

# 2X Manual

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2X Cloud Portal  
v10.1





URL: [www.2x.com](http://www.2x.com)  
E-mail: [info@2x.com](mailto:info@2x.com)

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# PRE-REQUISITES

The 2X Cloud Portal allows users to launch published applications and desktops from multiple farms which are accessed through a web portal according to their filter settings.

- Windows 2003/2008 Server
- Microsoft .NET Framework II
- IIS6 or IIS7
- 2X ApplicationServer

## Client Operating Systems and Browsers Supported

	Internet Explorer v6/7/8	Firefox 3.x	Opera 10	Chrome 3/4	Safari 3/4
Windows 2000, XP, Vista and Windows 7	X	X	X	X	X
Mac		X			X
Linux		X	X		

## Automatic Client Detection and Installation

	IE v6/7/8	Firefox 3.x	Opera 10	Chrome 3/4	Safari 3/4
Windows 2000, XP, Vista and Windows 7	Active X or Java Enabled	Java Enabled	Java Enabled	Java Enabled	Java Enabled
Mac	N/A	Java Enabled	N/A	N/A	Java Enabled
Linux	N/A	N/A	N/A	N/A	N/A

Please note that where the client is not automatically detected, you will need to install it as described in the ApplicationServer [manual](#).



# INSTALLATION

Make sure all Windows programs are closed before you begin the installation.

Run the 2X Access Portal setup program by double clicking on the '**2XWebPortal.msi**', or '**2X WebPortal-x64.msi**' file on the IIS machine that will be used as your access point to the published applications from the Web Portal.

We recommend that you do **not** install the 2X Cloud Portal on an Active Directory machine.

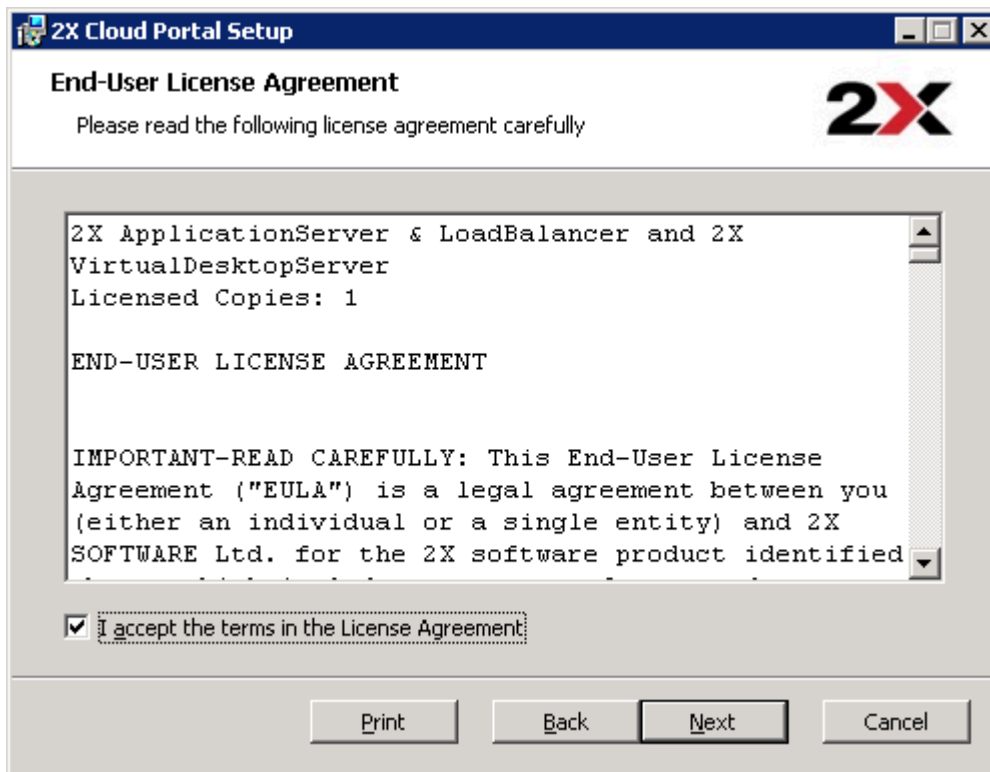
A welcome dialog box will appear. Close other Windows programs and click 'Next'.



*Welcome to the 2X Cloud Portal Setup Wizard*



After reading the End-User License Agreement, check the 'I accept the terms in the License Agreement' checkbox and click on 'Next'.



*Accept End-User License Agreement*



The 2X Web Server Port screen displays and you are asked to assign the port on which the 2X Web Service will be installed. By default, the 2X Cloud Portal is installed on port 81.

**NOTE:** The 2X Secure Client Gateway is installed on port 80 by default and is configured to forward HTTP requests to the local host, on port 81. Therefore, Clients will still be able to access the 2X Web Portal from port 80. You can choose to install the 2X Web Service on any other port, and you can also use an existing port used by other web sites.

