



Deployment Guide

Avaya 1X Agent

XenApp

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Introduction

Citrix XenApp™, a member of the Citrix Delivery Center™ product family, is the industry's de facto standard for delivering Windows-based applications with the best performance, security and cost savings. XenApp is the most complete application virtualization system available with the ability to virtualize applications on both the client side and server side, delivering them on demand based on the user, the application or the location (online or offline). By centralizing applications and data in secure datacenters, IT can reduce the costs of management and support, increase data security and facilitate business continuity. XenApp Platinum Edition adds critical capabilities for application performance monitoring, secure remote access, WAN optimization and single-sign-on application security.

Avaya one-X Agent is an integrated telephony softphone solution designed for agents in a Communication Manager Call Center environment. The Avaya one-X Agent application controls the advanced telephony features through its direct communication with the Communication Manager.

In addition to providing the basic telephony controls, Avaya one-X Agent supports the advanced Communication Manager agent functions, such as, agent state control, call wrapup control, screen pops, VuStats screen, agent greeting controls, and video features. Avaya one-X Agent has an intuitive graphical user interface (GUI) to provide a rich user experience for agents in contact centers. The application GUI occupies minimum space on the agent desktop, and provides the ability for agents to customize the application GUI to meet their individual needs.

Avaya one-X Agent supports agents working in the contact center and for agents working remotely from the contact center. Agents working remotely from the contact center can connect to a Communication Manager through an Internet connection and receive calls, as if they were present at the contact center. Agents manage both communications and tasks, regardless of where they are working, through the IP network. Avaya one-X Agent also supports remote agents using Public Switched Telephone Network (PSTN) networks to send a voice path, and a personal computer (with an IP connection) to send signaling (data) media to connect to Communication Manager.

Solution Requirements

- Avaya Telephony delivered through Citrix XenApp

Prerequisites

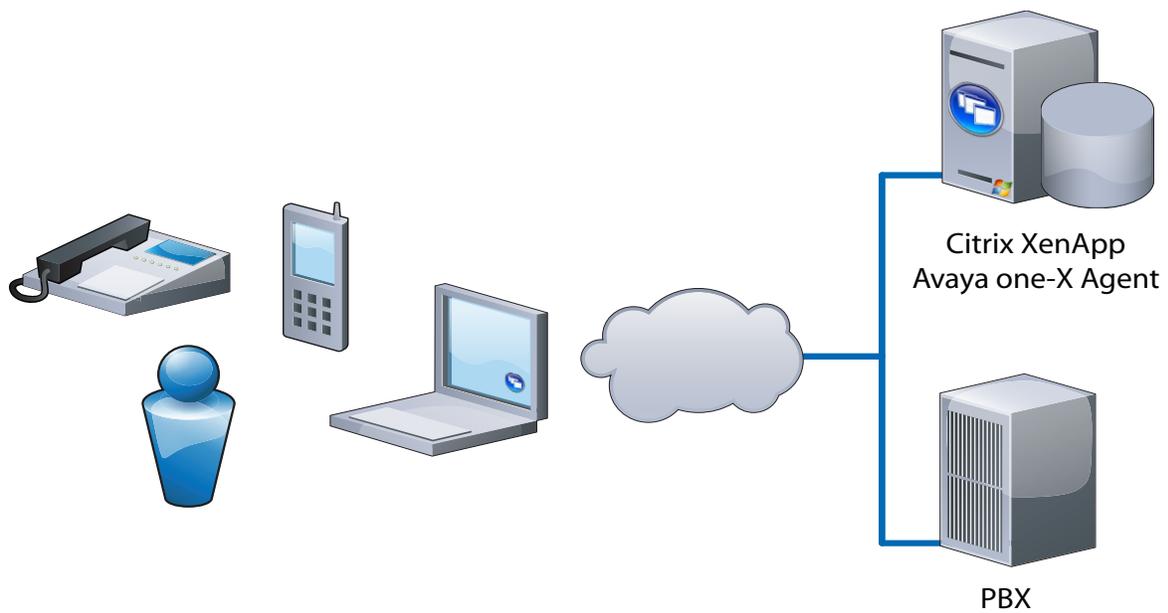
- Citrix XenApp 5.0
- Citrix XenApp Plugin for hosted apps v11.x for Windows
- Windows 2008 Server x32 (x86)
- Avaya one-X Agent R2 softphone solution
- Client computers

Usage Modes

- **Desk Phone:** The Avaya Desk Phone mode allows agents to use the office phone in a contact center environment. Agents can use the Desk Phone mode when they are at the contact center and want to share control between the office phone and the desktop computer. While in Desk Phone mode, agents access audio components from the office phone and visual components from the desktop computer.
- **Another Phone:** The Avaya Another Phone mode allows agents to use a PSTN or a GSM phone to make or receive calls when they are telecommuting. The Another Phone mode is configured for toll-quality audio and optimizes audio through another phone. Agents use the Another Phone mode to access audio components from a home phone, an office phone, or from a mobile phone.
- **My Computer:** My Computer mode is not currently supported with Citrix XenApp 5.0 for Avaya one-X Agent R2.

Network Diagram

The following is the Network that was used to develop this deployment guide.



VLAN Legend	Devices
 VLAN 1	XenApp: IPA: 10.217.104.240 / 24 Avaya PBX: IPA: 10.217.104.90 / 24

Compatibility Matrix

Avaya 1X Agent works, was tested and is supported on XenApp 5.0 running on Windows Server 2008 32 bit, in Desk Phone mode and Other Phone mode. Windows Server 2008 x64 is not currently supported. My Computer mode is not currently supported.

Citrix XenServer 5.5	Citrix XenApp 5.0	Avaya 1X Agent		
		My Computer mode	Desk Phone mode	Other Phone mode
	Windows Server 2003 x32		✓	✓
	Windows Server 2008 x32		✓	✓
	Windows Server 2008 x64			

XenApp Install

Install XenApp 5.0 onto the Windows server.

Avaya 1X Agent Install

Install Avaya 1X Agent onto the same server that XenApp is installed on.

Avaya 1X in XenApp

Citrix Web Interface

Once Avaya 1X Agent is installed on the XenApp server, it can be made available to users through a web interface. On the XenApp server, launch the Access Management Console.

From the AMC:

