

Test Center Enterprise

Local Device Server Installation Guide Release 5.3

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Test Center Enterprise 5.3

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About This Document

This document outlines the requirements and procedures for installing the Keynote DeviceAnywhere Local Device Server and Keynote DeviceAnywhere Studio client software. You can then attach mobile devices to the Local Device Server in order to control and interact with them in Studio and automate your mobile testing.

Document Outline

In this document:

<u>Requirements</u> lists the Keynote DeviceAnywhere components required for using local devices and the order of installation. It also provides installation guidelines and lists system requirements, network port and connectivity requirements, and mobile device requirements.

Installation contains step-by-step instructions for installing and verifying:

- <u>Local Device Server</u> for communicating with devices
- <u>Keynote DeviceAnywhere Studio</u> client software
- <u>Devices</u>—the process for onboarding mobile devices to the Local Device Server is broadly outlined in this document. Detailed, platform-specific instructions for onboarding smart devices can be found at <u>http://www.keynotedeviceanywhere.com/tce-pvt-devices-documentation.html</u>.

<u>System Verification</u> lists tests to verify the functionality of your Keynote DeviceAnywhere test environment.

Typographical Conventions

The table below describes the typographical conventions used in DeviceAnywhere documentation.

Style	Element	Examples
<u>Blue</u>	Links and email addresses	http://www.keynotedeviceanywhere.com The Document Outline section describes the structure of this manual.
Bold	User interface elements such as menu items	Click My Devices in the Test Center Enterprise view of Keynote DeviceAnywhere Studio.
Monospace	Commands, code output, filenames, directories	Right-click the project's step groups directory.
Monospace bold	User input	In a command window, type ipconfig .
Italic	Document titles and emphasis	Refer to the <i>iOS Device Onboarding Guide</i> for instructions on attaching an iOS device to a Local Device Server.

Contacting Support

If you have any comments or suggestions regarding this document, contact the Keynote DeviceAnywhere support organization for enterprise customers at <u>kda-esupport@keynote.com</u>. You may also send your

inquiries about Keynote DeviceAnywhere product demonstrations and consulting services to this address.

Customers can find additional support information at <u>http://www.keynotedeviceanywhere.com/support.html</u>.

Additional Documentation

You can find additional documents at <u>http://www.keynotedeviceanywhere.com/tce-pvt-devices-</u> <u>documentation.html</u>, which you can also access from the **Help** menu in Studio:

- Test Center Enterprise Release Notes
- TCE User Guide
- TCE Automation User Guide
- Platform-specific onboarding guides for software-integrated devices

1 Requirements

This chapter lists the components required for using local devices and the order of their installation. This chapter also lists system and network requirements for installing Keynote DeviceAnywhere components. (Step-by-step installation instructions can be found in the next chapter, <u>Component Installation</u>.)

Before attempting to install any components, please review the information in this chapter:

- List of <u>components</u> and order of installation
- <u>System requirements</u>
- Local Device Server Requirements
- <u>Device Requirements</u> (requirements for smart devices attached to the Local Device Server)
- <u>Component Connectivity</u> requirements, including <u>Troubleshooting Connectivity</u>

1.1 Components and Order of Installation

You must install the following components in order shown below to use local devices:

- 1 Local Device Server, downloaded from the Test Center Enterprise Portal—Server that communicates with smart devices
- 2 Keynote DeviceAnywhere Studio software, downloaded from the Test Center Enterprise Portal Client interface for interacting with devices and creating and running test scripts
- 3 Device onboarding, after installing device profile XML files, procured from Keynote DeviceAnywhere (generally one for each device to be added to the system)

1.2 System Requirements

Minimum requirements and operating systems tested for Keynote DeviceAnywhere components are:

DA Component	Hardware/Software	Requirement	Notes
Local Device Server	Processor speed	2GHz Pentium 4 (dual core)	Maximum of 2
	Memory	emory 2GB RAM concur devices ard drive space 10GB (You ca	concurrently attached
	Hard drive space		(You can onboard
	Operating system	 Windows XP SP2 Windows Server 2003 Windows Vista Windows 7 Windows Server 2008 Local Device Server is compatible with Windows 7 64 bit. Only 32 bit supported on other Windows systems. 	 more than 2 devices.) Install this component on the same machine as Keynote DeviceAnywhere Studio.
	USB ports	USB 2.0 ports for device connectivity Number of ports per device varies –	

 Table 1-1 Minimum System Requirements for Individual Components

DA Component	Hardware/Software	Requirement	Notes
		Directly attached smart devices require one or none.	
Keynote	Processor speed	2GHz Pentium 4	
DeviceAnywhere Studio	Memory	2GB RAM	
Studio	Hard drive space	10GB	
	Operating system	 Windows XP SP2 Windows Server 2003 Windows Vista Windows 7 Windows Server 2008 <i>and 64 bit supported on Windows</i>. Mac OS Linux JDK v1.5 must be installed for Mac/Linux. 	
	Screen resolution	1024 x 768 or higher	
	Additional	 Optional audio card for sound input/output JDK v1.5+ for Mac/Linux 	

1.3 Local Device Server Requirements

Devices — The Local Device Server supports two devices concurrently attached to the server. You can, however, onboard several devices — only two of these can be attached concurrently at any given time.

