SYCHRON ONDEMAND DESKTOP™

OnDemand Desktop™ Clients Installation and Configuration Guide

Contents

OnDemand Desktop™ Clients Installation and Configuration Guide

1. Overview

The OnDemand Desktop Client is a simple application that provides access to the Sychron OnDemand Desktop environment. It manages the Portal connection, Habitat selection, and credentials exchange prior to the virtual desktop creation.

This document describes the installation and configuration of the OnDemand Desktop™ Clients for each supported operating system.

2. Supported Operating Systems

The OnDemand Desktop™ Client is available for Microsoft™ Windows™, Windows CE, Windws XPe, Fedora Core 8, PXE (**P**reboot E**x**ecution **E**nvironment), Solaris, and Mac OS X™.

Sychron supports the OnDemand Desktop Client for the Microsoft Windows and Fedora Core 8 environments. It is available to beta users for Windows CE, Solaris, and Mac OS X operating systems and for the Preboot Execution Environment.

3. Required Sychron Components

The OnDemand Desktop client is an access point for the entire OnDemand VDI solution and requires a fully functional system to provide a virtual desktop. However, for installation and initial configuration, an operating OnDemand Desktop Portal will suffice.

4. Required Third-Party Applications

OnDemand Desktop Clients require external remote desktop clients. Table 1 lists the default applications the client invokes to manage the remote desktop session. Confirm that the application is installed, or configure the client to use an alternative client (see *Configuration Options*).

OS	Client	Default Application
Windows	Microsoft Terminal Server Client	`C:\WINDOWS\SYSTEM32\MSTSC.EXE`
Fedora Core 8	Terminal Server Client	`/usr/bin/tsclient`
Mac OS X	Microsoft Remote Desktop Connection	`/Applications/Remote Desktop Connection.app`
Solaris	Sun Ray Connector	`/opt/SUNWuttsc/bin/uttsc`

Table 1. – Default Remote Desktop Applications

The OnDemand Desktop Client also requires a Java 6™ run-time environment. Refer to the Java website (http://java.sun.com/javase/downloads/index.jsp) for a download package appropriate for your client OS.

The Linux installations also require Mozilla Firefox 1.5 or higher.