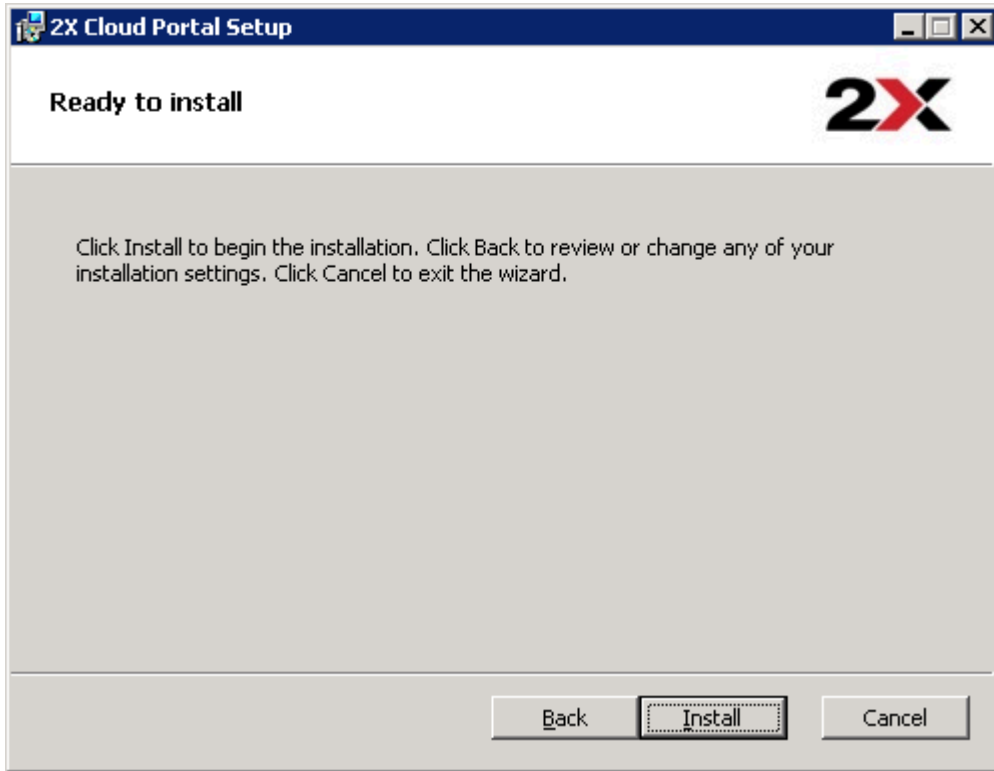
In this scenario, the service will be installed under the web site configured on port 81. Click 'Next'.



Cloud Portal – Web Server Port Number



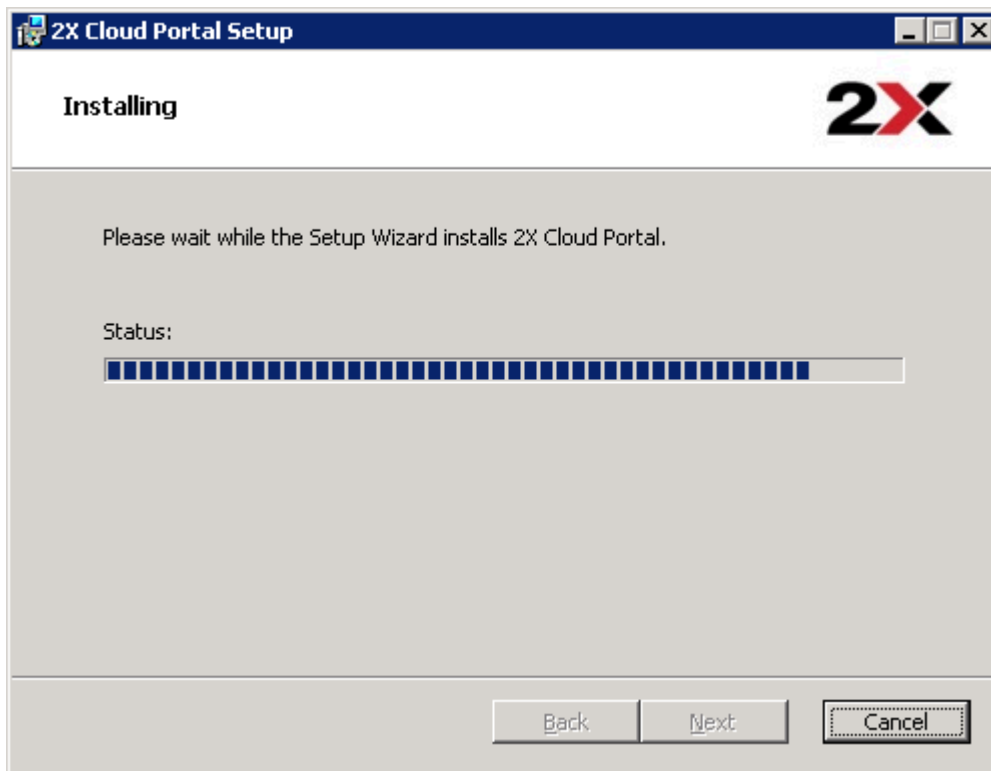
Click on 'Install' to begin the installation.