Studio-Local Device Server and Studio client software must be installed on the same machine.

USB Ports—The Local Device Server must have one USB 2.0 port per device connected via data cable. Non-rooted Android devices connected by Wi-Fi also require one USB port.

1.4 Device Requirements

Keynote DeviceAnywhere's Direct-to-Device Software methodology is used to control smart devices attached to the Local Device Server.

- You must provide devices to be connected locally. Contact your Keynote DeviceAnywhere TAM for a list of supported devices.
- Devices are connected to the Local Device Server via USB cable or Wi-Fi—check the onboarding guides at <u>http://www.deviceanywhere.com/enterprise-documentation.html</u>.
- Devices require one available USB 2.0 port on the Local Device Server if connecting to it by data cable. Non-rooted Android devices connecting by Wi-Fi also require a USB port. Check the onboarding guides at <u>http://www.deviceanywhere.com/enterprise-documentation.html</u>.
- Devices must be onboarded to the Local Device Server in order to be controlled in Studio. Platformspecific prerequisites for onboarding smartphone(s) are detailed in the appropriate onboarding guide.
- A local device is only visible to and can be acquired by the user onboarding the device.

1.5 Component Connectivity

- The Local Device Server and Studio must be able to communicate with each other—Studio must be able to connect to the Local Device Server installed on the same machine in order to acquire devices (see <u>Port Settings</u> below).
- The Local Device Server must be able to connect over the Internet to the TCE Access Server—the Access Server IP address and port number are displayed in the Local Device Server Administrator (see Local Device Server Installation).
- Devices must be connected to the Local Device Server machine via data cable or Wi-Fi—see the onboarding guides on http://www.keynotedeviceanywhere.com/tce-pvt-devices-documentation.html.
- Studio must be able to connect over the Internet to the TCE Access Server—the Access Server IP address and port are preconfigured in the Studio installer (see <u>Installing Studio on Windows</u>).

1.5.1 Port Settings

Keynote DeviceAnywhere components communicate with each other over TCP/IP. Before you begin the installation, make sure that you have configured all the required ports based on the port settings provided in the table below. Default port settings are listed here.

DeviceAnywhere Servers	Description	Open Ports
Local Device Server	The Local Device Server provides access to devices. Users interacting with devices in Studio communicate with the Local Device Server on port 443. This server must therefore accept inbound traffic on port 443, which is the default setting and can be reconfigured. The Local Device Server must also be able to send outbound communication to an Access Server from port 443 (SSL). The port for outbound communication cannot be changed. NOTE Ensure that no other application/service is using port 443.	443 – In (Default setting; can be changed during installation) 443 – Out (SSL; cannot be changed)
Keynote DeviceAnywhere Studio	Studio is the client software used to control devices and create test assets. Studio must be able to communicate over port 443 with the Local Device Server installed on the same machine and with the other remote Keynote DeviceAnywhere components over the Internet.	443 – Out (SSL; cannot be changed)

Table 1-2 Port Requirements

1.5.2 Troubleshooting Connectivity

After installing Keynote DeviceAnywhere components, use the Telnet procedure below to troubleshoot connectivity between machines. A list of tests is given in Table 1-3 below.

To use Telnet to test connectivity on a Windows machine:

- 1 Go to the **Start** menu and select **Run**.
- 2 Type **cmd** to bring up a DOS command prompt window.
- 3 Type the telnet command in the window in the format shown:

telnet <IP/Hostname> <Port_Number>

Tests to run are shown in the table below:

Table 1-3	DeviceAn	uwhere Server	Connectivity	Tests
		,		

#	Test
1	Action: Open a Telnet session from Local Device Server machine to port 443 on the TCE Access Server.
	Command: telnet svtceas01.deviceanywhere.com 443
2	<i>Action</i> : Open a Telnet session between Studio to port 443 on the Local Device Server installed on the same machine.
	Command: telnet <local_device_server_ip> 443</local_device_server_ip>
	NOTES Do not use localhost to indicate the local machine hostname/IP address.
	Change the incoming Local Device Server port number from 443 if configured differently.

Results:

- When access to the server in question is successful, the DOS window appears blank.
- When access to the server in question is unsuccessful, you will see an error message.