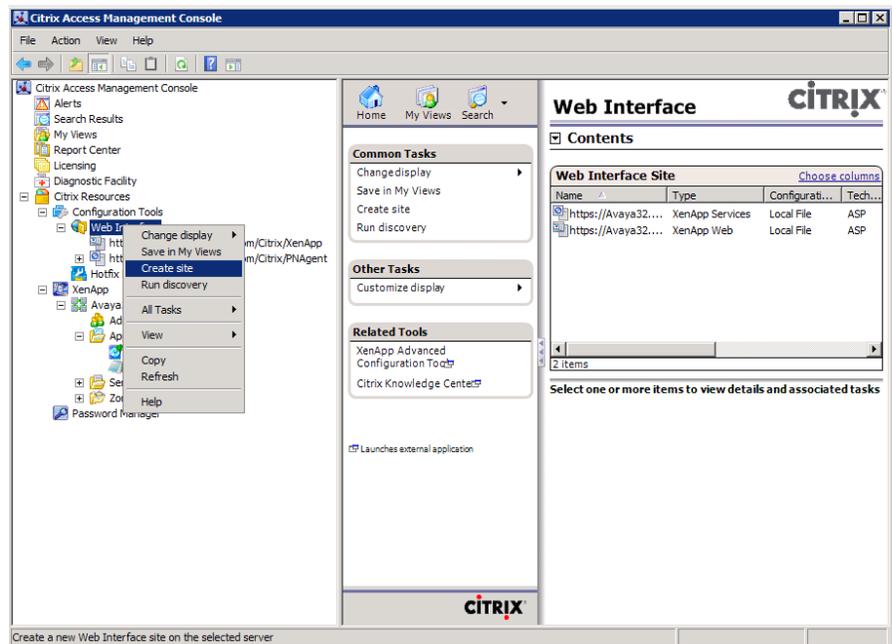
Citrix Resources →

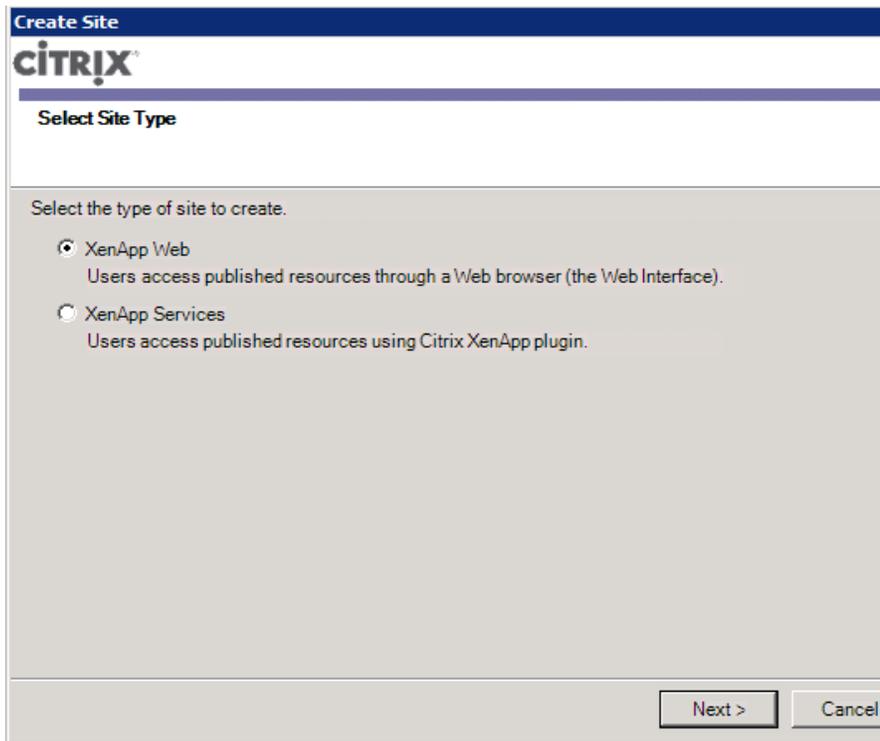
Configuration Tools →

Web Interface →

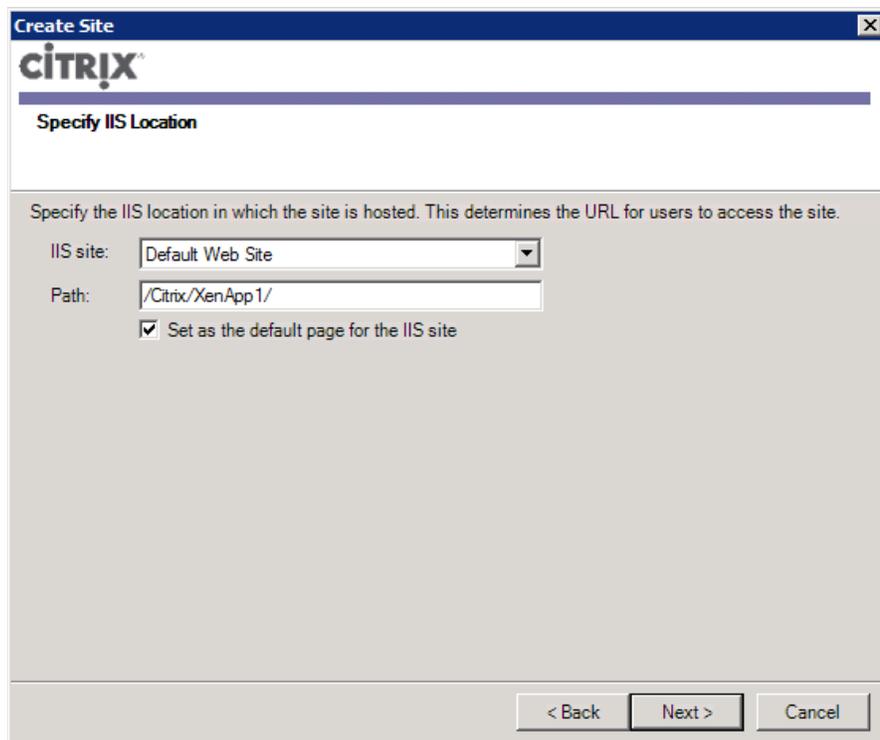
Create Site.

Note: Right-Click on Web Interface to get the menu.





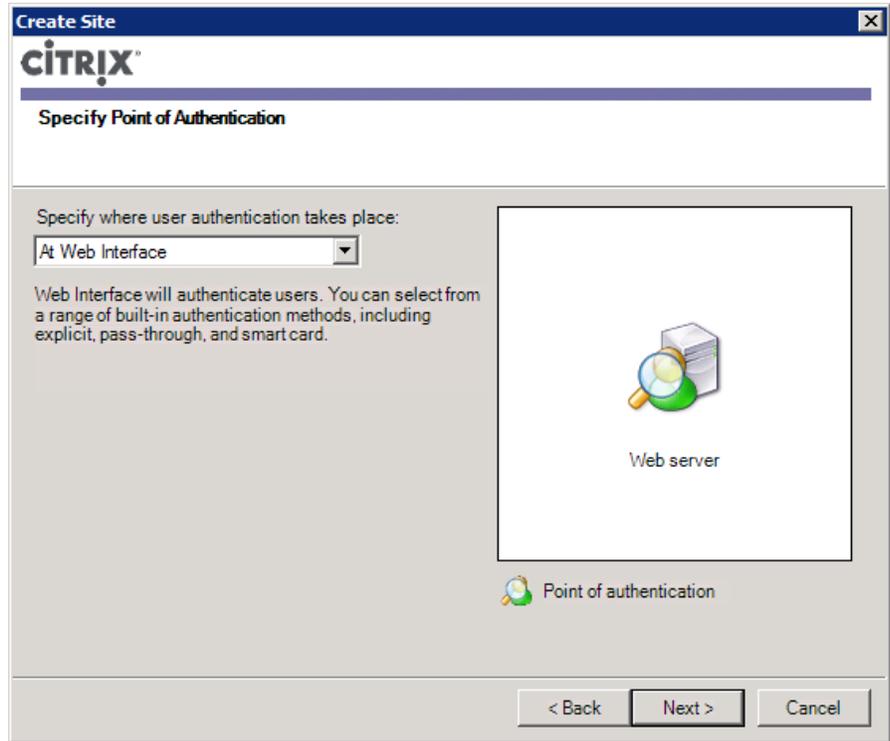
Create Site:
XenApp Web



Create Site:
IIS Site: Default Web Site
Path: /Citrix/XenApp1/
Set as default IIS Page

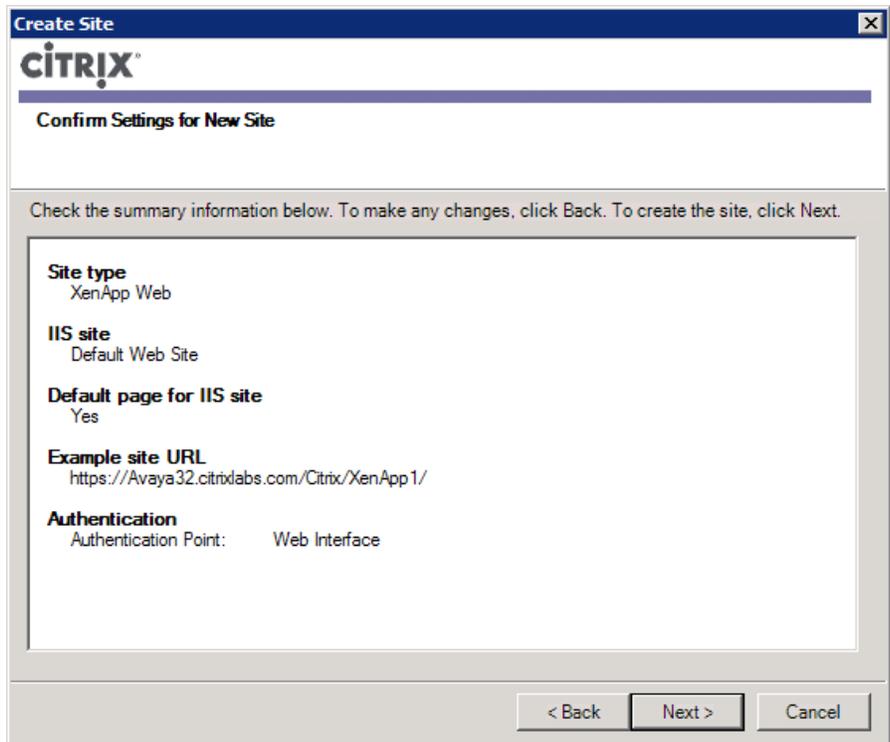
Create Site:

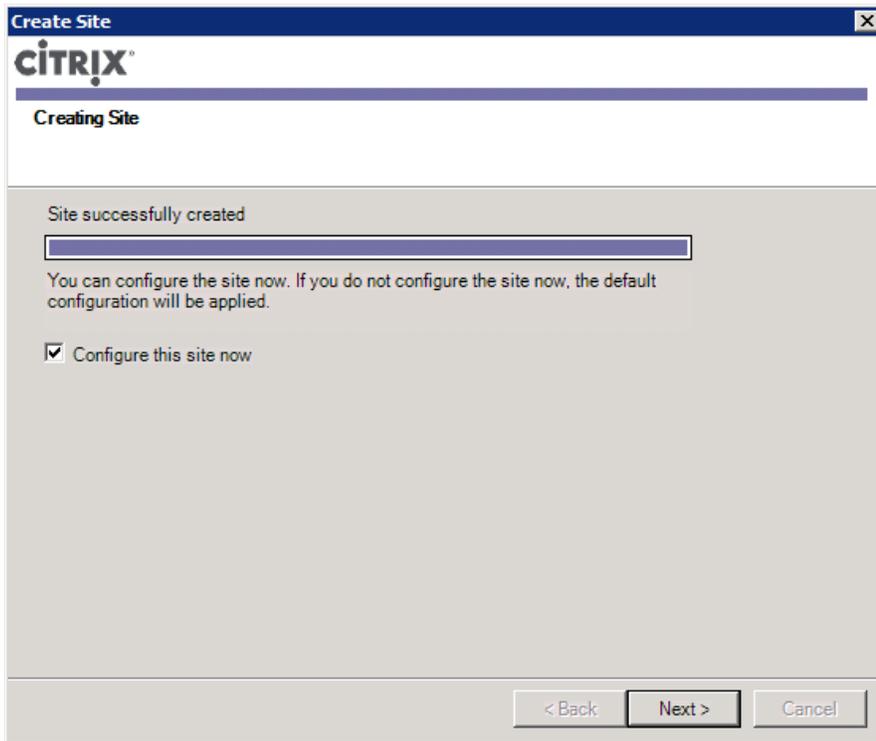
Authentication: At Web Interface



Create Site:

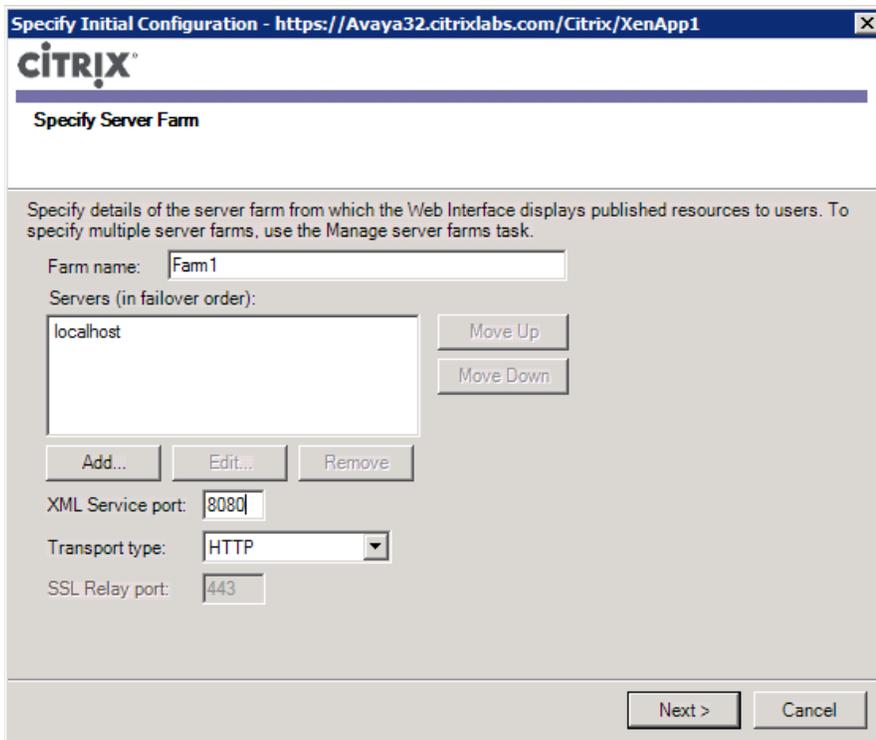
Confirm Settings





Create Site:

Configure this site now



Specify Configuration:

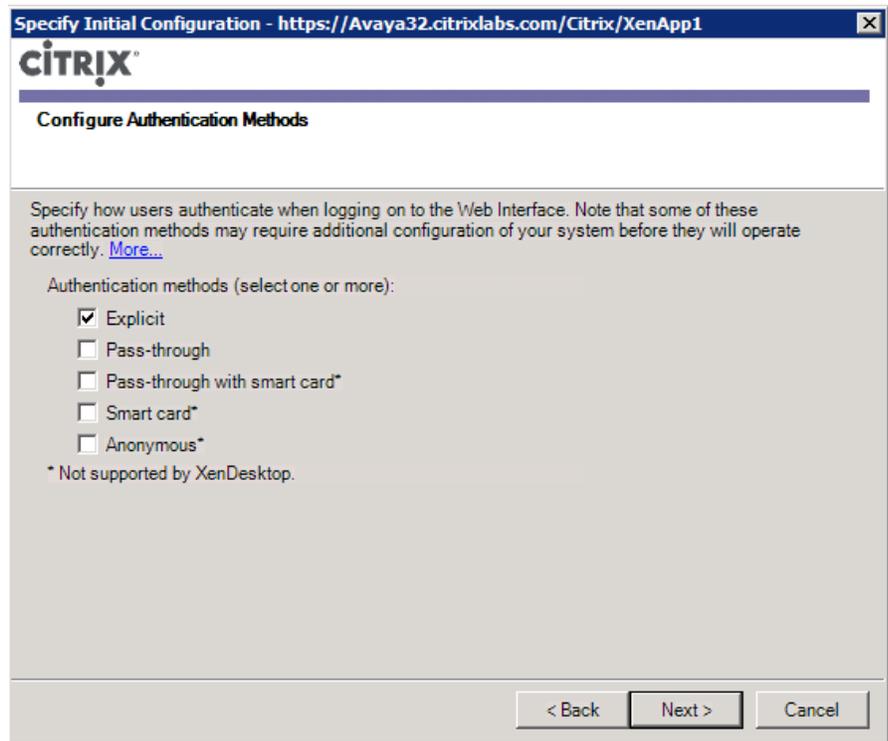
Farm name: Farm1

Servers: localhost

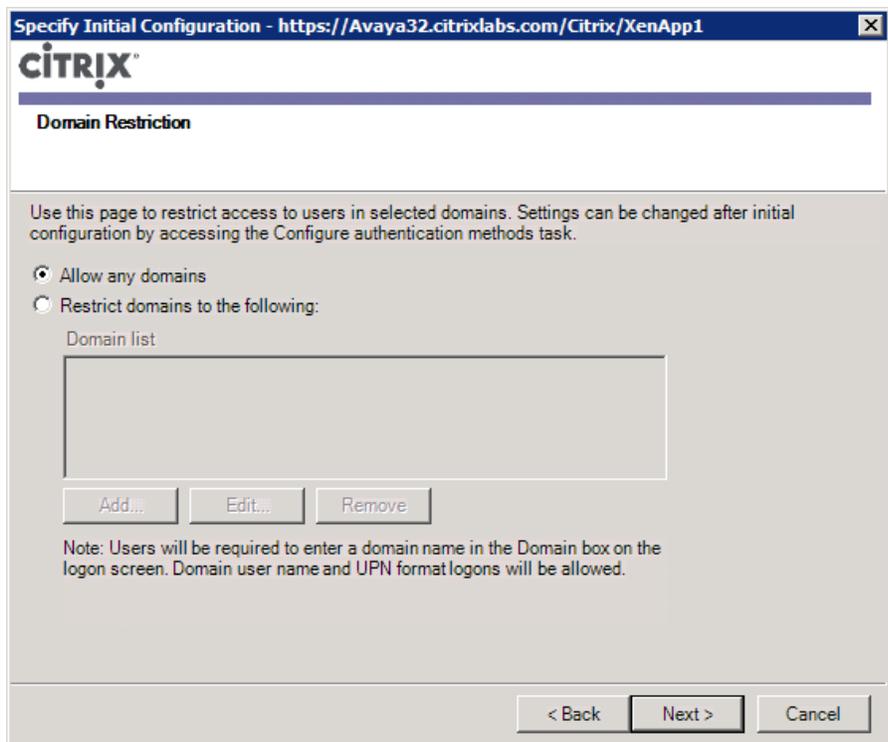
XML port: 8080

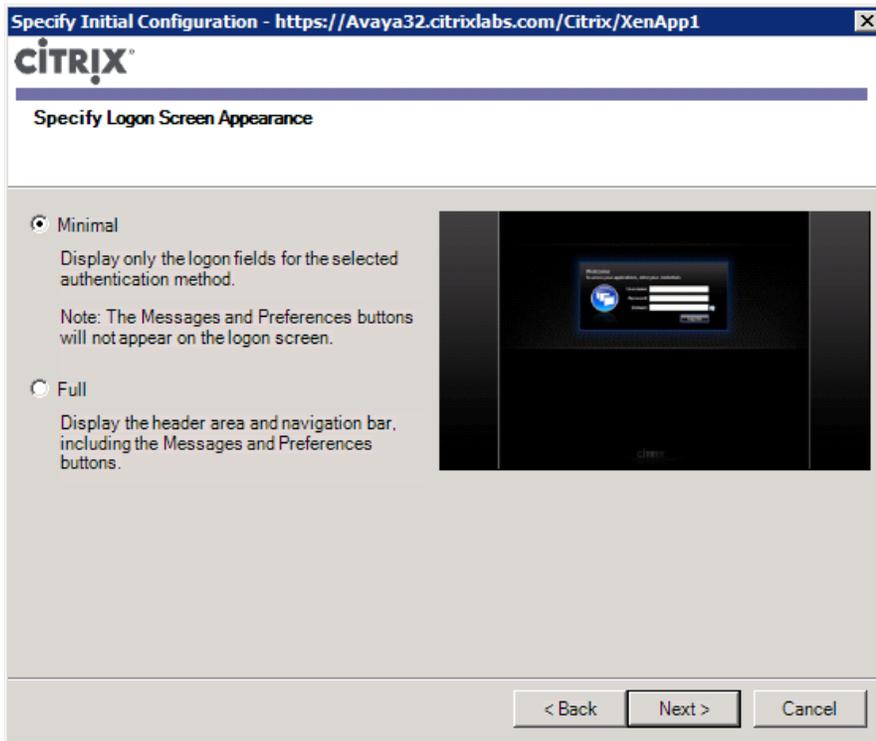
Transport: HTTP

Specify Configuration:
Authentication Method: Explicit

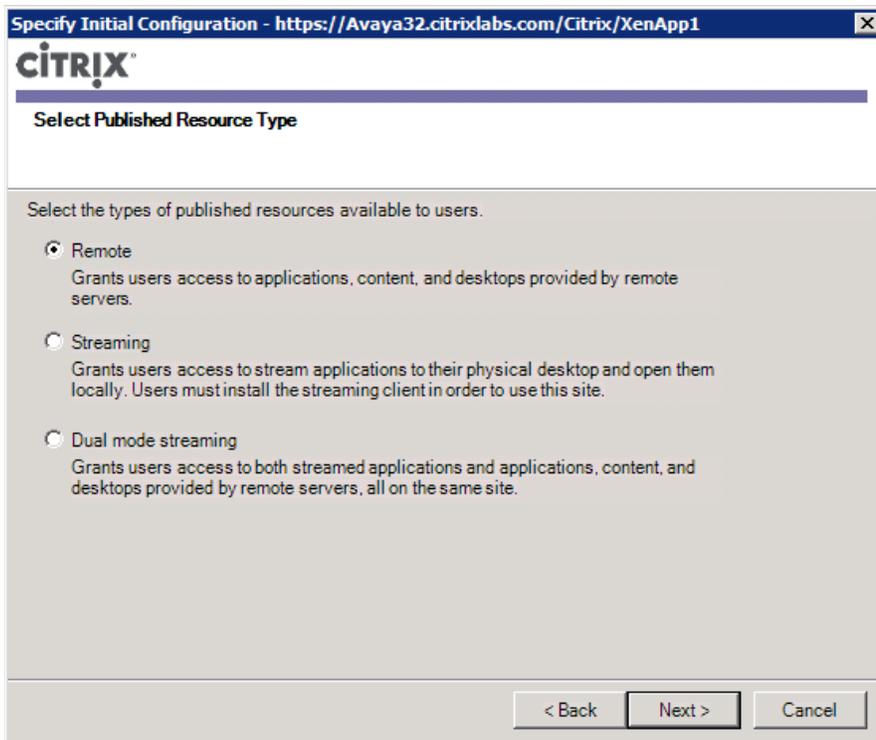


Specify Configuration:
Allow any domains





Specify Configuration:
Minimal Logon Screen



Specify Configuration:
Published Resource Type:
Remote

Specify Configuration:

Confirm settings and finish

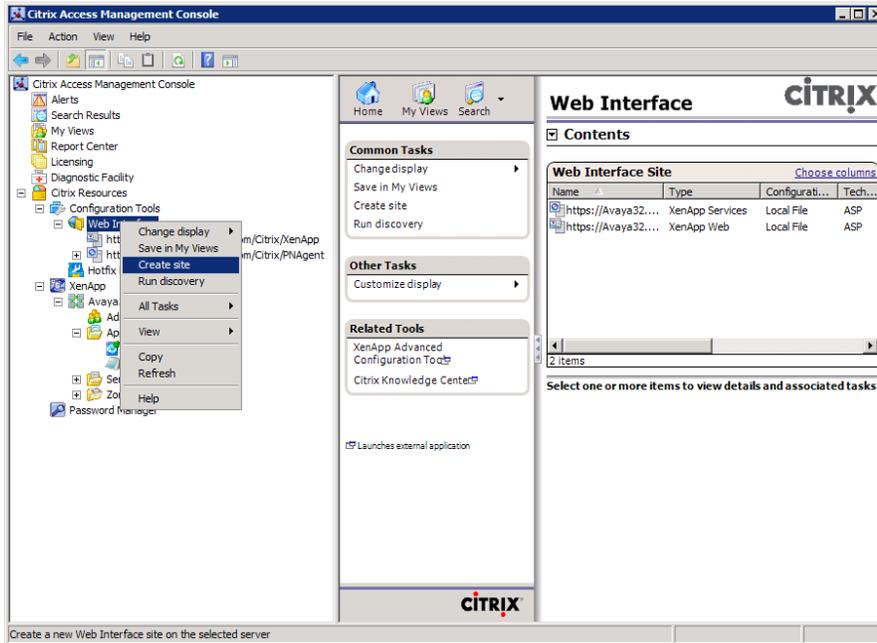
The screenshot shows a web browser window titled "Specify Initial Configuration - https://Avaya32.citrixlabs.com/Citrix/XenApp1". The page features the Citrix logo at the top, followed by a "Confirm Settings" section. Below this, a message reads: "Check the summary information below. To make any changes, click Back." A scrollable list of configuration items is displayed:

- Fam name**: Fam1
- Servers**: localhost
- XML Service port**: 8080
- XML Service transport type**: HTTP
- Authentication methods**: Explicit
- Domain restriction**: Allow any domains
- Logon screen**: Minimal

At the bottom of the window, there are three buttons: "< Back", "Finish", and "Cancel".

Citrix XenApp Plugin

Once Avaya 1X Agent is installed on the XenApp server, it can be made available to users through the Citrix XenApp Plugin. On the XenApp server, launch the Access Management Console.