*Cloud Portal Installation*



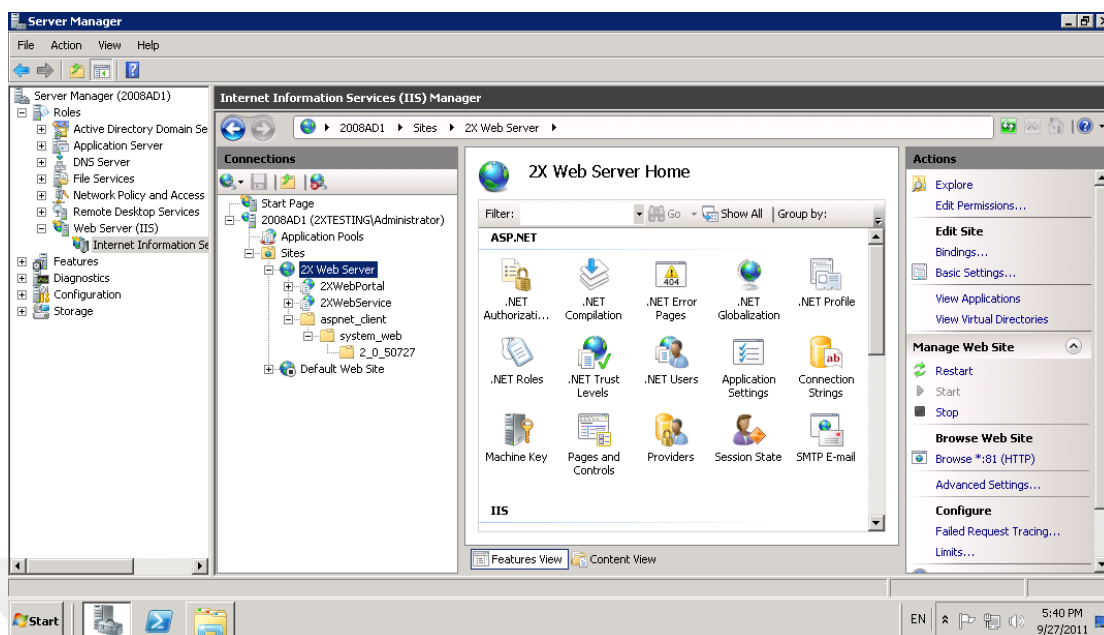
Setup will copy the required files and will create an IIS application on the machine.



Web Portal – Copy Files to IIS Machine

**Note:** Please note that IIS7 caches dynamic content as well as static content.

To disable the caching for .aspx, .asmx and .ashx pages for the 2X Cloud Portal directory with an asp.net page that depends on the session state. please perform the following on the '2X Web Server', '2XWebPortal' and '2XWebService'. These are shown in the following screenshot.



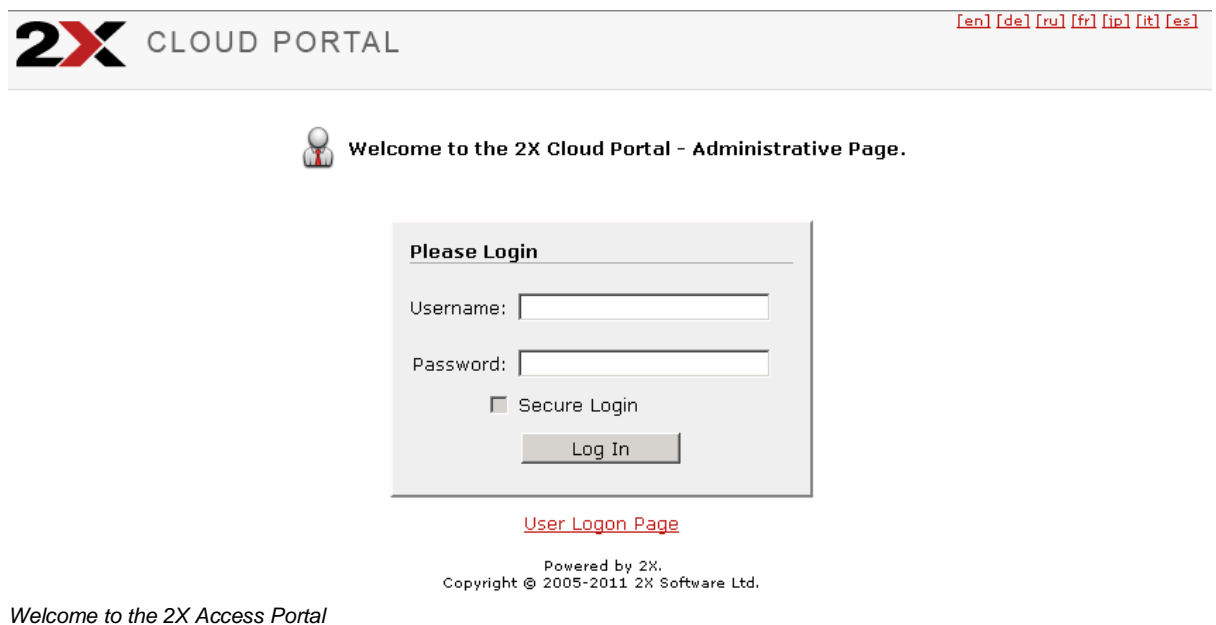
Disabling Caching for folders consisting on .aspx, .asmx and .ashx

1. Run the Server Management console.
2. Navigate to Roles -> Web Server (IIS) -> Internet Information Services.
3. Repeat steps 4 to 12 for the following sites; '2X Web Server', '2XWebPortal' and '2XWebService'.
4. Select the folder that contains the .aspx, .asmx and .ashx pages you need to turn caching off for.
5. In the Feature View, double-click "Output Caching".
6. If there is a rule there already for the .aspx extension double click it and continue from step 8. Otherwise right click and select "Add..."
7. Enter .aspx for the "File name extension"
8. Check "User-mode caching"
9. Select "Prevent all caching"
10. Check "Kernel-mode caching"
11. Select "Prevent all caching"
12. Click OK.
13. Close the Server management Console.