The screenshot below shows the error message generated when a connection does not exist on port 443.

Figure 1-1 Telnet Error Message



Proxy server settings can sometimes negatively affect the performance of your system. If you are experiencing connectivity issues, make sure the deviceanywhere.com domain is white-listed in firewall or proxy server settings.

There is a known incompatibility with Bluecoat proxy servers. In order to access the deviceanywhere.com domain, your IT team must open Bluecoat's policy file with a text editor and add the following statement under the <Proxy> section header:

url.domain=deviceanywhere.com detect_protocol (none)

Contact kda-esupport@keynote.com if you need further assistance to resolve this issue.

Some anti-virus software has port filtering settings turned on for port 443 by default. Since all data communication between Studio and Keynote DeviceAnywhere servers occurs on port 443, this can delay response time. Remove port filtering on port 443 to correct the problem.

NOTE Kaspersky anti-virus software has port filtering turned on for port 443 by default.

2 Installation

This chapter will take you through the following:

- 1 Installing the Keynote DeviceAnywhere Local Device Server
- 2 Installing Keynote DeviceAnywhere Studio
- 3 Guidelines for attaching devices to the Local Device Server (details covered in onboarding guides available at <u>http://www.keynotedeviceanywhere.com/tce-pvt-devices-documentation.html</u>)

2.1 Local Device Server

The Local Device Server hosts one or more devices over USB or Wi-Fi (Bluetooth connectivity is available but is only recommended if your testing specifically requires it—contact your Keynote DeviceAnywhere TAM for details). The Local Device Server supports two concurrently attached devices. See <u>Infrastructure</u> <u>Requirements</u> for system and connectivity requirements and installation guidelines.

2.1.1 Local Device Server Installation

Before installation, you must gather the following information:

- The credentials of a Keynote DeviceAnywhere account with permission to connect local devices
- The IP address or hostname of the machine on which the Local Device Server is to be installed

To install the Local Device Server:

- 1 Download the Local Device Server executable from the TCE Portal:
 - a Access the TCE Portal by logging in to <u>www.keynotedeviceanywhere.com</u>. You can also directly access the TCE Portal at <u>http://tce.deviceanywhere.com/home</u>.
 - b Select your Test Center Enterprise environment under **Execute** (screen left), then click **Download Local Device Server** to save the executable to your local drive.



- 2 From your download directory, double-click the LocalDeviceServer.exe installer to execute it.
- 3 Click **Next** in the setup screen that appears.

Keynote DeviceAnywhere Loca	Keynote DeviceAnywhere Local Device Server Setup		
	Welcome to the InstallShield Wizard for Keynote DeviceAnywhere Local Device Server The InstallShield® Wizard will install Keynote DeviceAnywhere Local Device Server on your computer. To continue, click Next.		
InstallShield	< <u>Back</u> <u>Next</u> Cancel Cancel Cancel) e	

4 Accept the license terms and click **Next**.

Keynote DeviceAnywhere Loca	l Device Server Setup	×
Keynote DeviceAnywhere Loca	Device Server Setup License Agreement Please read the following license agreement carefully. NOTICE: THIS SOFTWARE PRODUCT (TOGETHER WITH ITS ACCOMPANYING DOCUMENTATION, THE "PRODUCT") IS THE PROPERTY OF Keynote DeviceAnywhere INC ("Keynote DeviceAnywhere"). THE PRODUCT IS MADE AVAILABLE TO YOU, THE DRIGINAL PURCHASER, SUBJECT TO THE FOLLOWING LICENSE AGREEMENT ("LICENSE"). PLEASE READ THIS LICENSE CAREFULLY BEFORE INSTALLING OR USING THE PRODUCT. A COPY OF THIS LICENSE IS AVAILABLE FOR YOUR FUTURE REFERENCE IN THE "LICENSE.TXT" FILE PROVIDED WITH THE PRODUCT. YOU MAY ACCEPT THIS LICENSE BY PLACING A CHECK IN THE "I ACCEPT THE	×
	LICENSE AGREEMENT" BOX BELOW. YOU MAY REJECT THIS LICENSE, AND TERMINATE THIS INSTALLATION PROCESS, BY CLICKING THE "CANCEL" BUTTON BELOW. IF YOU DO NOT ACCEPT THIS LICENSE, THEN YOU MAY NOT INSTALL OR USE THE PRODUCT. IN THAT CASE, YOU MAY, WITHIN TEN (10) DAYS AFTER YOU FIRST RECEIVED THE PRODUCT, RETURN IT TO Keynote DeviceAnywhere, ALONG WITHITS ORIGINAL PACKAGING AND PROOF-OF-PURCHASE, FOR A FULL REFUND. ANY USE BY YOU OF THIS PRODUCT ALSO CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS. Keynote DeviceAnywhere is only willing to grant you this License if you obtained the Product	
	Incom Reprice DeviceAnywhere of a Reprice DeviceAnywhere authorized reseller. If you Erint Erint	
	C I do not accept the terms of the license agreement	
	< <u>B</u> ack <u>N</u> ext > Cancel	
InstallShield	DeviceAny, whe	ere"

5 Choose a destination folder and select **Next**. The default installation location is C:\Program Files\DeviceAnywhere\EnsembleServer. You may enter a different location if desired.