5. Windows OS Installation and Setup

5.1. Windows OS Installation

For the Windows operating system, the OnDemand Desktop Client is distributed as standard MSI product in a compressed (ZIP) file format. To begin, copy the file `OnDemand Desktop Client-2.1.xxxx.zip` to your local disk.
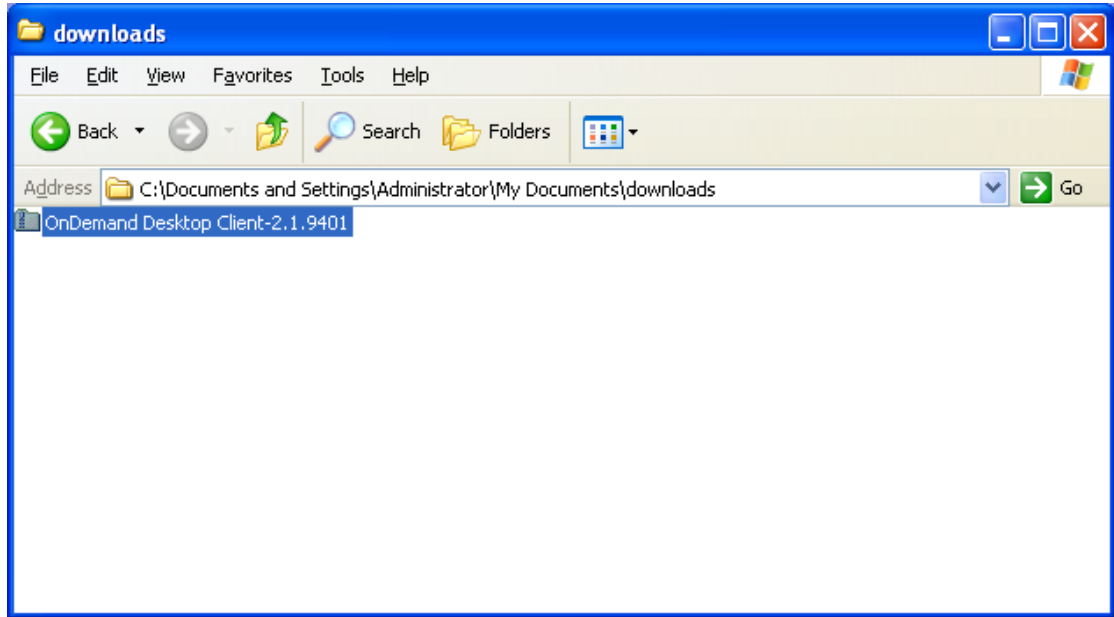
Open the ZIP folder. You will see two files: `OnDemand Desktop Client.msi` and `setup.exe`.
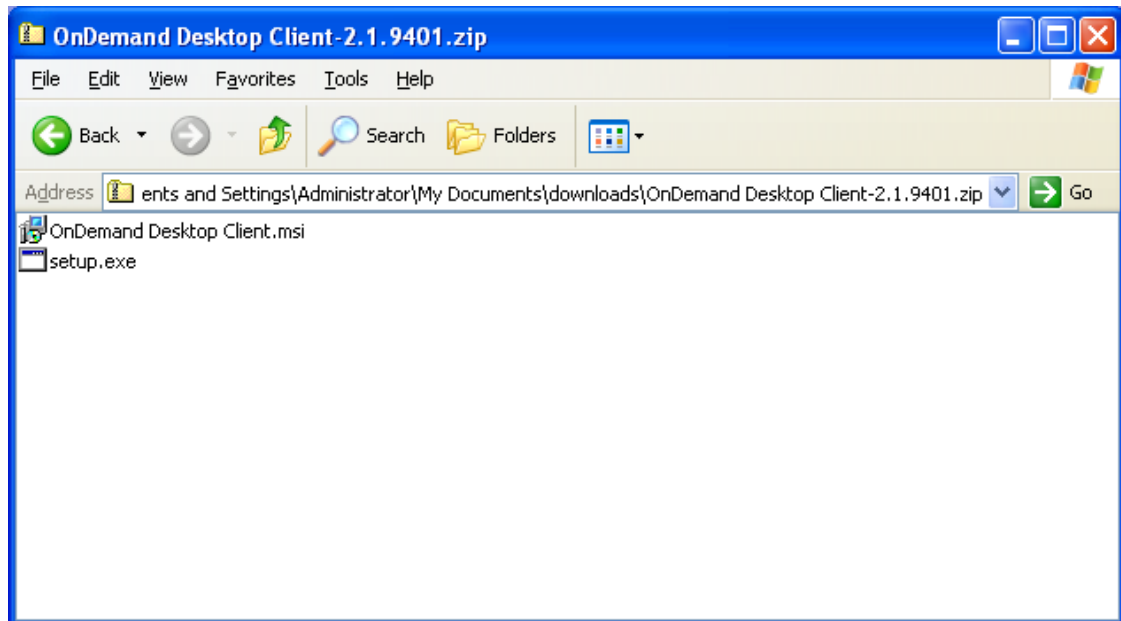
Open `setup.exe`. If you get a warning about previous versions, use the **Add or Remove Programs** feature in your **Control Panel** to remove any existing OnDemand Desktop Client installations. Otherwise, you should see the OnDemand Desktop Client welcome screen.
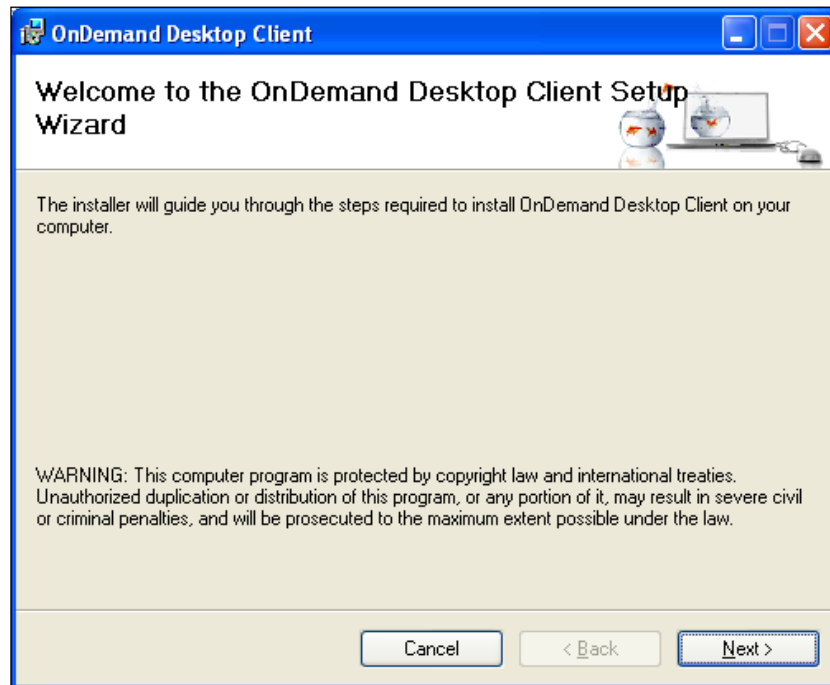
Click **Next**.
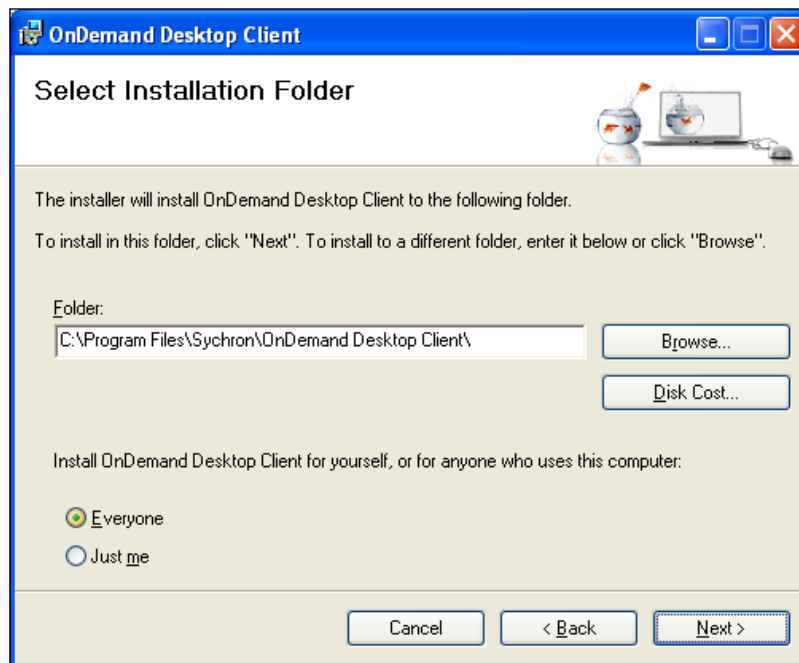
We highly recommend use of the default installation location. Click **Next**.
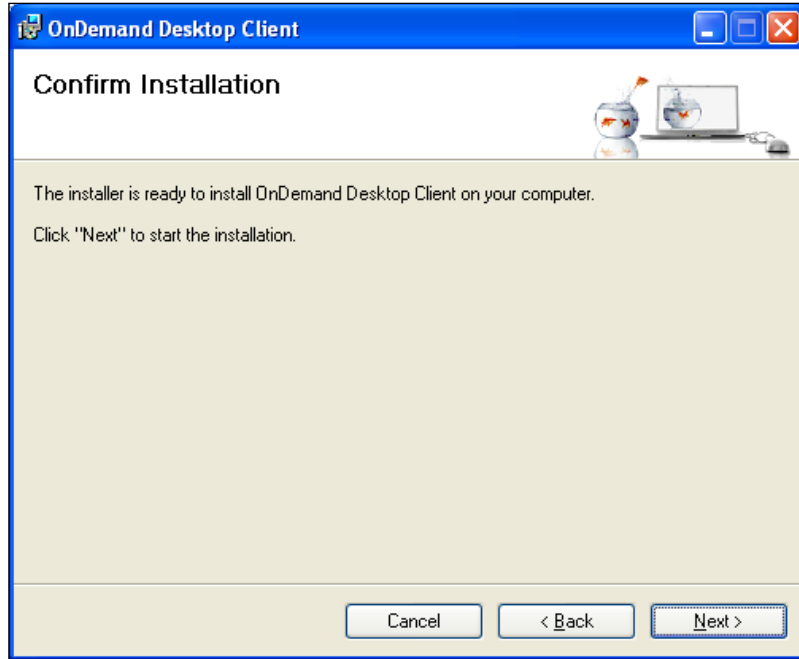
Click **Next**. Installation will begin.
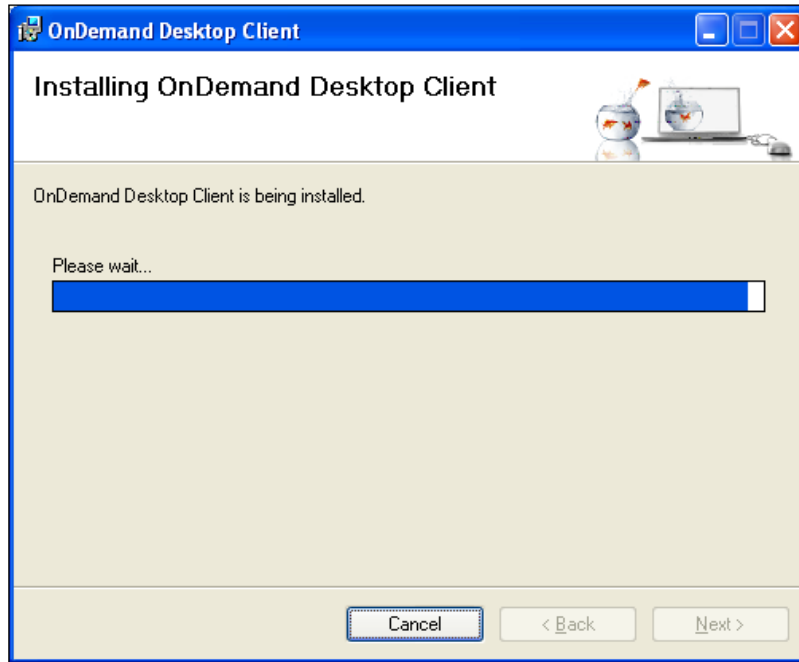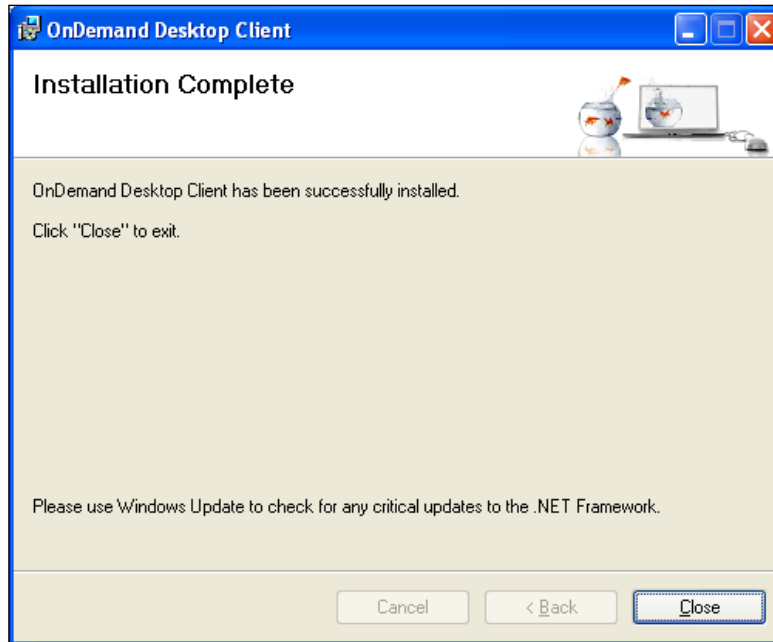
Click **Close**. You should now have an icon for the OnDemand Desktop Client on your desktop as well as in the Start menu.