# CONFIGURATION

The first step after installing the 2X Web Portal is to direct the browser to [http://localhost/2XWebPortal/Admin.aspx] and login with a username that has administrative rights on the IIS machine.



The screenshot shows the administrative login page of the 2X Cloud Portal. At the top left is the 2X logo followed by the text "CLOUD PORTAL". At the top right, there are language selection links: [en] [de] [ru] [fr] [jp] [it] [es]. Below the header, a user icon is followed by the text "Welcome to the 2X Cloud Portal - Administrative Page." The main content area contains a "Please Login" form with fields for "Username:" and "Password:", a checkbox for "Secure Login", and a "Log In" button. Below the form is a link for "User Logon Page". At the bottom, it says "Powered by 2X. Copyright © 2005-2011 2X Software Ltd." and "Welcome to the 2X Access Portal".

Enter the language code at the end of the url to change to a different language at the logon page if desired.



You can add Farms by entering the IP/hostname and then click 'Add Farm'. In the 'Farm Details' area you are able to configure how the 2X Web Service will connect with the 2X Secure Client Gateway.

The screenshot shows the 2X Cloud Portal interface. At the top, there is a navigation bar with the 2X logo and 'CLOUD PORTAL' text. On the right, there are language selection links: [en] [de] [ru] [fr] [jp] [it] [es]. Below this is a secondary navigation bar with links for 'Online Manual', 'Farm Settings', 'General Settings', and 'Logout [administrator]'. The main content area is titled '2X Cloud Portal - Console'. On the left, there is a sidebar menu with 'General Settings' expanded, showing sub-items: 'Logging', 'System Settings', 'Customised Appearance', 'Replication Settings', 'Software Update', and 'About'. The main content area is divided into two sections. The top section is titled '2X Cloud Portal' and contains a table with the following data:

Module	Version
2X Cloud Portal	10.1.1205.0
2X Web Service	10.1.1205.0
2X AppList	10.1.1205.0

Below the table, there is copyright information: 'Copyright © 2005-2011 2X Software Ltd. This product is registered for 2X Software Ltd. Licensed under Patent No. 5,490,216'. At the bottom of the main content area, there is an 'Apply Settings' button. Below the console area, there is a footer that reads '2X Cloud Portal - Powered by 2X.'

Add a new farm

The administrator is able to configure the settings of the 2X Secure Client Gateway for each farm.

The 2X Secure Client Gateway Details (as shown in the figure below) are used from the 2X Web Service to connect with the 2X Secure Client Gateway. These settings are primarily used for the connection between the 2X Web Service and the 2X Secure Client Gateway service.

The screenshot shows the 'Farm Details' configuration page in the 2X Cloud Portal. The top navigation bar is identical to the previous screenshot. The main content area is titled '2X Cloud Portal - Console'. On the left, there is a sidebar menu with 'Farms' expanded, showing 'Farm 1' and 'Farm 2'. Below 'Farm 2', there is a text input field for 'Farm Name' and an 'Add Farm' button. The main content area is divided into two sections. The top section is titled 'Farm Details' and contains the following text: 'These settings are used from the 2X Web Service and 2X Client to connect with the 2X Secure Client Gateway of the selected farm.' Below this text, there is a section titled '2X Secure Client Gateway Details' with the following fields: 'Primary Hostname / IP:' with a text input field containing 'Farm 2'; 'Secondary Hostname / IP:' with a text input field; 'Connection type:' with a dropdown menu showing 'Direct Mode'; and 'Port:' with a text input field containing '80'. Below these fields, there is a link for 'Advanced Settings >>'. At the bottom right of the main content area, there is a 'Delete Farm' button. At the bottom of the console area, there is an 'Apply Settings' button.

Configuring the Farm Details

To configure (override) the options of how the Client will connect with the 2X Secure Client Gateway, click on 'Advanced Settings'. These options allows the administrator to override the options that are used in the 2X Secure Client Gateway Details; and provides the administrator with the ability to use different settings when 2X Clients are connected to the 2X Secure Client Gateway.

**Farm Details**

These settings are used from the 2X Web Service and 2X Client to connect with the 2X Secure Client Gateway of the selected farm.

**2X Secure Client Gateway Details:**

Primary Hostname / IP:

Secondary Hostname / IP:

Connection type:

Port:

**Advanced Settings <<**

The following settings can be used to override different settings on the 2X Client.

Override 2X Secure Client Gateway IP/Host:

Primary Hostname / IP:

Secondary Hostname / IP:

Override Gateway Port:

Override SSL Gateway Port:

Default Connection Mode:

Advanced Settings

After you have configured your required settings, click the 'Apply Settings' button. Log back in to view the applications listing.

To test a basic client connection point, point the client's browser to:  
[http://WEB\\_SERVER\\_NAME/2XWebPortal/Logon.aspx](http://WEB_SERVER_NAME/2XWebPortal/Logon.aspx).