Keynote DeviceAnywhere Local Device Server Setup		
	Choose Destination Location Select folder where setup will install files.	
	Setup will install Keynote DeviceAnywhere Local Device Server in the following folder. To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	
InstallShield	Destination Folder C:\\DeviceAnywhere\EnsembleServer <u> </u>	

The installer displays the progress of the installation.

Keynote DeviceAnywhere Local Device Server Setup		
	Setup Status	
\$	Keynote DeviceAnywhere Local Device Server is configuring your new software installation.	
	C:\\DeviceAnywhere\EnsembleServer\VCRT\WindowsMobileSetup.msi	
	Cancel)
InstallShield	DeviceAnywher	'e "

6 In the configuration screen, enter information as shown in the table below and click **Next**.

Keynote DeviceAnywhere Loca	l Device Server Setup	×
Keynote DeviceAnywhere Loca	I Device Server Setup Keynote DeviceAnywhere Local Device Server Please enter your information. Access Server Please enter the location of the AccessServer. Address svtceas01.deviceanywhere.com Port 0 SSL Port 443 Ensemble Server Please enter the location of this EnsembleServer. the port it should listen on for incoming	×
	Connections and the external address of the server. Location San Mateo Port 443 SSL Port 0	
0 2	External Address localdeviceserver01.yourcompany.com	
	Nevt	
InstallShield		re"

Field	Value
Address	Access Server IP/Hostname (not editable)
Port	The default port of the Access Server is 443 (not editable).
SSL Port	0 (not editable)
Location	Enter the name of the city, e.g., Paris, where the Local Device Server is physically located.
Port	The default incoming port of the Local Device Server is 443 – change if different.
SSL Port	The default SSL port for incoming communication is 0, i.e., disabled.
Country	Select the country, e.g., France, where this machine is located.
External Address	Local Device Server IP/hostname
	Enter the full hostname or IP address of the machine hosting the Local Device Server. This is IP address or machine name that other system components will use to communicate with the Local Device Server.
	To find your machine hostname, right-click My Computer > Properties . Enter the full Computer name .

7 Select **Yes** to install the Tone Decoder ActiveX Control. This enables the sound decoder that supports the Wait Audio command.



8 In the Tone Decoder ActiveX Control installation wizard, select Next.



9 Accept the Tone Decoder ActiveX Control licensing terms.

圮 Setup - ToneDecoder ActiveX Control v3.3.14			
License Agreement Please read the following important information before continuing.			
Please read the following License Agreement. Use the scroll bar or press the Page Down key to view the rest of the agreement.			
License Agreement			
LICENSE STATEMENT AND LIMITED WARRANTY			
This license statement and limited warranty constitutes a legal agreement ("License Agreement") between you (either as an individual or a single entity) and Hotwind Software Inc ("Phone Tone Decoder Control") for the software product ("Software") identified above, including any software, media, and accompanying on-line or printed documentation.			
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install ToneDecoder ActiveX Control v3.3.14, you must accept this agreement.			
< <u>B</u> ack <u>Y</u> es <u>N</u> o			

10 In the Select Destination Directory screen, choose an installation location for the Tone Decoder ActiveX Control. The default destination is C:\Program Files. You may choose another location. Click Next.

🛃 Setup - ToneDecoder ActiveX Control v3.3.14			
Select Destination Directory Where should ToneDecoder ActiveX Control v3.3.14 be installed?			
Select the folder where you would like ToneDecoder ActiveX Control v3.3.14 to be installed, then click Next.			
C:\Program Files (x86)\PhoneTone Decoder Control			
C:\ Program Files (x86) Acro Software Adobe Cisco Cisco Systems Common Files			
💒 c: os 💌			
The program requires at least 3.6 MB of disk space.			
< <u>B</u> ack <u>N</u> ext > Cancel			

11 Next, you must choose a location for the Tone Decoder's shortcuts in the **Start** menu. Click **Next** to install the shortcuts.