From the AMC:

Citrix Resources ↗

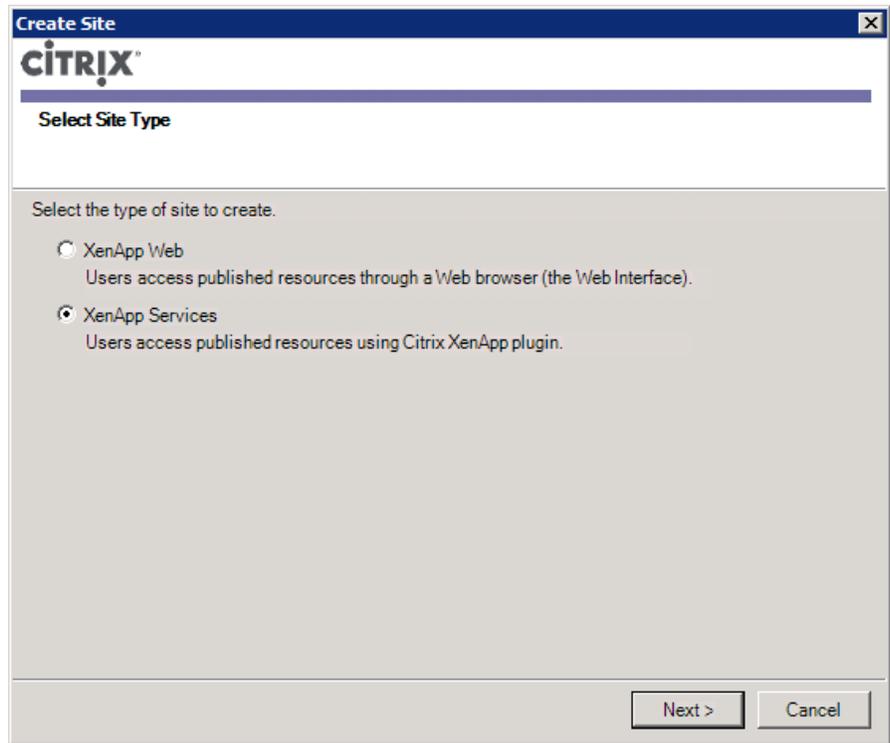
Configuration Tools ↗

Web Interface ↗

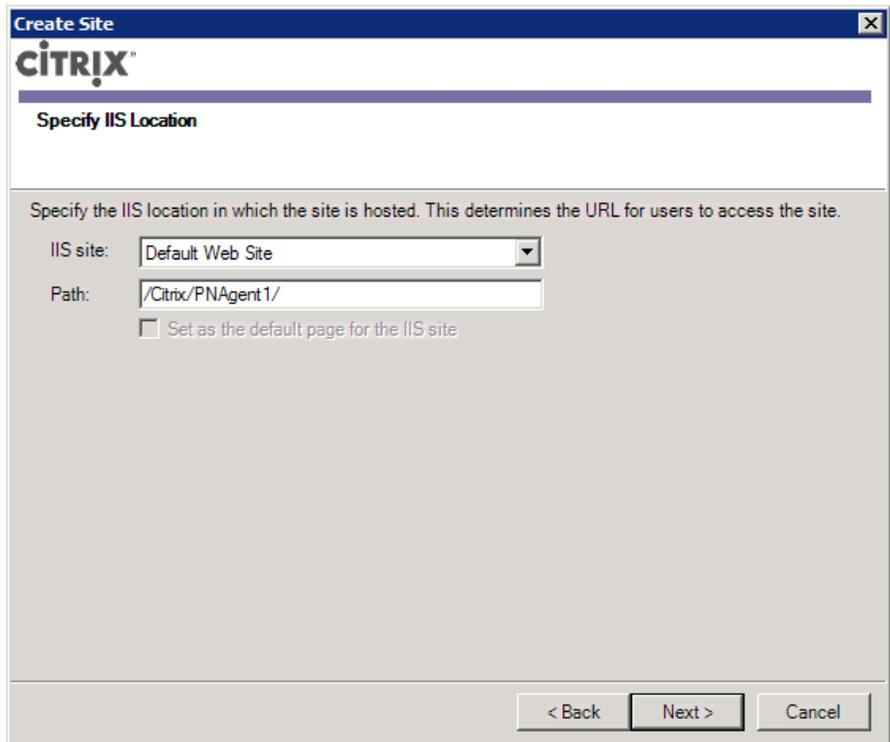
Create Site.

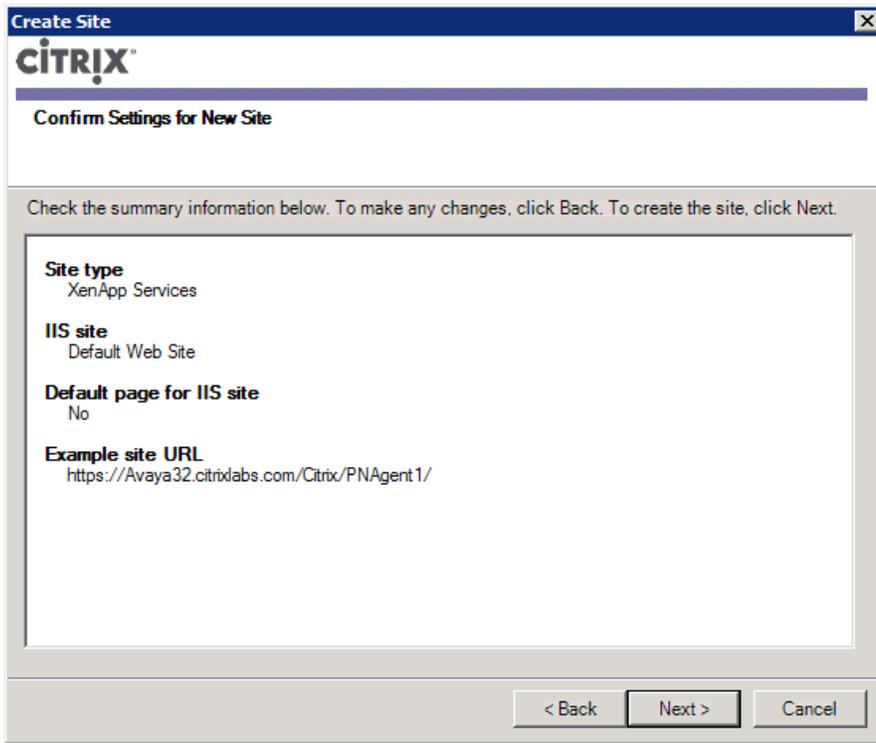
Note: Right-Click on Web Interface to get the menu.

Create Site:
XenApp Services

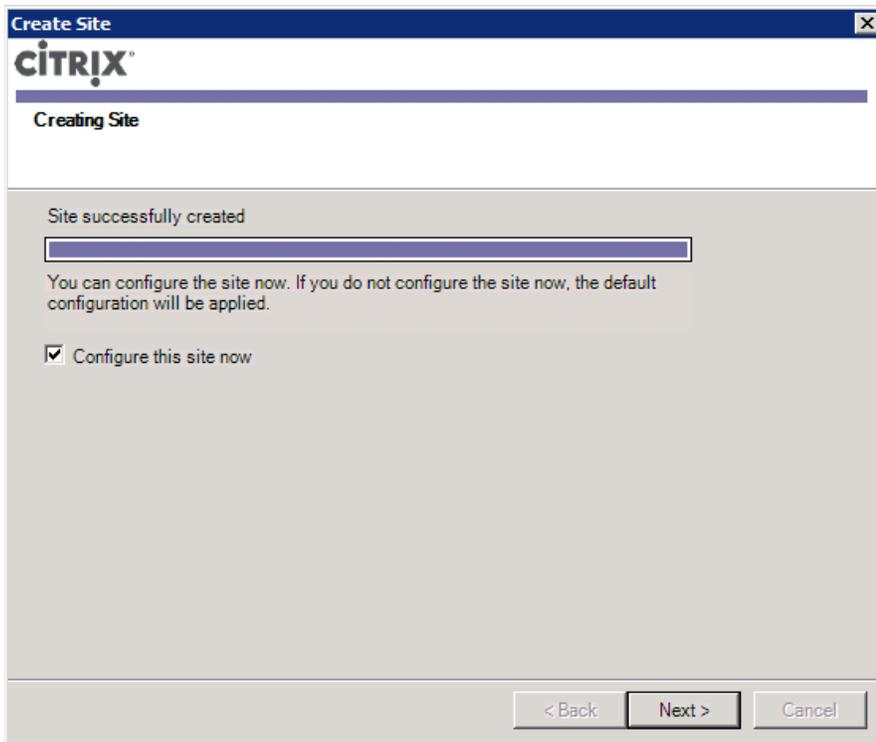


Create Site:
IIS Site: Default Web Site
Path: /Citrix/PNAgent1/





Create Site:
Confirm Settings



Create Site:
Configure this site now

Specify Configuration:

Farm Name: Farm1

Servers: localhost

XML port: 8080

Transport: HTTP

Specify Initial Configuration - https://Avaya32.citrixlabs.com/Citrix/PNAgent1

CITRIX

Specify Server Farm

Specify details of the server farm from which the Web Interface displays published resources to users. To specify multiple server farms, use the Manage server farms task.