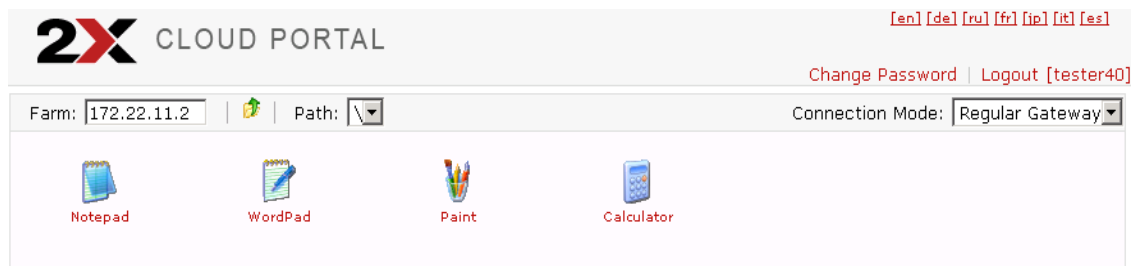
If the client is already installed, it will be automatically detected. If not, you will be prompted to install the client.

Please check '[Supported Client Operating Systems and Browsers](#)' at the beginning of this manual to ensure your client OS and browser are supported.

After entering the user credentials in the 'Username' and 'Password' fields, the application list should be populated according to the Client filtering settings.

Username in UPN suffix format should be used to specify the user and domain. (i.e. user@domain)

Clients will be able to browse through the application groups by clicking on the icon of each application group or by using the path field. Clients are also allowed to select the connection mode in order to specify which connection mode should be used when connecting with a published application or desktop.



*Application Listing*



To connect in secure mode, enable SSL on the 2X ApplicationServer or enable SSL on IIS.



A dialog box titled "Please Login" with a light gray background. It contains two text input fields: "Username:" with the text "Administrator" and "Password:" which is empty. Below the fields is a checkbox labeled "Secure Login" which is checked. A red oval highlights the checkbox and its label. At the bottom center is a "Log In" button.

*Secure Login*

Add more farms by following the steps above. Always remember to click '*Apply Settings*' to activate your settings.




## General Settings

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### Logging

The 2X Cloud Portal can log all the actions that are carried out by an administrator or a user. The log can be cleared by clicking on '*Clear Log*'. 2X Cloud Portal will compress the log file to a repository on a weekly basis. Click on '*Download repository*' to download the stored logs.



The screenshot shows the 'Logging' configuration page in the 2X Cloud Portal. On the left, a sidebar menu lists various settings: General Settings, Logging, System Settings, Customised Appearance, Replication Settings, Software Update, and About. The 'Logging' section is selected. The main content area has a title 'Logging' and a checked checkbox for 'Enable Logging'. Below this is a large, empty text area for log entries. At the bottom of the page, there is a note: 'The Log file is backed up in a compressed repository file on a weekly basis.' and two buttons: 'Clear Log' and 'Download repository'.

Logging



## System Settings

2X CLOUD PORTAL [\[en\]](#) [\[de\]](#) [\[ru\]](#) [\[fr\]](#) [\[jp\]](#) [\[it\]](#) [\[es\]](#)

[Online Manual](#) | [Farm Settings](#) | [General Settings](#) | [Logout \[administrator\]](#)

2X Cloud Portal - Console

General Settings

- Logging
- System Settings
- Customised Appearance
- Replication Settings
- Software Update
- About

Logon Settings

Session Timeout (minutes):

Security Settings

- Show Public / Private Logon Options
- Enforce Security (HTTPS / SSL)
- Enforce Advanced Client Security  
*When this option is enabled, no session settings are stored on the client. This option requires client version 10.1 or higher.*

Client Installation Settings

Installation Mode:

Installation Type:

Client Detection Failure Options:

2X Cloud Portal - Powered by 2X.

### System Settings

#### Session Settings

The 'Session Timeout' (minutes) field allows you to set the amount of idle time that has to pass before the session ends. If the user does not refresh the page or navigate to a different page during the specified amount of time, the session will end. Enter the amount of time that needs to pass before the session is timed out and click on 'Apply Settings'.

#### Security Settings

Security settings have been added to enhance security when entering a 2X Cloud Portal Session and when connecting to a server.

Show Public / Private Logon Options: Enable this setting so that the user specifies whether he is logging in the system through a public/shared computer or a private computer. To illustrate the affect of this feature, the 2X Cloud Portal Logon screen is shown below.



Welcome to the Cloud Portal.

**Please Login**

Security:

This is a private computer

This is a public or shared computer

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Farm:

Username:

Password:

Secure Login

[Administrative Page](#)

User Logon – Show Public / Private Logon Options Enabled

- **This is a private computer**

When a private computer is used, the username will be 'stored' after first log on. When logging again into the 2X Cloud Portal again, the username will be readily available.

- **This is a public computer**

In this case, since a public computer is used, the username 'will not be stored' after first logon. The user will have to re-enter username again.

Enforce Security (HTTPS / SSL):

Enabling this setting forces the user to connect to the 2X Web Portal in SSL (HTTPS) mode. Users will not be allowed to connect to the 'Farm' if SSL is not enabled from the 2X Console.

Enforcement Advanced Client Security:

When this setting is enabled, the user can only open the .2xa files when the user is logged on to the 2X Web Portal. Please note that a user cannot open the .2xa files when the 2X Cloud Portal session times out.