🗐 Setup - ToneDecoder ActiveX Control v3.3.14	- 🗆 🗙
Select Start Menu Folder Where should Setup place the program's shortcuts?	
Select the Start Menu folder in which you would like Setup to create the program's shortcuts, then click Next. PhoneTone Decoder Control	
Accessories Administrative Tools Adobe Adobe LiveCycle ES2 Cisco Systems VPN Client CyberLink PowerDVD 9.5 Dell Dell Latitude ON Reader 2.1 Dell System Manager Dell Webcam DeviceAnywhere	•
< <u>B</u> ack <u>N</u> ext > Ca	ancel

12 Click **Install** to begin installation of the tone decoder.

Setup - ToneDecoder ActiveX Control v3.3.14	<u>_ ×</u>
Ready to Install Setup is now ready to begin installing ToneDecoder ActiveX Control v3.3.14 on your computer.	
Click Install to continue with the installation, or click Back if you want to review o change any settings.	r
Destination directory: C:\Program Files (x86)\PhoneTone Decoder Control	<u> </u>
Start Menu folder: Phone Tone Decoder Control	
<u>.</u>	▼ ▶
< <u>B</u> ack	Cancel

13 Select **Finish** to complete installation of the Tone Decoder ActiveX Control.

Setup - ToneDecoder ActiveX Control v3.3.14			
	Setup has finished installing ToneDecoder ActiveX Control v3.3.14 on your computer. The application may be launched by selecting the installed icons. Click Finish to exit Setup. Phone Tone Decoder Help Browse the demo source Browse Program Group		
	<u>F</u> inish		

14 Several intermediate installation windows appear and are automatically cleared from your desktop. Wait for the window below to appear and click **Finish** to complete installing the Local Device Server.

Keynote DeviceAnywhere Local Device Server Setup		
Keynote DeviceAnywhere Loca	I Device Server Setup InstallShield Wizard Complete The InstallShield Wizard has successfully installed Keynote DeviceAnywhere Local Device Server. Click Finish to exit the wizard.	
InstallShield		

15 The Administrator window for the Local Device Server appears concurrently, in which you must enter login credentials to connect with the Access Server. Click **Configure**.

🕌 Individual Server Administrator	<u> </u>
Individual Server Administrator	.keynote.com
Individual Server is running	Stop Restart
User name: Access server: svtceas01.deviceanywhere.com Proxy: disabled	Configure
	🔝

NOTE The system tray displays the icon for the Administrator **W**, while a shortcut **W** is placed on the desktop.

16 In the Access Server tab, enter your Keynote DeviceAnywhere User name and Password and Save your settings.

IMPORTANT Do not edit the address or port of the Access Server.

Individual Server Configu	ration 🔀
Individual Server Cor	figuration
Access Server	Access Server
Proxy Settings	
Service Settings	Access address: svtceas01.deviceanywhere.c 0
	User name:
	Password:
	Save Close

17 The Administrator window now displays the user credentials you have saved. **Restart** the Local Device Server.



The Administrator window indicates that the server is being stopped. The icon in the system tray also

indicates a restart in progress 🔟.	
🛃 Individual Server Administrator	<u> </u>
Individual Server Administrator	.keynote.com
\mathbf{c}_{i}^{i} Individual Server is stopping	Stop Restart
User name: user1@tce01.com Access server: svtceas01.deviceanywhere.com Proxy: disabled	Configure

The Administrator window indicates when the Local Device Server has been restarted.

🕌 Individual Server Administrator	
Individual Server Administrator	.keynote.com
Individual Server is running	Stop Restart
User name: user1@tce01.com Access server: svtceas01.deviceanywhere.com Proxy: disabled	Configure

2.1.2 Verifying Local Device Server Installation

When you have successfully installed and configured the Local Device Server, you can verify the installation. Log files can be found at C:\Program Files\DeviceAnywhere\ EnsembleServer\logs.

Verify in the wrapper.log file that:

• The Local Device Server has initialized loading data from Access Server.

Look for the line Initialization: Data loaded from Access Server.

• The Local Device Server log file displays the correct build version and date.

Look for a banner displaying build information.

Items to verify in the log file are shown in the figure below.