Installation is complete.

5.2. Windows OS Setup

The OnDemand Desktop Client uses two configuration files for Windows:

> `ondemandclient.properties` – This file resides in the same directory as the OnDemand Desktop Client JAR file and contains options that are necessary for connecting to a Portal. This file will be created if it does not exist.

> `welcome_rdp.txt` – This file resides on the OnDemand Portal and lists the necessary options to display the *Habitat selection screen*.

Both OnDemand Desktop Client configuration files are in XML format.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
<entry key="RDPClientLocation">c:\sychron\sychronrdp.exe</entry>
<entry key="loggingCommand">wscript.exe "C:\Program Files\Sychron\OnDemand
Desktop Client\LogToEventLog.js"</entry>
<entry key="backgroundImage">c:\sychron\backgroundimg.gif</entry>
<entry key="welcomeMessage">Welcome Message.</entry>
</properties>
```

example `ondemandclient.properties` file

Note: Option keys are case-sensitive.

The `welcome_rdp.txt` file resides in the OnDemand Portal as an RDP welcome template
(`welcome_rdp.txt`). See the ***OnDemand Portal Installation Guide*** for information about these
template files.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?><!DOCTYPE properties
SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
<entry key="error">$$ERROR$$</entry>
<entry key="habitats">$$HABITATS$$</entry>
<entry key="resolutions">$$RESOLUTION$$</entry>
<entry key="welcomeText">
OnDemand Desktop&#8482; is an enterprise scalable management system that
provides on demand virtual desktops to authorized users who
have Internet access. Based upon black magic and voodoo, OnDemand
Desktop provides the right desktop to the right user at the right
time. With OnDemand Desktop, you will see more bang for your IT
asset buck because you can use any server and reuse your peripheral
hardware instead of investing in expensive servers and buying new
PCs every year. You manage all of your VMs through one application
at one time and avoid having to update individual VMs every time
you need to install an update or a patch. Security is tighter
because user data lives on the VM and not on the client device -
you never lose data because a user lost a notebook. Administrators
can guarantee user service levels and ensure desktop continuity
from login to login. All you need is a browser or a thin client,
and OnDemand Desktop does the rest.
</entry>
<entry key="welcomeImage">images/fishbowl.jpg</entry>
</properties>
```

example welcome_rdp.txt file

6. Fedora Core 8 Installation and Setup

A TAR file is available for general installation of the OnDemand Desktop Client to Linux servers.
Fedora users also have the option of using an RPM file.

6.1.1. Fedora RPM Installation

1. Obtain the OnDemand Desktop Client RPM file: `OnDemandClient-2.1-`
    `xxxx.fc8.i386.rpm`

2. Run the RPM command on the distribution file: `rpm -i OnDemandClient-2.1-xxxx.fc8.i386.rpm`

6.1.2. TAR File Installation

1. Obtain the OnDemand Desktop Client compressed TAR file: `OnDemandClient-2.1-xxxx.tgz`

2. Create the installation directory: `mkdir -p /opt/sychron`

3. Change to the new directory: `cd /opt/sychron`

4. Un-TAR the distribution file: `tar xzf OnDemandClient-2.1-xxxx.tgz`

6.2. Fedora Core 8 Setup

In order to install the OnDemand Desktop Client on a Linux server, you will need to define and configure a user or path where the application is going to reside.

- Log into the Linux server, and configure two settings:

  o If the path where the Java VM is located is unknown to the user's environment, set it by typing `export PATH=`/opt/SDK1.15/jdk/bin`:$PATH` where the underlined part of the line refers to the path where the Java VM is located.

  o Set LD_LIBRARY_PATH and MOZILLA_FIVE_HOME variables to Mozilla libraries. In our server, it was `export LD_LIBRARY_PATH = /usr/lib/firefox-1.5.0.12/ export MOZILLA_FIVE_HOME = /usr/lib/firefox-1.5.0.12/`.

  (The location or version of Firefox may be different on your system, so some editing of the two preceding commands may be required.)

- You must install the applications **tsclient** and **rdesktop** on Linux. For Red Hat/Fedora, log on as *root*, and execute `yum install tsclient`. To execute the OnDemand Desktop Client, type `java -jar OnDemandClient.jar`.

7. Windows CE Installation and Setup

This client allows a Windows CE-based device, such as a NeoWare C50, to serve as a thin client to an OnDemand Desktop system.

7.1. Windows CE Installation

1. Perform a factory reset on the Neoware thin client, and reboot it.

2. Select device type **WindowsCE**, and check radio option **No connection manager**.

3. Within the control panel of the thin client, select the **user interface** icon.

4. Select the radio option **disk drives**.

5.	Perform additional customizations of the CE device as desired.

6.	On the control panel, click **OK** and **OK**. The thin client will reboot.

7.	Download the OnDemand Windows CE client and the `install.2do` files to a hard drive accessible to your local computer.