### Client Installation Settings

The '*Installation Mode*' field has three choices:

- No Client Detection - Client installation will not be detected
- Install Client - Installs client but user is prompted
- Install Client Silently - Installs client but user is not prompted

From the '*Installation Type*' field choose from the following choices:

- Full – Normal Installation
- Basic – Only core components are installed (for the logon user)Basic with Cleanup – Same as basic, but removes components when the user logs off of the machine

Client Detection Failure Options:

- Show error message and allow retest – Prompts user that no 2X Client is installed and also allows user to retest for client detection.
- Show error message and allow full installation or retest – Prompts user that no 2X Client is installed and provides the option to fully install 2X Client or perform retest.
- Show error message and allow full installation – Prompts user that no 2X Client is installed and provides the option to fully install 2X Client
- Show error message only – Prompts user that no 2X Client is installed.

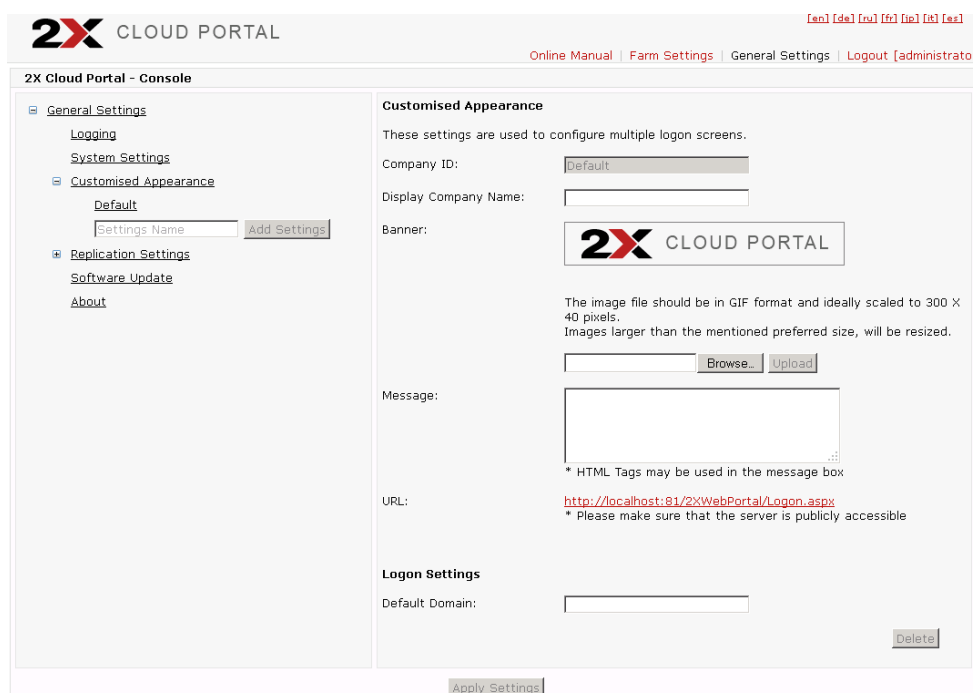


## Customized Appearance

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The 2X Cloud Portal can be customized to show a personalized appearance. Settings can be created to add a custom company name, company logo, banner and message. Each profile will have a different URL that can be given to the users.

To add a new profile, enter the 'Settings Name' and click on 'Add Settings' as shown below.



The screenshot shows the 2X Cloud Portal console interface. The top navigation bar includes the 2X logo, 'CLOUD PORTAL', and links for 'Online Manual', 'Farm Settings', 'General Settings', and 'Logout [administrator]'. The main content area is titled '2X Cloud Portal - Console' and features a sidebar with a tree view containing 'General Settings', 'Logging', 'System Settings', 'Customised Appearance', 'Replication Settings', 'Software Update', and 'About'. The 'Customised Appearance' section is active, displaying the following fields and options:

- Company ID:** A text box containing 'Default'.
- Display Company Name:** An empty text box.
- Banner:** A preview of the 2X Cloud Portal logo. Below it, a note states: 'The image file should be in GIF format and ideally scaled to 300 X 40 pixels. Images larger than the mentioned preferred size, will be resized.' There is a 'Browse...' button and an 'Upload' button.
- Message:** A large text area for entering a message. A note below it says: '\* HTML Tags may be used in the message box'.
- URL:** A text box containing the URL 'http://localhost:81/2XWebPortal/Logon.aspx'. A note below it says: '\* Please make sure that the server is publicly accessible'.
- Logon Settings:** A section with a 'Default Domain:' text box.

Buttons for 'Add Settings' (in the sidebar), 'Apply Settings', and 'Delete' are visible.

Customized Appearance

The 'Company ID' is a unique ID that distinguishes one profile from another. This is set by the system and cannot be changed.

The 'Company Name' is the name of the Cloud Portal that will be displayed to the user.

A custom message can also be added to be displayed to the user in the login page. The 'Message' field will also accept HTML tags.

## Logon Settings

The 'Default Domain' field allows you to enter the domain name so that users only need to enter their unique logon name. (i.e. @2X.com)

**Logon Settings**

Default Domain:

[Delete](#)

*Login Settings; Default Domain Field*



Administrators have the option to provide users with a message that they will see when they log on.

**2X CLOUD PORTAL** [en] [de] [ru] [fr] [jp] [it] [es]

[Online Manual](#) | [Farm Settings](#) | [General Settings](#) | [Logout \[administrator\]](#)

**2X Cloud Portal - Console**

- [-] [General Settings](#)
  - [Logging](#)
  - [System Settings](#)
- [-] [Customised Appearance](#)
  - [Default](#)
- [+] [Replication Settings](#)
- [Software Update](#)
- [About](#)

### Customised Appearance

Customised Appearance allows administrators to add the customisation details for multiple logon screens.