Figure 2-1 Local Device Server Log

-				
INFO	jvm 1	2012/07/24 18:37:42	count = 294	
INFO	jvm 1	2012/07/24 18:37:42	count = 293	
INFO	jvm 1	2012/07/24 18:37:42	count = 292	
INFO	i ivm 1	2012/07/24 18:37:42	count = 291	
INFO	i ivm 1	2012/07/24 18:37:43	count = 290	
INFO	i ivm 1	2012/07/24 18:37:43	count = 289	
TNEO	i ivm 1	2012/07/24 18:37:43	count = 288	
TNEO	i ivm 1	2012/07/24 18:37:43	count = 287	
TNEO	ivm 1	2012/07/24 18:37:43	count = 286	
TNEO	i ivm i	2012/07/24 18:37:44	count = 285	
TNEO	i ivm 1	2012/07/24 18:37:44	LILILLY ******* SSI Handshake status. [true] LILILLY ********	
TNEO	i ivm 1	2012/07/24 18:37:44	2012-07-24 18:37:43 937 DEBUG HandshakeCompletedNotify_Thread] -	NetClient: SSL Handshake
TNEO	i ivm i	2012/07/24 18:37:44	2012-07-24 10:57:44 171 DEBUG [HaltBaad Account feedback in the state of the state	NetSession: Cot s
TNEO	Jum 1	2012/07/24 18:37:44	2012-07-24 10:37:44,171 DEBUG [NetRead Access Server = DataNetwork]	NetSession: Got sy
TNEO		2012/07/24 18:37:44	2012-07-24 10:37:44,703 DEBUG [NetRead Access Server = DataNetwork] =	NetSession: Got sy
TNEO		2012/07/24 10.37.44	2012-07-24 10:57:44,703 DEBUG [Netkedu Access article - Databetwork] -	from Accors Sonvon
TNEO		2012/07/24 10.37.44	Loaded Di Brogram Glac Device marboro Erre al Convert and the second	dili tale vencaoni 0 0 a
INFO	JVm 1	2012/07/24 18:37:44	Daded D: Program Files (beviceAnywhere Ensembleserver bin briverinceriace	and the version: 0.0.3
INFO	I I M I	2012/07/24 18:37:44	Driverinterlace.dli loaded	
INFO	JVM T	2012/07/24 18:37:44	Elapsed lime o ms	more and a
INFO	JVm 1	2012/07/24 18:37:44	DeviceID RXVIdeo RXAudio	TXAUGTO
INFO	i jvm i	2012/0//24 18:37:44	Allocation Tracker: Count : Size (0 records)	
INFO]vm 1	2012/0//24 18:37:44	DirectShowDeviceDLL version 1.14	
INFO]] VM 1	2012/07/24 18:37:44	Elapsed Time 16 ms	
INFO	jvm 1	2012/07/24 18:37:44	DeviceID RxVideo RxAudio	TxAudio
INFO	jvm 1	2012/07/24 18:37:44	Allocation Tracker: Count : Size (O records)	
INFO	jvm 1	2012/07/24 18:37:44	BlueCove log redirected to log4j	
INFO	jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 ERROR [Thread-0] - BluetoothStack not detected	
INFO]∨m 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 ERROR [Thread-0] - BluetoothStack not detected	
INFO	jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0]	
INFO	jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - MobileComplete - EnsembleServe	r
INFO]∨m 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - ==================================	
INFO	jvm 1	2012/07/24 18:37:44	Elapsed Time 31 ms	
INFO	jvm 1	2012/07/24 18:37:44	DeviceID RxVideo RxAudio	TxAudio
INFO]vm 1	2012/07/24 18:37:44	Allocation Tracker: Count : Size (0 records)	
INFO]vm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - Ensemble type: : INDIVIE	UAL_SERVER
INFO	j jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - Version : 5.3	
INFO	j jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - Build Number : build 4	30
INFO	jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - DB Schema Version : 5.3	
INFO]vm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO [Thread-0] - DB Data Version : 5.3	
INFO	j jvm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO Thread-0 - DB Procedure Version : 5.3	
INFO	ivm 1	2012/07/24 18:37:44	2012-07-24 18:37:44,796 INFO Thread-01 - Built At : 2012/07	/20 06:28
INFO	i ivm 1	2012/07/24 18:37:44	2012-07-24 18:37:44.796 INFO Thread-01 -	

2.1.3 Starting and Stopping the Local Device Server

The Local Device Server is configured by default to start automatically when you power on the machine. You can change startup options in the Local Device Server Administrator, which you can launch using

the desktop shortcut

1 In the **Service Settings** tab, opt to start the Server automatically or manually.

Individual Server Configurati	ion	×
Individual Server Config	uration	()
Access Server Proxy Settings	Service Settings	
Service Settings	Start utomatically Start manually Start automatically Service disabled	
	Save	Close

- 2 Save your settings.
- 3 **Restart** the Local Device Server.

🕌 Individual Server Administrator	
Individual Server Administrator	.keynote.com
Individual Server is running	Stop
User name: user1@tce01.com Access server: svtceas01.deviceanywhere.com Proxy: disabled	Configure

To start and stop the Local Device Server manually, you can use either the Local Device Server

Administrator **Administrator** or the Windows Computer Management tool.

In the Local Device Server Administrator, click Start.

Figure 2-2 Starting Local Device Server Using the Administrator

🕌 Individual Server Administrator	
Individual Server Administrator	.keynote.com
Individual Server is stopped	Start Restart
User name: user1@tce01.com Access server: svtceas01.deviceanywhere.com Proxy: disabled	Configure

To use Windows Computer Management, navigate to **My Computer > Manage > Services**. Select the **MC EnsembleServer** service to **Start**.

