efficiently.

You may be asked to collect some information and you may be asked a number of questions. Please take your time to answer these questions accurately. Without the proper information it will not be possible to diagnose your problem.

We will answer your inquiry within 24 hours or less, depending on your time zone.

Request Support via Phone

You can also contact 2X by phone for technical support. Please check our support website for the correct numbers to call, depending on where you are located, and for our hours of operation.

<http://support.2x.com>

ABOUT 2X

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