8.	Open the **Neoware EZManager** application.

9.	If you have not already done so, browse the network in order to identify the NeoWare devices.

10.	Click on the **Snapin Manager** (plus icon).
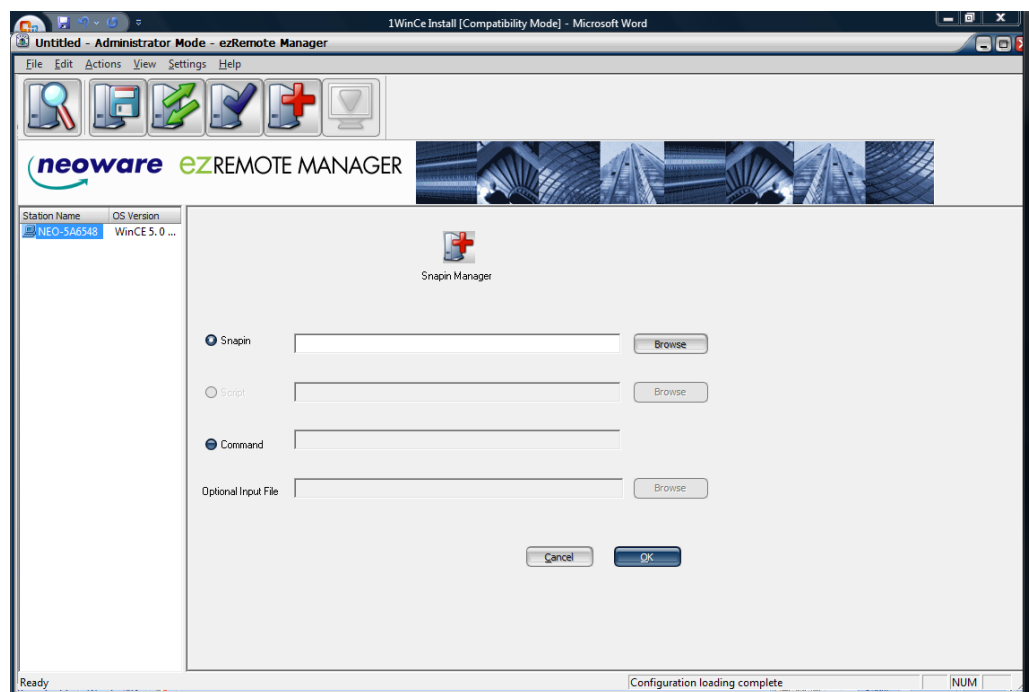
11.	Within the Snapin Manager, click **Browse** to select the `install.2do file` from the same directory as the Windows CE client.
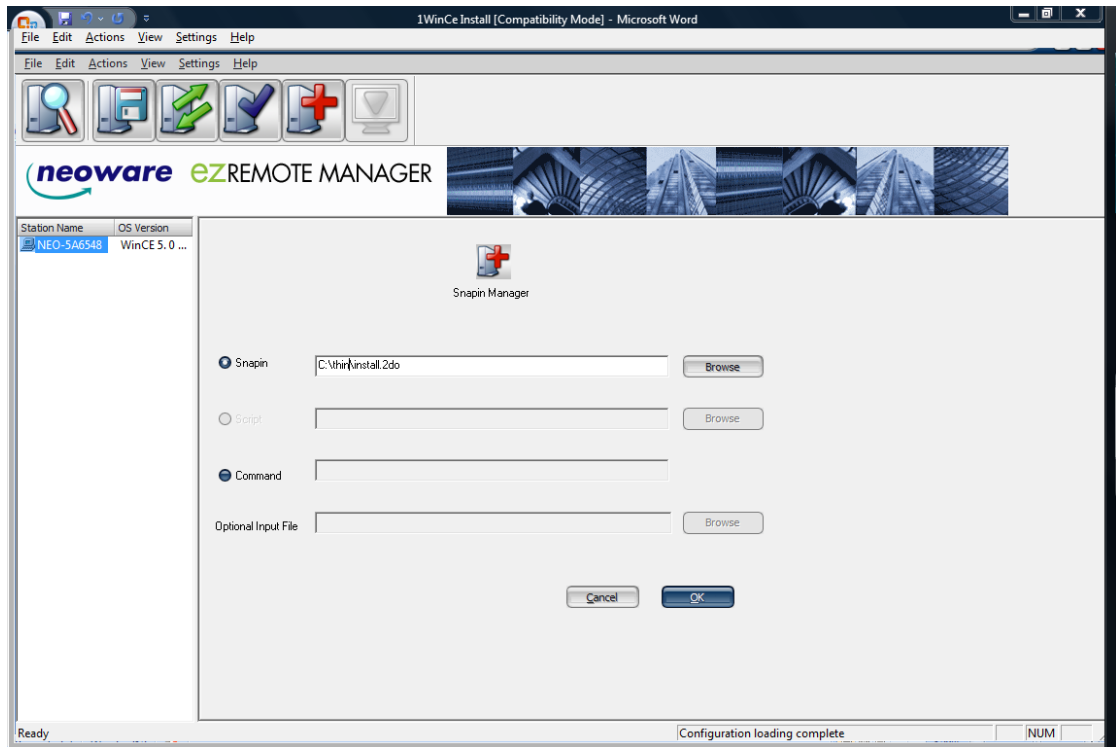
12. Click **OK** to install the Sychron Windows CE client on the thin client.

13. Upon completion of the file copy, click **Close**.

7.2. Windows CE Setup

1. Highlight the desired thin client.

2. Click on the **Properties Manager** icon from the tool bar (check mark icon).

3. Highlight the selected thin client.

4. Select **Get properties from file** from the thin client radio button.
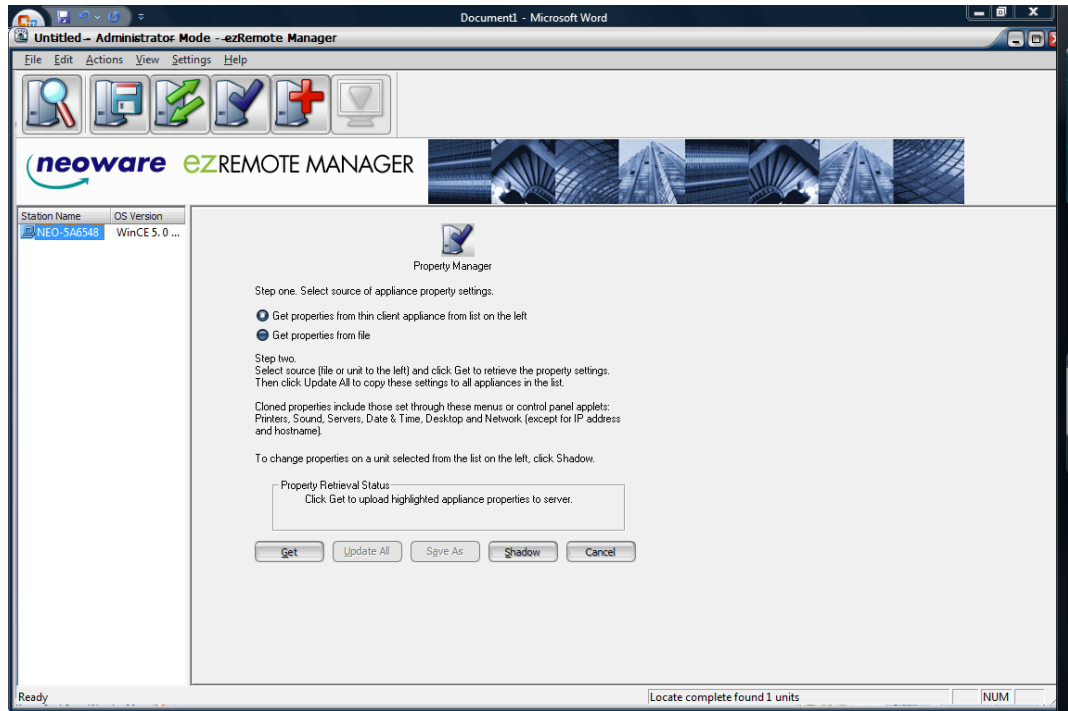
5. Click the **Get** button. This will acquire the client properties from the device.

6. Once the properties are retrieved from the client, click the **Save As** option in order to save the properties.

7. Save the file under the same name as the thin client's host name to the same directory where you have loaded the OnDemand Windows CE client and the `install.2do` file.