Figure 2-3 Starting Local Device Server Using Windows Computer Managemer	Figure 2-3	Starting	Local	Device	Server	Using	Windows	Computer	Managemer	ıt
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🟭 Computer Management								_ 🗆 🗙
File Action View Help								
♦ ♦ 2 1 0 8 1								
Ecomputer Management (Loc	Q Services							Actions
🗆 🎁 System Tools			4					Services
I I Task Scheduler	MC EnsembleServer	Name 🔺	Description	Status	Startup Type	Log On As		More Actions
Ide Event Viewer		Supervision Discovery Resource	Publishes t		Manual	Local Serv		More Accions
Shared Folders	Start the service	🔍 Group Policy Client	The servic	Started	Automatic	Local Syst		MC EnsembleSer 🔺
Berfermanes		🌼 Health Key and Certificate M	Provides X		Manual	Local Syst		More Actions
Dovico Managor	Description:	鵒 HomeGroup Listener	Makes loca		Manual	Local Syst		
	Mobile Complete EnsembleServer.	🌼 HomeGroup Provider	Performs n		Manual	Local Serv		
Disk Management	This is used to communicate to	鵒 Human Interface Device Acc	Enables ge		Manual	Local Syst		
Services and Applications	devices.	鵒 IKE and AuthIP IPsec Keying	The IKEEX	Started	Automatic	Local Syst		
Services		鵒 Intel(R) Rapid Storage Tech	Provides st	Started	Automatic (D	Local Syst		
🚔 WMI Control		Interactive Services Detection	Enables us		Manual	Local Syst		
		🔍 Internet Connection Sharing	Provides n		Disabled	Local Syst		
		🔍 IP Helper	Provides tu	Started	Automatic	Local Syst		
		IPsec Policy Agent	Internet Pr	Started	Manual	Network S		
		🔍 KtmRm for Distributed Trans	Coordinate		Manual	Network S		
		🔍 Link-Layer Topology Discove	Creates a		Manual	Local Serv		
		🔍 LiveUpdate	LiveUpdate		Manual	Local Syst		
		MC EnsembleServer	Mobile Co		Automatic	Local Syst		
		Media Center Extender Service	Allows Me		Disabled	Local Serv		
		Microsoft .NET Framework N	Microsoft		Disabled	Local Syst		
		Microsoft .NET Framework N	Microsoft		Disabled	Local Syst		
		Microsoft .NET Framework N	Microsoft		Automatic (D	Local Syst		
		Microsoft .NET Framework N	Microsoft		Automatic (D	Local Syst		
		🔍 Microsoft iSCSI Initiator Ser	Manages I		Manual	Local Syst		
		Microsoft Software Shadow	Manages s		Manual	Local Syst		
		Mozilla Maintenance Service	The Mozill		Manual	Local Syst		
		Multimedia Class Scheduler	Enables rel	Started	Automatic	Local Syst		
		🔍 Net.Tcp Port Sharing Service	Provides a		Disabled	Local Serv		
		© Netlogon	Maintains	Started	Automatic	Local Syst	-	
	Extended Standard /							

2.2 Keynote DeviceAnywhere Studio

Keynote DeviceAnywhere Studio is the client application that enables you to interact with shared as well as locally attached devices and create manual and automated tests in the Test Case Manager and Test Automation views. This section assumes you are installing the Studio for the first time.

See <u>Requirements</u> for system and connectivity requirements.

Before installation, you require the credentials of a TCE account so you can log in to the TCE Portal and download the Studio installer.

2.2.1 Installing Studio on Windows

To install Keynote DeviceAnywhere Studio:

- 1 Download the Studio executable from the TCE Portal:
 - a Access the TCE Portal by logging in to <u>www.keynotedeviceanywhere.com</u>. You can also directly access the TCE Portal at <u>http://tce.deviceanywhere.com/home</u>.
 - b Select **Download Keynote DeviceAnywhere Studio**. Be sure to select the appropriate client platform.



NOTE If you wish to launch Studio directly from the Portal by selecting the **Access Devices** link for your TCE environment, you must first download and install Studio.

- 2 From your download directory, double-click the DeviceAnywhereStudioTCE.exe installer to execute it.
 - DeviceAnywhere Studio

 S

 Welcome to the InstallShield Wizard for DeviceAnywhere Studio

 This will install DeviceAnywhere Studio on your computer. To continue, click "Next".

 InstallShield

 InstallShield
- 3 In the setup screen that appears, click **Next**.

4 Accept the license terms and click Next.



5 Choose an installation location in the local directory for Studio. By default, this folder is C:\ Program Files\DeviceAnywhere\DeviceAnywhereStudio. Click Next.