Users with administrative rights on the Web Service machine are allowed to add customised appearance settings from this interface. To add a new setting, enter the Setting name and click "Add Setting". Further to that, a screen will be displayed prompting you to insert the Company Name, Company Logo and Message.

New settings will get activated once the Apply button has been pressed.

### Common Customisation

Global Message:

\* HTML Tags may be used in the message box

2X Cloud Portal - Powered by 2X.

### Creating a Global Message



## Replication Settings

Often, you may have 2X Cloud Portal installed on more than one machine (e.g. High Availability with Multiple Gateways and 2X Web Access Portals or High Availability with a dual firewall DMZ), and it can be useful to keep the settings of each web portal exactly the same. Use the Replication Settings feature to avoid setting the same configuration for each web portal.

Click [here](#) for examples of scenarios. Enter the server name and click on 'Add Server'. Enter HostName/IP and Port (default 81) then click on 'Apply Settings'.

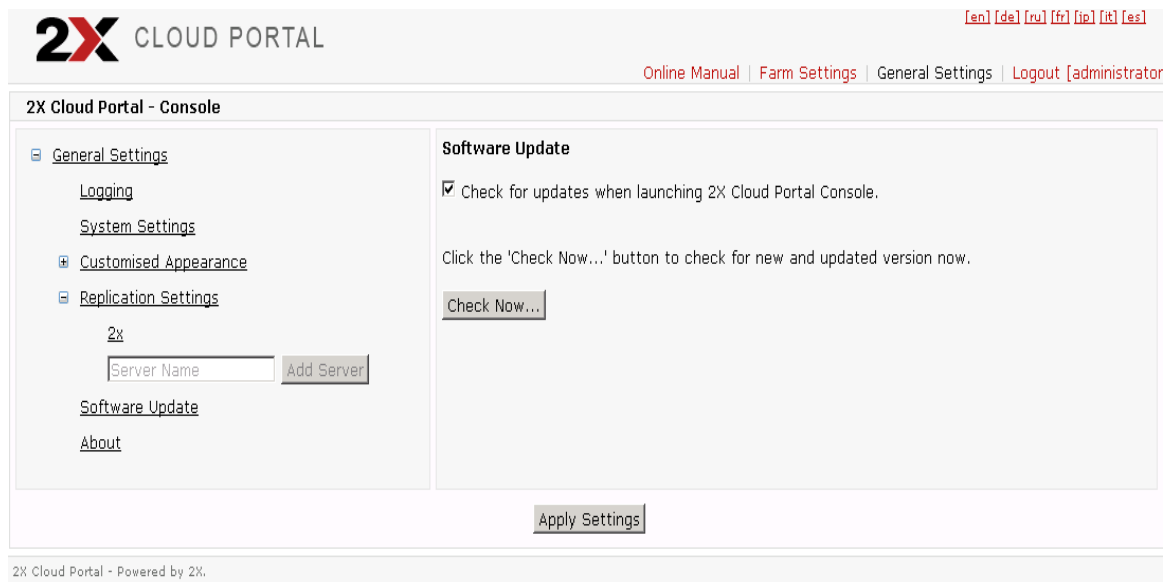
By default the 'Override Advanced Farm Settings?' box is checked allowing you to replicate the advanced settings for each farm.

The screenshot shows the '2X Cloud Portal - Console' interface. The top navigation bar includes the 2X logo, 'CLOUD PORTAL', and language links: [en] [de] [ru] [fr] [jp] [it] [es]. Below the navigation are links for 'Online Manual', 'Farm Settings', 'General Settings', and 'Logout [administrator]'. The main content area is titled '2X Cloud Portal - Console' and features a sidebar with a tree view containing: 'General Settings' (with sub-items 'Logging', 'System Settings', 'Customised Appearance', and 'Replication Settings'), '2X' (with sub-items 'Server Name' and 'Add Server'), 'Software Update', and 'About'. The 'Replication Settings' section is active and contains: 'Replication Settings' header, a description 'These settings are used to replicate settings from the current 2X Web Service to the remote 2X Web Service.', '2X Web Service Connection Settings' with input fields for 'HostName / IP:' (containing '2X') and 'Port:' (containing '81'), 'Advanced Settings' with a checked checkbox 'Override Advanced Farm Settings?', and a 'Delete' button. An 'Apply Settings' button is located at the bottom of the main content area. The footer of the page reads '2X Cloud Portal - Powered by 2X.'

### Replication Settings

## Software Update

The 2X Cloud Portal is set to automatically check for updates online. If an update is found, the administrator will be prompted to download and install the update. The update feature can be disabled and updates can be installed manually by clicking on the 'Check Now...' button.