Farm name:

Servers (in failover order):

localhost	<input type="button" value="Move Up"/>
	<input type="button" value="Move Down"/>

XML Service port:

Transport type:

SSL Relay port:

Specify Configuration:

Resource Type: Remote

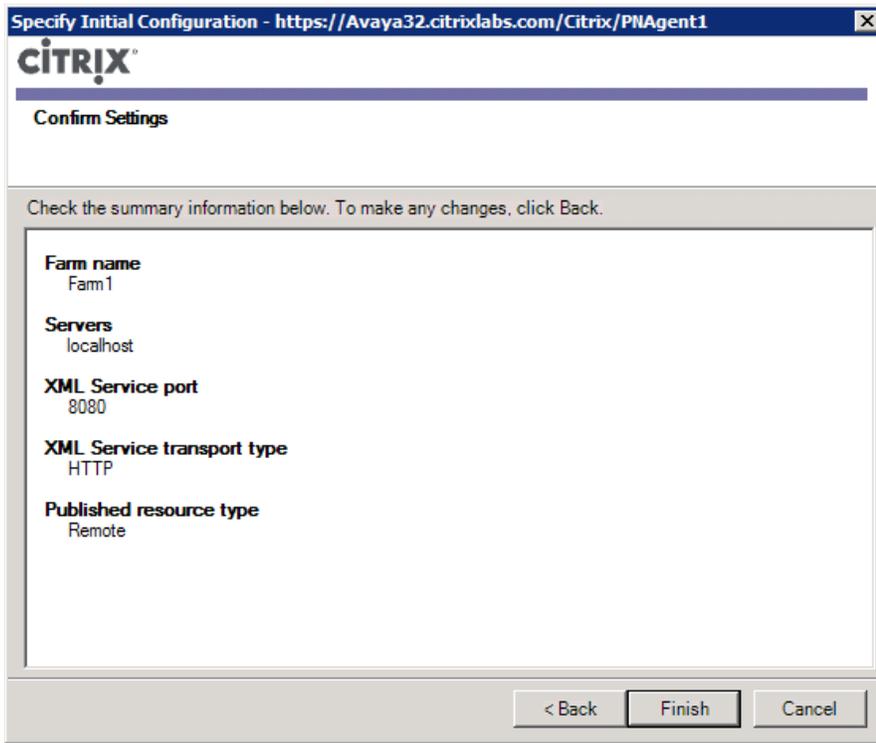
Specify Initial Configuration - https://Avaya32.citrixlabs.com/Citrix/PNAgent1

CITRIX

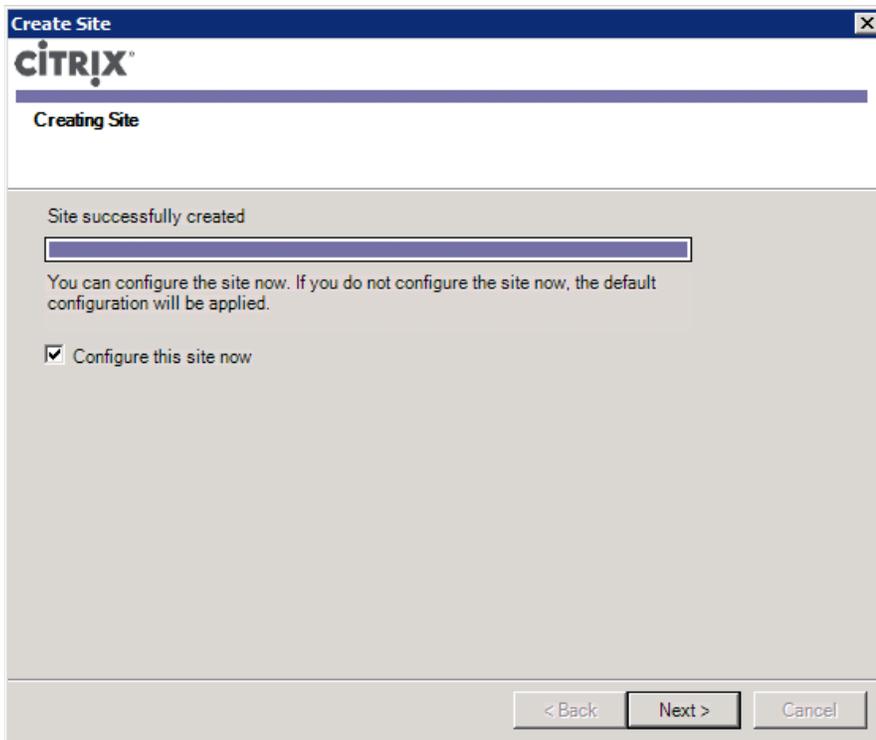
Select Published Resource Type

Select the types of published resources available to users.

- Remote
Grants users access to applications, content, and desktops provided by remote servers.
- Streaming
Grants users access to stream applications to their physical desktop and open them locally. Users must install the streaming client in order to use this site.
- Dual mode streaming
Grants users access to both streamed applications and applications, content, and desktops provided by remote servers, all on the same site.



Specify Configuration:
Confirm Settings



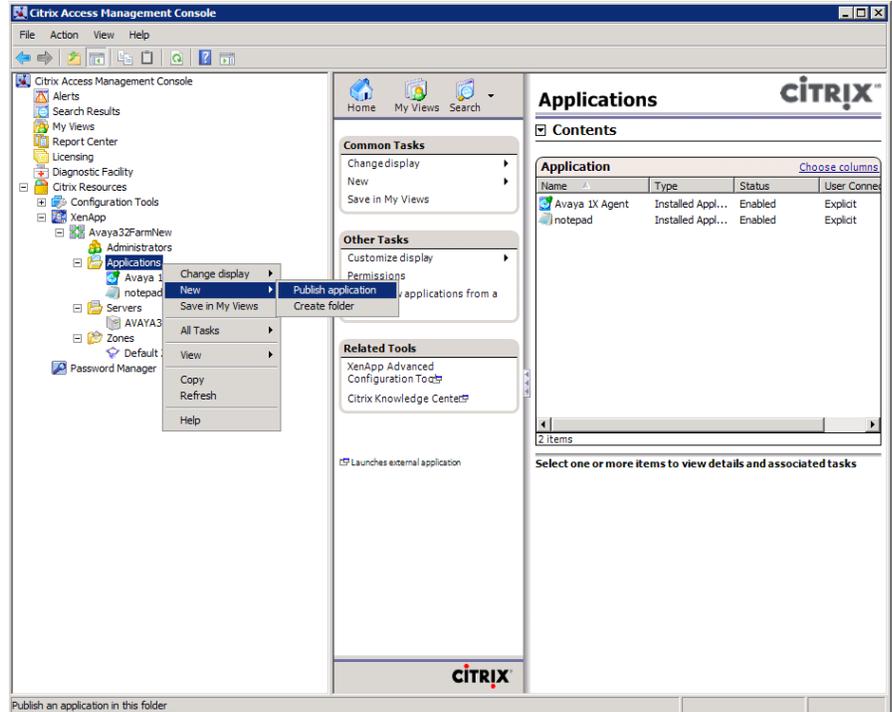
Create Site:
Configure this site now

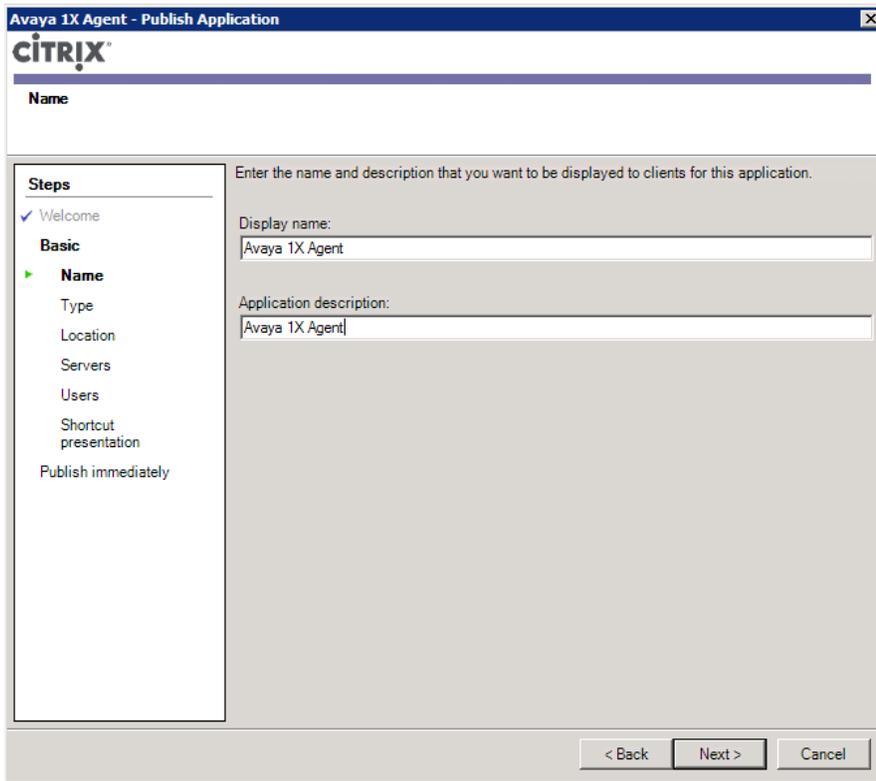
Publish Avaya 1X Agent

After the Web Interface and XenApp Plugin sites have been created, you need to publish the Avaya 1X Agent application so users can access it through the Citrix Server.