8. Open the file with Windows Notepad to enter the new registry settings:
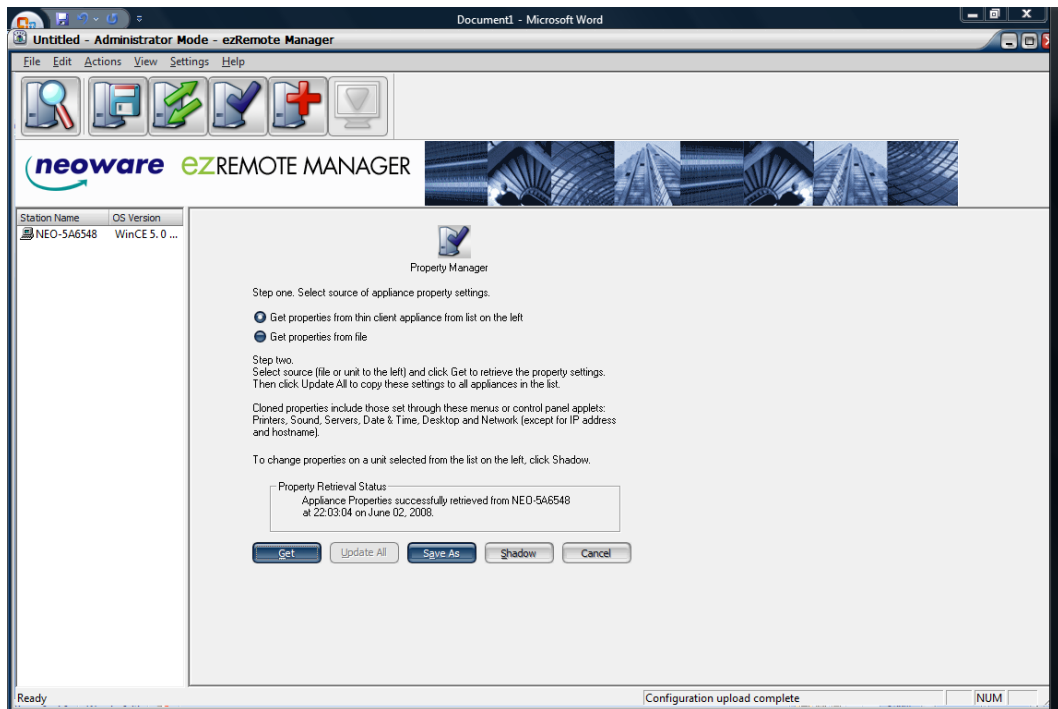
9. Enter the following lines in the properties as shown. (Be sure to enter the lines right below the key `-s [HKLM\init] "Launch50"=sz:"explorer.exe"` as shown below.)

NEW LINES TO ADD (Change data as they pertain to the client such as station `public01`.):

```
-s [HKLM\init] "Launch60"=sz:"\diskonchip\wince_client.exe"

-s [HKLM\init] "Depend60"=hex:32,00

-s [HKLM\Software\Sychron\Client] "BaseUrl"=sz:"http://PORTAL-ADDRESS/svdwp/"

-s [HKLM\Software\Sychron\Client] "autouser"=sz:"USERNAME"

-s [HKLM\Software\Sychron\Client] "autopass"=sz:"PASSWORD"

-s [HKLM\Software\Sychron\Client] "autohabitat"=sz:"HABITAT-NAME"

-s [HKLM\Software\Sychron\Client] "clientAssetName"=sz:"CLIENT-ASSET-NAME"
```

The above example uses the following values. Choose values appropriate to your environment:

`PORTAL-ADDRESS` = the DNS name or IP address of the OnDemand Portal

`USERNAME` = the username to use to autologin this device

`PASSWORD` = the password for the chosen username

`HABITAT-NAME` = the OnDemand Habitat defined in the Portal web config file

`CLIENT-ASSET-NAME` = the asset name for this client device

```
public - Notepad
File  Edit  Format  View  Help

;#WinCE Property RGY File

-d [HKLM\Comm\Security\SystemCertificates\Root\Certificates]
-d [HKLM\Services]
-c [HKLM\SYSTEM\CurrentControlSet\Services\SNMP\Parameters\ValidCommunities]
-d [HKLM\ControlPanel]
-s [HKLM\Software\NCD\NCDSrv] "URL"=sz:""
-s [HKLM\nls] "DefaultLCID"=dword:00000409
-s [HKLM\nls] "ExtraCurrency"=dword:000020ac
-s [HKLM\init] "Launch50"=sz:"explorer.exe"
-s [HKLM\init] "Launch60"=sz:"\diskonchip\wince_client.exe"
-s [HKLM\init] "Depend60"=hex:32,00
-s [HKLM\Software\Sychron\Client] "BaseUrl"=sz:"http://192.168.158.3/svdwp/"
-s [HKLM\Software\Sychron\Client] "autouser"=sz:"public01"
-s [HKLM\Software\Sychron\Client] "autopass"=sz:""
-s [HKLM\Software\Sychron\Client] "autohabitat"=sz:"MBOPL"
-s [HKLM\Software\Sychron\Client] "clientAssetName"=sz:"public01"
-s [HKLM\platform] "TaskManView"=dword:00000000
-s [HKLM\platform] "UiWizHasRun"=dword:00000001
-s [HKLM\platform] "UIProfile"=dword:00000003
-s [HKLM\System\GWE] "SysColor"=binary:00,00,00,00,3a,6e,a5,00,00,00,00,00,00,00,00,00,ef,eb,de,00,ff
-s [HKLM\Comm\ApplicationDownload] "SvrFmt"=sz:"https://%s/devicemgmt/server.aspx"
-s [HKLM\Comm\PCI\FET5CEB1\Parms] "ConnectionType"=dword:00000000
-s [HKLM\WBT] "HasBrowser"=dword:00000001
-s [HKLM\WBT] "WebConnectionConfigured"=dword:00000001
-s [HKLM\Comm\Security\SystemCertificates\Root] "InitFile"=sz:"\windows\sysroots.p7b"
-s [HKLM\Snd\Event] ".AllSounds"=multi_sz:"Asterisk" "Close" "critical" "default" "Empty" "exclam" "i
-s [HKLM\Snd\Event] ".Scheme"=sz:".DefaultSounds"
-s [HKLM\Snd\Event] "EventMask"=dword:00ffffff
-s [HKLM\Snd\Event] "EventCache"=dword:00000300
-s [HKLM\Snd\Event] ".NoSounds"=multi_sz:"" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" "" ""
-s [HKLM\Snd\Event] ".DefaultSounds"=multi_sz:"Asterisk" "" "critical" "default" "" "exclam" "infbeg"
-s [HKLM\Snd\Scheme] ".NoSounds"=sz:"No Sounds"
-s [HKLM\Snd\Scheme] ".AllSounds"=sz:"All Sounds"
-s [HKLM\Snd\Scheme] ".DefaultSounds"=sz:"Windows CE Default"
-s [HKLM\Services\TIMESVC] "ClientOnly"=dword:00000001
-s [HKLM\Services\TIMESVC] "TrustLocalClock"=dword:00000000
-s [HKLM\Services\TIMESVC] "threshold"=dword:05265c00
-s [HKLM\Services\TIMESVC] "recoveryrefresh"=dword:05265c00
-s [HKLM\Services\TIMESVC] "refresh"=dword:05265c00
-s [HKLM\Services\TIMESVC] "ServerRole"=dword:00000000
-s [HKLM\Services\TIMESVC] "AutoUpdate"=dword:00000001
-s [HKLM\Services\TIMESVC] "server"=multi_sz:"time.windows.com"
-s [HKLM\Services\TIMESVC] "Index"=dword:00000000
-s [HKLM\Services\TIMESVC] "Prefix"=sz:"NTP"
-s [HKLM\Services\TIMESVC] "Keep"=dword:00000001
-s [HKLM\Services\TIMESVC] "Order"=dword:00000099
-s [HKLM\Services\TIMESVC] "Dll"=sz:"timesvc.dll"
-s [HKLM\Services\TIMESVC] "Context"=dword:00000000
-s [HKLM\Services\credsvc] "Prefix"=sz:"CRD"
-s [HKLM\Services\credsvc] "Index"=dword:00000000

[taskbar] iGoogle - Moz...  1WinCe Install...  Untitled - Ad...  Alpha5  public - Notep...  Registry - Not...
```
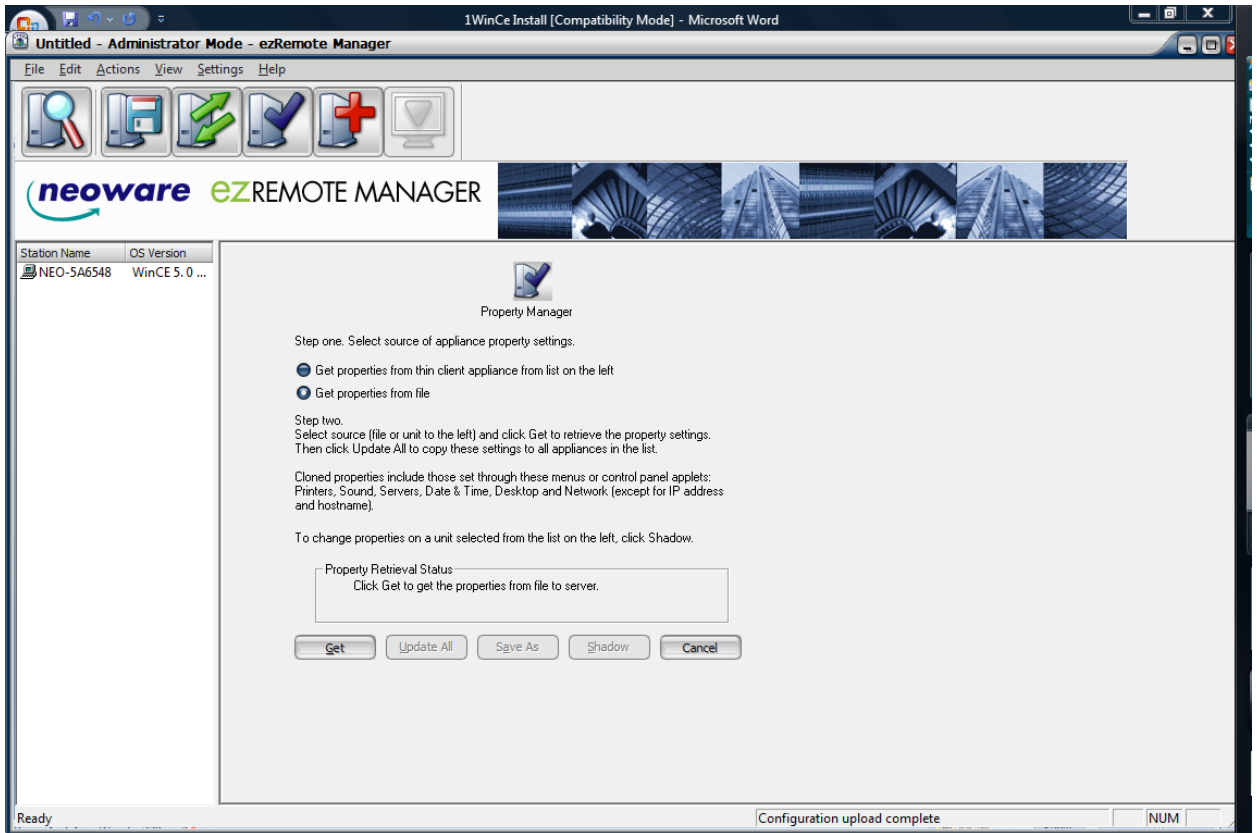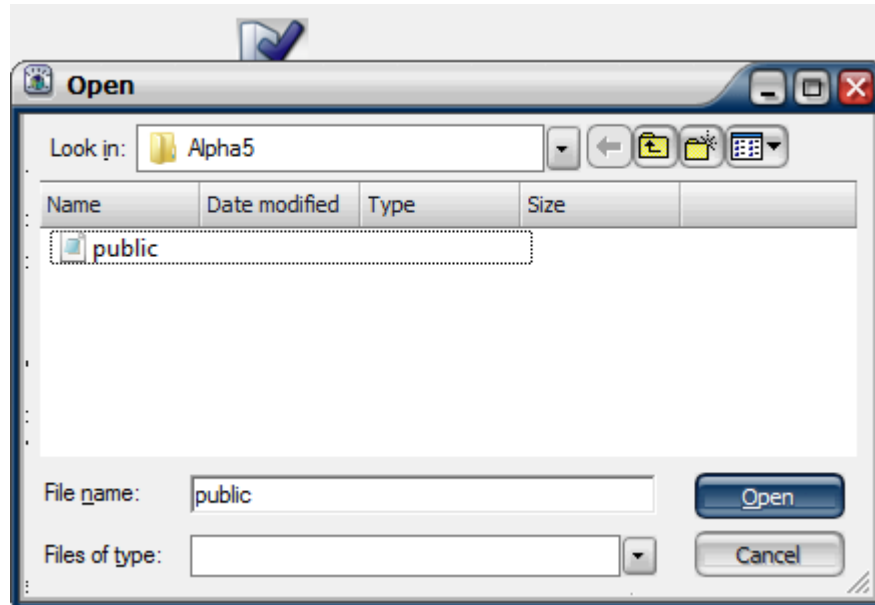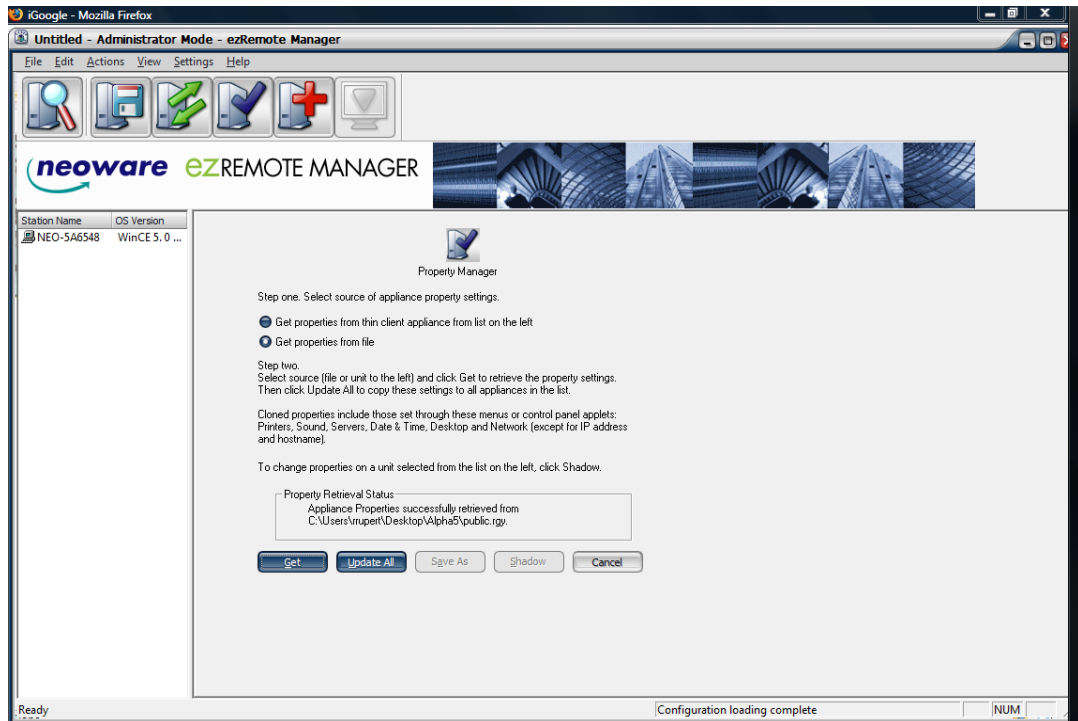
10.   Save the properties page back to the same folder it from where you opened it.