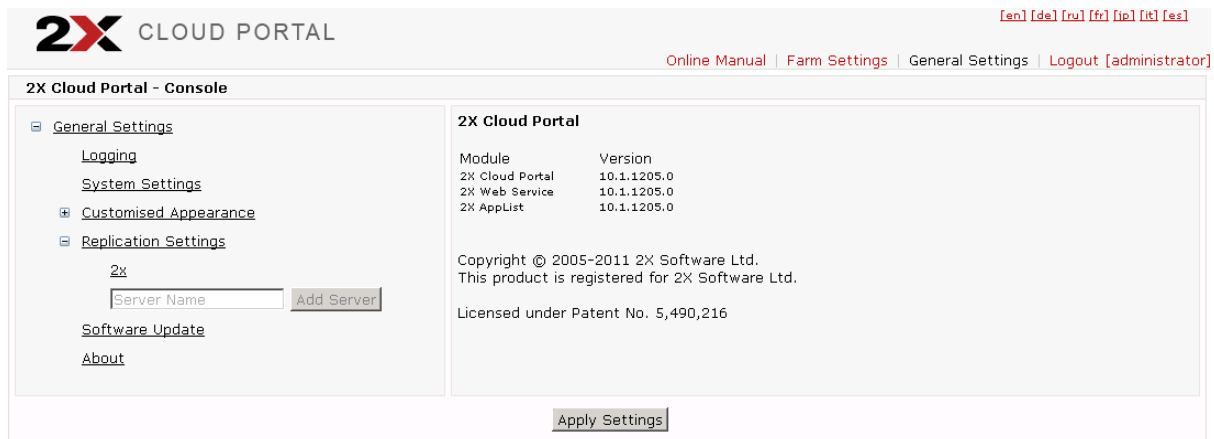
The screenshot shows the 2X Cloud Portal interface. At the top left is the 2X logo and 'CLOUD PORTAL'. On the top right, there are language selection links: [en] [de] [ru] [fr] [jp] [it] [es]. Below this is a navigation bar with links for Online Manual, Farm Settings, General Settings, and Logout [administrator]. The main content area is titled '2X Cloud Portal - Console' and is split into two columns. The left column contains a sidebar menu with 'General Settings' expanded, showing sub-items: Logging, System Settings, Customised Appearance, Replication Settings, 2x (with a 'Server Name' input field and 'Add Server' button), Software Update, and About. The right column is titled 'Software Update' and contains a checked checkbox for 'Check for updates when launching 2X Cloud Portal Console.', followed by the instruction 'Click the 'Check Now...' button to check for new and updated version now.' and a 'Check Now...' button. At the bottom of the main content area is an 'Apply Settings' button. The footer of the page reads '2X Cloud Portal - Powered by 2X.'

### Software Update



## About

The about section provides information about the 2X Cloud Portal currently installed on the system.



The screenshot shows the 2X Cloud Portal console interface. At the top left is the 2X logo and 'CLOUD PORTAL'. On the top right, there are language selection links: [en] [de] [ru] [fr] [it] [es]. Below this is a navigation bar with links: Online Manual | Farm Settings | General Settings | Logout [administrator]. The main content area is titled '2X Cloud Portal - Console' and is divided into two columns. The left column contains a sidebar menu with the following items: General Settings (expanded), Logging, System Settings, Customised Appearance (expanded), Replication Settings (expanded), 2x (with a sub-menu), Server Name (input field) and Add Server (button), Software Update, and About. The right column is titled '2X Cloud Portal' and contains a table of installed modules:

Module	Version
2X Cloud Portal	10.1.1205.0
2X Web Service	10.1.1205.0
2X AppList	10.1.1205.0

Below the table, the text reads: Copyright © 2005-2011 2X Software Ltd. This product is registered for 2X Software Ltd. Licensed under Patent No. 5,490,216. At the bottom of the console, there is an 'Apply Settings' button.

*About the 2X Access Portal*

The 2X Cloud Portal is able to identify whether the 2X Client is installed or not.

When the 2X Cloud Portal identifies that the 2X Client is not installed on the client's system, a link to the appropriate client is displayed. The link is dynamically generated according to the request of the client's OS. By default, this link points to the latest clients from [www.2X.com/downloads](http://www.2X.com/downloads). Some browsers need additional plug-ins so that checking works. ActiveX must be installed if you are using Internet Explorer and Java is needed if you are using Opera or Google Chrome.

In order to replace the client, you should place the client's setup files in the web portal client folder. (By default this folder is found at "c:\inetpub\wwwroot\2XWebPortal\clients"). If no setup files are found in this location, the latest client setup files can be downloaded from [www.2X.com/downloads](http://www.2X.com/downloads).

Clients for different OS's can be placed in the folder mentioned above and the file names must use the following:

- Windows Client: 2XClient.msi
- Mac Client: 2XClient.dmg
- Linux Client: 2XClient.i386.rpm

An online version of this manual can be accessed by clicking [here](#).

# TROUBLESHOOTING AND SUPPORT

## Introduction

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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](mailto:support@2x.com)
- Contacting our support department by telephone.

## Knowledgebase

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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

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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

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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.

# ABOUT 2X

**ABOUT 2X |** 2X Software Ltd - 2X - is a company developing software for the booming server-based computing market. Thin client computing controls skyrocketing PC management costs, centralizes application and desktop management, improves security and performance and allows users to work remotely. The company's product line includes: 2X ApplicationServer for Windows Terminal Services, 2X ApplicationServer, 2X LoadBalancer for Terminal Services/Citrix and 2X ThinClientServer. 2X is a privately held company with offices in the USA, Germany, France, UK, Australia and Malta. Its management team is backed by years of experience in developing and selling network infrastructure software. 2X is a Microsoft, VMware, IBM and RedHat partner. For more information visit: <http://www.2x.com>. All product and company names herein may be trademarks of their respective owners.



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