From the AMC:
 Citrix Resources ↗
 XenApp ↗
 Applications ↗
 New ↗
 Publish.

Note: Right-Click on Applications to get the menu.

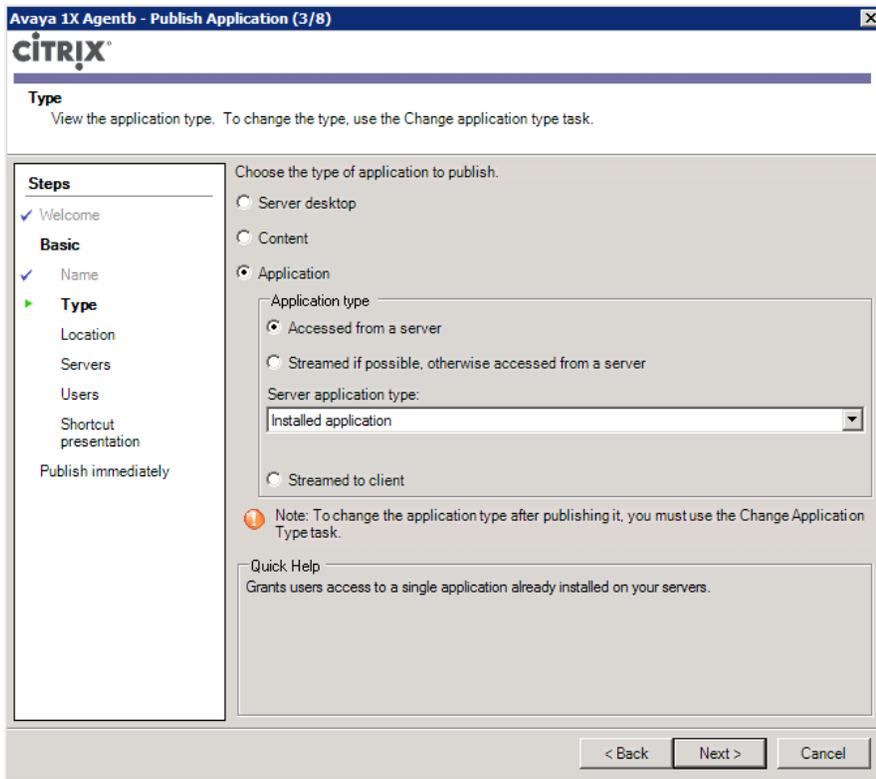




Name:

Display Name: Avaya 1X Agent

Description: Avaya 1X Agent



Type:

Application:

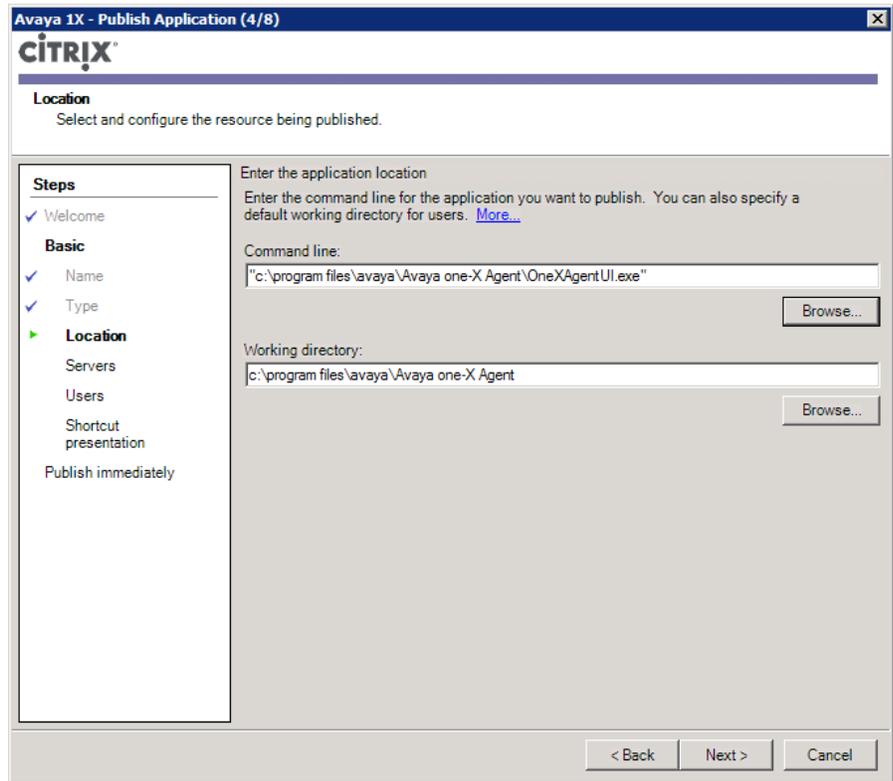
Accessed from a server

Installed Application

Location:

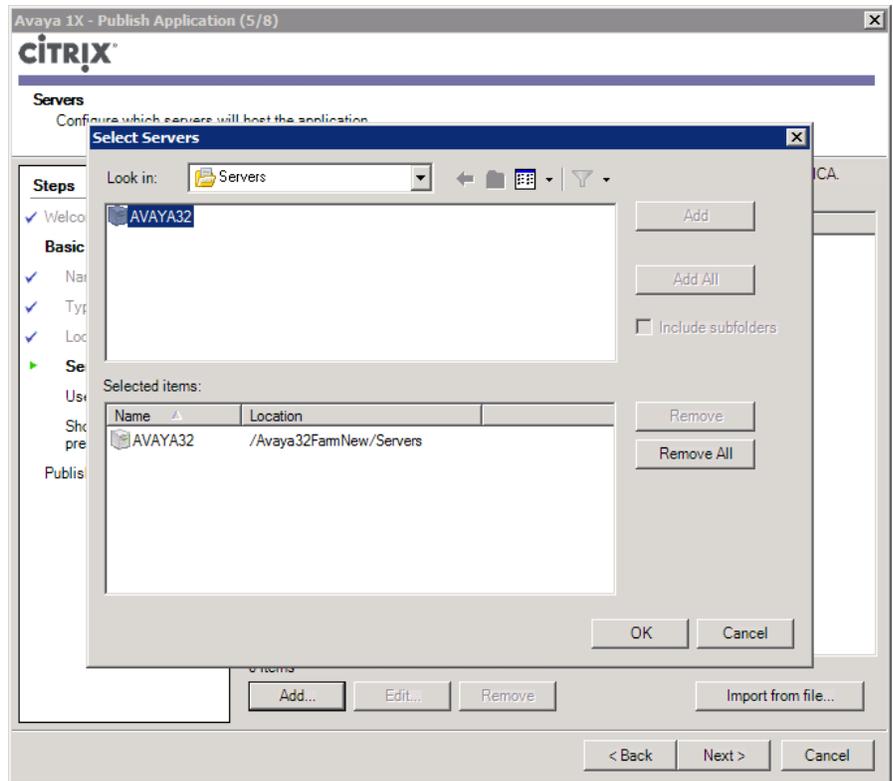
Command line: "c:\program files\avaya\Avaya one-X Agent\OneXAgentUI.exe"