11.   In EZManager, click on the radio button **Get properties from file**.

12. Click the **Get** button.

13. Select the properties file to which you just added the registry settings, and click **Open**.

    14.   Click **Update All**. The thin client will reboot.

8. Solaris Installation and Setup

8.1. Solaris Installation

Sychron does not support the Solaris release; however, this release has demonstrated that it works.

1.   Obtain the OnDemand Desktop Client compressed TAR file: `OnDemandClient-2.1-xxxx.tgz`

2.   Create the installation directory: `mkdir -p /opt/sychron`

3.   Change to the new directory: `cd /opt/sychron`

4.   Un-TAR the distribution file: `tar xzf OnDemandClient-2.1-xxxx.tgz`

8.2. Solaris Setup

9. Mac OS Installation and Setup

9.1. Mac OS Installation

1.   Obtain the OnDemandDesktopClient-2.1.xxxx.dmg file.
2.   Double-click the OnDemand Desktop icon to open it.
3.   Drag the OnDemandClient-2.1.xxxx application and the ondemandclient.properties file to your Applications folder.

9.2. Mac OS Setup

10. PXE Installation and Setup

OnDemand Desktop requires a TFTP server to be running and accessible by the clients at TCP and UDP Ports 69.

10.1. PXE Installation

1. Copy the contents from the download to the root directory of the TFTP server:

   - `initrd-sychron-ondemand-client-v1.0-917.img`
   - `pxelinux.0`
   - `pxelinux.cfg`
   - `vmlinuz0-sychron-ondemand-client-v1.0-917`
   - `pxelinux.cfg/default`

2. Add the following options to your DHCP configuration:

   - Option 66:
     `Boot Server Host Name/nextserver: <tftpserver>`
     where you are to replace `<tftpserver>` with the address of your TFTP server accessible from the clients

   - Option 67:
     `Bootfile name/filename: pxelinux.0`
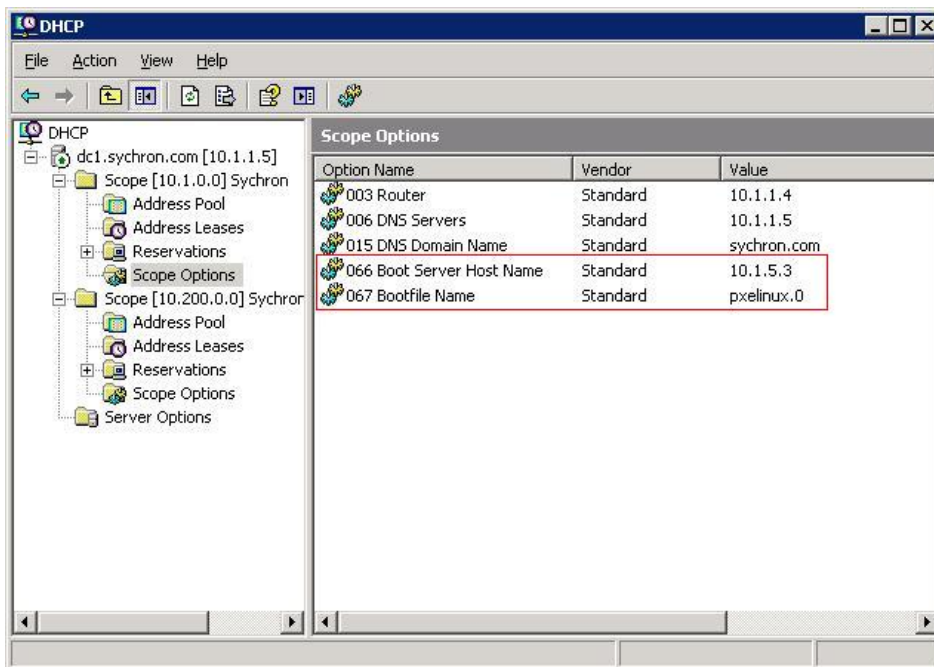
For minimum disturbance to your existing network boot infrastructure, Sychron recommends that you limit the DHCP options above to the relevant clients and that you place the files from the download onto another TFTP server. Sychron can advise on alternatives, such as how to bypass broken firmware.

10.2. PXE Setup

11. XPe Thin Client Installation

You can install the OnDemand Desktop Client for Windows on a thin client running the Microsoft XPe operating system. Sychron recommends that you follow the thin client manufacturer's instructions for adding software to the thin client; however, below are some general instructions that should work for most thin clients with XPe. A thumb drive with the OnDemand Client for Windows installation files and at least 256MB free space is required to complete these installation instructions.

1) Log into the thin client device as local administrator.

2) Disable FBWF. The device will reboot.

3) Log into the thin client device as local administrator.

4) Insert a thumb drive with the required free space, and take note of the drive letter it is assigned in My Computer. Also, look for a drive labeled Ramdrive (may vary by manufacturer), and take note of the drive letter it is assigned.

5) Right-click My Computer, choose properties, and click the Advanced tab in the System Properties window.

6) Click the Environment Variables button, and take note of the TEMP and TMP variables. If the TEMP and TMP variables have values of the previously noted Ramdrive, change the values to the drive letter assigned to your thumb drive by left-clicking the TEMP and TMP environment variables and clicking the Edit button.

7) Update the variable values, and click **OK**. Click **OK** in the Environment Variables window and the System Properties window. Reboot.

8) Execute `setup.exe` for OnDemand Desktop Client that is located on the thumb drive. **(Note: During installation of .NET 2.0, the system may complain that the contents of the folder has changed and ask you to click OK to retry. Click OK, and the process should finish without incident.)**

9) Test the function of the OnDemand Desktop Client.

10) Change `TEMP` environment variable back to `previous value.`

11) Enable FBWF. The device will reboot.

12) Test functionality again.

12. Client Use

12.1. Command Line

The OnDemand Desktop Client is an executable JAR file that allows for two command line options. The `-config` option specifies the location and name of a non-default properties file (described in Section 7). In addition, the user may specify a specific OnDemand Portal to use.

```
java –jar OnDemandClient.jar [-config path-to-properties-file]
[portal name or IP address]
```

For Windows, double-click the OnDemand Desktop Client icon on your desktop.

Sample desktop shortcut for the OnDemand Desktop Client

12.2. Client Features

The OnDemand Desktop Client features two screens: the *initial connect screen* and the *Habitat selection screen*.