DeviceAnywhere Studio		×
	Choose Destination Location	_
	Select folder where setup will install files.	
*	DeviceAnywhere Studio will be installed in the following folder.	
	To install in this folder, click Next. To install in a different folder, click "Browse" and select another folder.	
0 2		
	Destination Folder	1
	C:\\DeviceAnywhere\DeviceAnywhereStudio	
	< <u>B</u> ack <u>Next></u> Cancel)
InstallShield	Keynote DeviceAnywher	e.

The installer displays the progress of the installation.

DeviceAnywhere Studio	
	Setup Status
\$	DeviceAnywhere Studio is configuring your software installation.
InstallShield	Cancel Keynote DeviceAnywhere"



6 Select **Run DeviceAnywhere Studio now** and click **Finish**.

NOTE After installing Studio, you will need to relaunch any open browser windows in order to **Access Devices** (launch Studio) directly from the TCE Portal.

This launches Studio. The Studio shortcut 🔊 is placed on your desktop.



7 Enter login credentials – these are the same credentials used to access the TCE Portal.

Login to D	eviceAnywhere Studio	×
Email:		
Password:		Save password
Show advan	Login	Cancel

Users with local device access see the Device Manager view in the Studio sidebar when they log in. Local devices are only displayed in this tab after they have been added. They are operational after they have been fully onboarded.



2.2.2 Installing Studio on Mac OS X

To install Studio on Mac OS X:

- 1 Ensure that you have JDK v1.5+ on your client machine.
- 2 Download Studio For OS X (DeviceAnywhereStudio.tgz) from the TCE Portal.
- 3 Drag the Studio icon into the **Application** folder on your desktop.
- 4 Double-click **DeviceAnywhere Studio** in your **Application** folder to launch the program.
- 5 Before you can log in, you must create a profile for Test Center Enterprise by saving the Access Server information:
 - a In the login window, click **Show advanced** to view advanced options.

Login to D	eviceAnywhere S	Studio	×
Email:			
Password:		▼ S	ave password
Show advar	nced	Login	Cancel

b Click **Change** next to **Active profile** to enter and save a new profile for TCE.

Login to DeviceAnywhere	Studio [default]
Email:	
Password:	Save password
Hide advanced	Login Cancel
Proxy: none	Change
Active profile: default	Change

c Click Add.

Cha	ange active profile	×
S	elect profile to use	
	default	Add
		Edit
		Remove
	· · · · · · · · · · · · · · · · · · ·	
	Save and restart	Cancel

- d In the New profile dialog box, enter and **Save** the following information:
 - Access server address—svtceas01.deviceanywhere.com:443
 - **Profile name**—enter a name to identify the profile, e.g., TCE.

New profile	×
Profile name:	
Access server address:	
Save Cano	el

Studio indicates that it is connecting to the TCE Access Server.

New profile	×
Profile name:	
TCE Live	
Access server address;	
svtceas01.deviceanywhere.com	
Save Cancel	
Discovering access server	

e From the list of profiles, select the one you just created and click Save and restart.

Cha	ange active profile	2	<
5	elect profile to use		
	TCE Live	Add	
	default	Edit	
		Remove	
	Save and restart	Cancel	

6 Enter your credentials and log in. These credentials are authenticated against the selected profile the Access Server IP/port information entered when you created the profile. Studio remembers the last used profile for subsequent logins.

2.2.3 Installing Studio on Linux

To install Studio on Linux:

- 1 Ensure that you have JDK v1.5+ on your client machine.
- 2 Download Studio For Linux (DeviceAnywhereStudio.dmg) from the TCE Portal.
- 3 To un-tar the DeviceAnywhereStudio.dmg file, right-click and choose Extract Here. This will create a folder with the name DeviceAnywhereStudio.
- 4 From the DeviceAnywhereStudio folder, select the da_studio.sh file.
- 5 Double-click to run the file and launch Studio.
- 6 Create a profile pointing to the TCE Access Server and port, svtceas01.deviceanywhere.com:443. Your login credentials will be verified against this profile. Creating a profile for TCE is described in Installing Studio on Mac OS X above.
- 7 Enter your credentials and log in.

2.3 Devices

Your Keynote DeviceAnywhere TAM can provide the list of devices supported for onboarding and controlling locally. You should also receive device profile XML files from Keynote DeviceAnywhere for the devices you wish to use locally. Each XML file contains important device-related information that is essential to using the device in Studio. Before connecting a device, you must copy the XML file to the appropriate Studio directory. You must then onboard the device to the Local Device Server following smartphone platform-specific onboarding instructions found at

http://www.keynotedeviceanywhere.com/tce-pvt-devices-documentation.html.