12.2.1. Initial Connection Screen

If you do not use the `forcehost` client properties option, the *initial connection screen* prompts the user for the name or IP address of a Portal.
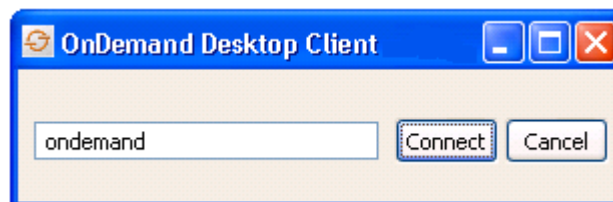
12.2.2. Configuration Items for Initial Connection Screen

Configuration items on the *initial connect screen* are in the `ondemandclient.properties` file. This file must either reside in the directory from which you execute the OnDemand Desktop Client or be specified using the `-config` argument. By default, the location is `C:\Program Files\Sychron\OnDemand Desktop Client`.
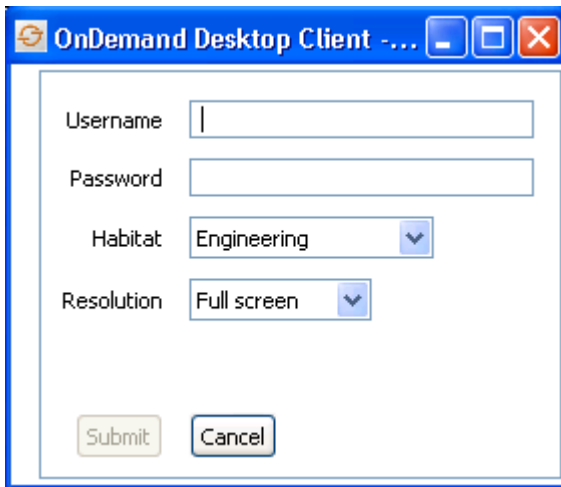
See the *Client Properties* section of *Configuration Options* for details on the configuration options available for the *initial connection screen*.

12.2.3. Habitat Selection Screen

The *Habitat selection screen* presents a client credentials prompt, a Habitat selection dropdown, and a resolution dropdown. The client credential prompt, Habitat selection dropdown, and resolution dropdown are collectively known in this document as the Habitat selection dialog.

If you specify the "optionalURL" option, the URL specified in the option displays in the Habitat selection screen behind the Habitat selection dialog. Note that the Habitat selection dialog "floats" above the `optionalURL` content. This `optionalURL` content will not flow around the Habitat selection dialog.

You must statically position the Habitat selection dialog in the *Habitat selection screen*. The `credentialsXoffset` and `credentialsYoffset` specify the position of the top left corner of the Habitat selection dialog. These options are relative to the left side of the *Habitat selection screen* and the bottom of the banner image, respectively. You may provide input for both options in absolute pixels or a percentage of the *Habitat selection screen*. To specify percentage, append a "%" sign to the end of the value of the option. The default value for both X and Y offset is 50%.

OnDemand Desktop Client Habitat selection screen

Configuration items on the *Habitat selection screen* are specified in the `welcome_rdp.txt` configuration file on the OnDemand Portal.

See the *Virtual Desktop Properties* section of *Configuration Options* for details on the configuration options available for the *Habitat selection screen*.

13. Configuration Options

13.1. Available Options for Windows and Linux

13.1.1. Client Properties

These configuration items are stored in `ondemandclient.properties`. Note that, because this is an XML format file, some special characters will cause XML parsing problems. In particular, be careful with the use of the ampersand (&), and the greater-than/less-than (<>)

	characters. Consider using the URL-encoded equivalents (e.g., @amp; for ampersand).
`backgroundImage`	sets the background image for the initial connect screen The initial connect screen will scale larger to fit the background image. If the background image is smaller than the initial connect screen's minimal size needed to display the value of `welcomeMessage` and input elements, the background image may be tiled.
`credentialsMessage`	label for the Habitat selection screen If no value is specified, no label will be displayed.
`forcehost`	defines a host to which the client will automatically connect No initial connect screen will be displayed. Instead, the user will be connected to the named portal with no capability to return to the initial connect screen.
`hideWindowDecoration`	When set to `yes`, window decorations (i.e., title bar, minimize, maximize buttons) will not be displayed on the *Habitat selection screen*. Note that some operating systems do not support this parameter.
`lasthost`	pre-populates the host field in the initial connect screen
`loggingCommand`	When set, this value is the program that is invoked to send text to a logging destination. It is run at the OS level as: *logCommand text* where *logCommand* is the value supplied in the properties file, and the OnDemand Client application supplies *text*. On Windows installations, `loggingCommand` defaults to `wscript.exe C:\Program Files\Sychron\OnDemand Desktop Client\LogToEventLog.js`. On Linux installations it defaults to `logger`. Users may supply another logging mechanism as long as it conforms to the behavior described.
`RDPClientLocation`	used to identify a custom RDP client If not specified, a default client is used.

welcomeMessage	label for the hostname input on the initial connect screen
	If no value is specified, no label will be displayed.
useSSL	When set to `yes`, the Client will attempt to use `HTTPS` for communication with the Portal.

13.1.2. Virtual Desktop Properties

Note that these configuration items are stored on the server.	
bannerImage	specifies the location of the banner image that will be at the top of the *Habitat selection screen* – deprecated and may be unsupported in future versions of the OnDemand Desktop Client
credentialsXoffset and credentialsYoffset	specifies the position of the Habitat selection dialog on the Habitat selection screen relative to the left side of the Habitat selection screen. This value is in pixels, but may be given as a percentage of the Habitat selection screen by appending a "%" to the value.
	Note that specifying a negative value, value above 100%, or value greater than the number of pixels in the Habitat selection screen may cause unpredictable results.
	The defaults are center of the window vertically but to the left of the window horizontally to better match the common use of a credentials dialog with HTML content to the right.
defaultHabitat	specifies the Habitat that will be the default display in the Habitat selection dropdown
	Note: If no `defaultHabitat` is specified, any of the Habitats specified in the *Habitats* properties may be shown as the default.
defaultResolution	specifies the resolution that will be the default in the resolution selection dropdown
	Note: If no default resolution is specified, the first resolution listed in the *resolutions* property will be used.

error	an error response to return to the Client; should be set to `$$ERROR$$`

	Note: This option is required. Failure to set this option will result in unpredictable Client behavior when an authentication failure occurs.
`errorDetail`	a detailed error message to return to the Client; message will be displayed if the mouse cursor hovers over the error message specified by the error property; should be set to $$DETAILED_ERROR$$ *Note*: This option is not required but is highly recommended.
`Habitats`	This is a comma-delimited list of Habitats available. You *must* provide and set this parameter.
`optionalURL`	specifies the URL to load in the Habitat selection screen *Note*: This URL should be external to the Sychron Virtual Desktop Portal.
`resolutions`	a comma-delimited list of resolutions and resolution codes to allow the user to select Example: **fullscreen,1,1024 x 768,2** specifies `fullscreen` and `1024x768` as available resolutions. See the ***OnDemand Desktop Portal Installation Guide*** for a list of resolutions and resolution codes. *Note:* If no resolution is provided, *fullscreen,1* will be the default.
`scaleBannerToScreenWidth`	If set to `yes`, the banner image presented on the Habitat selection dialog will be scaled to fit the width of the screen. This is deprecated and may be unsupported in future versions of the OnDemand Desktop Client.