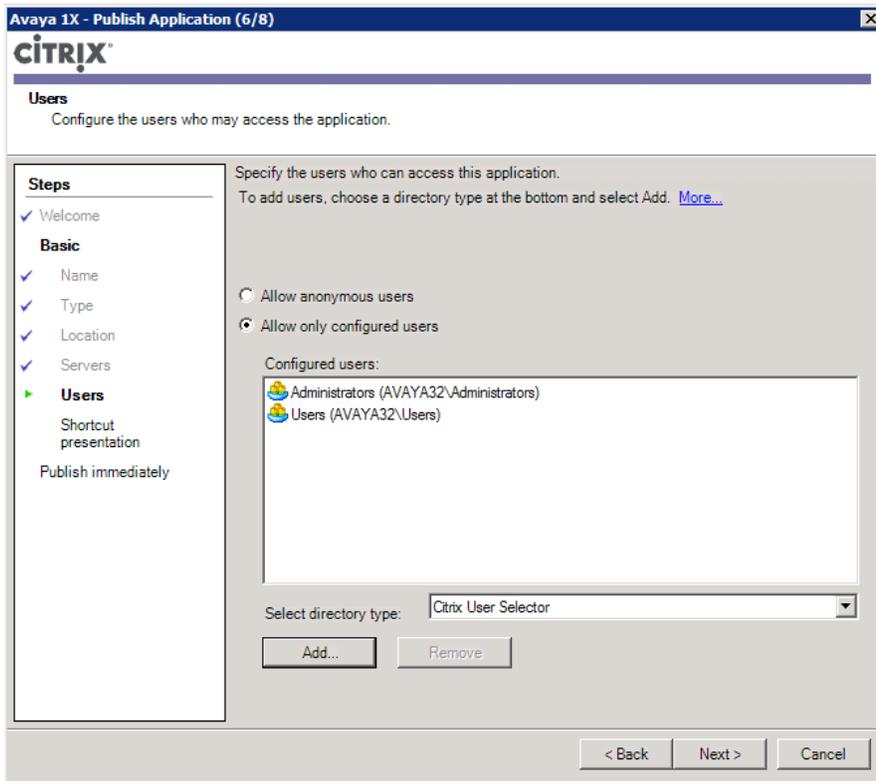
Directory: c:\program files\avaya\Avaya one-X Agent



Servers:

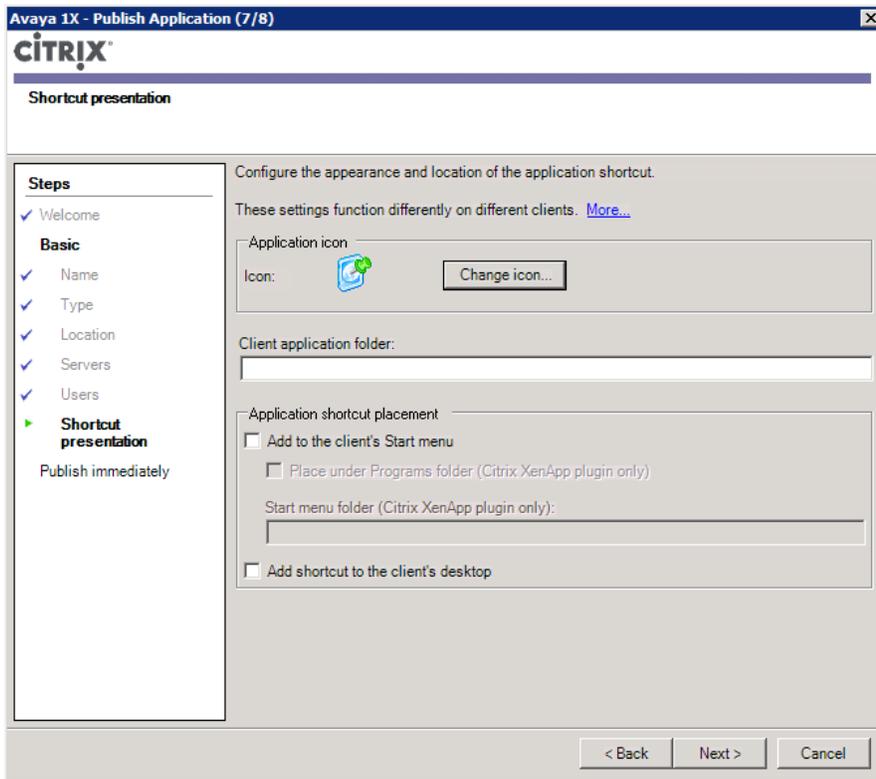
Add: <Name of Server>





Users:

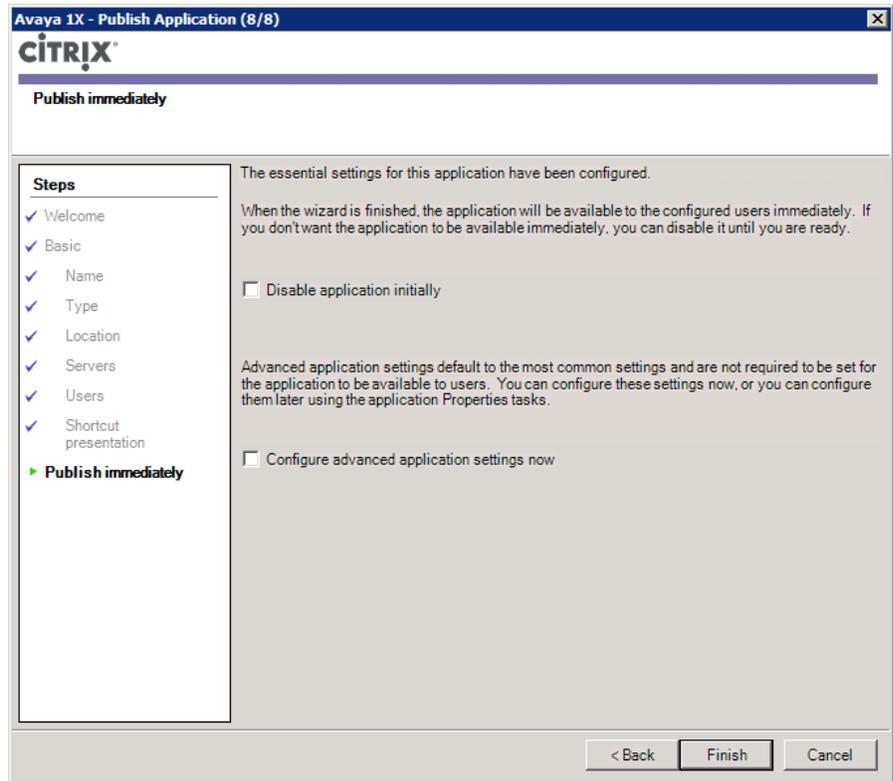
Allow anonymous users or
Allow only configured users.



Shortcut Icon:

(we used the default)

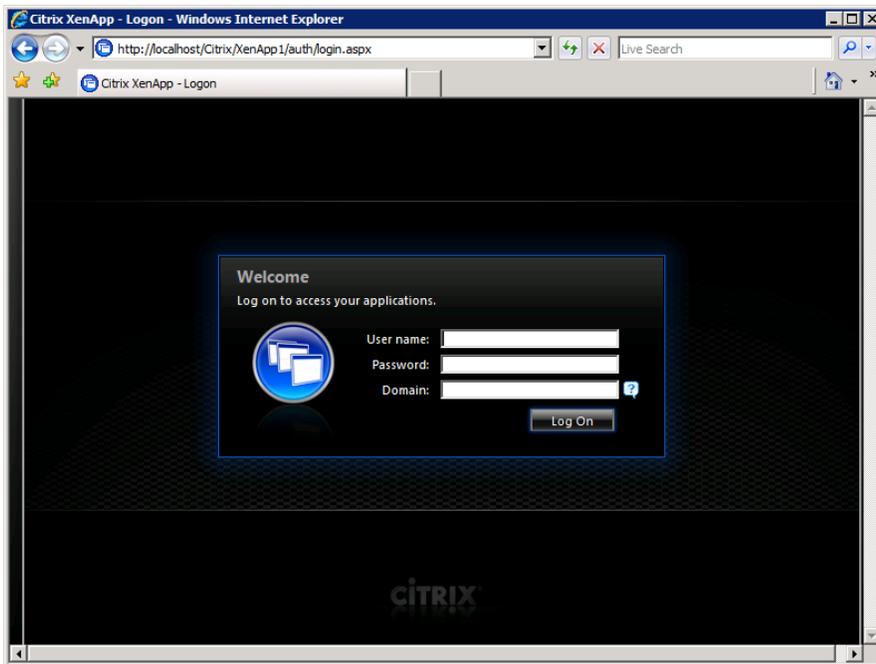
Publish:
Immediately



Testing Avaya 1X Agent

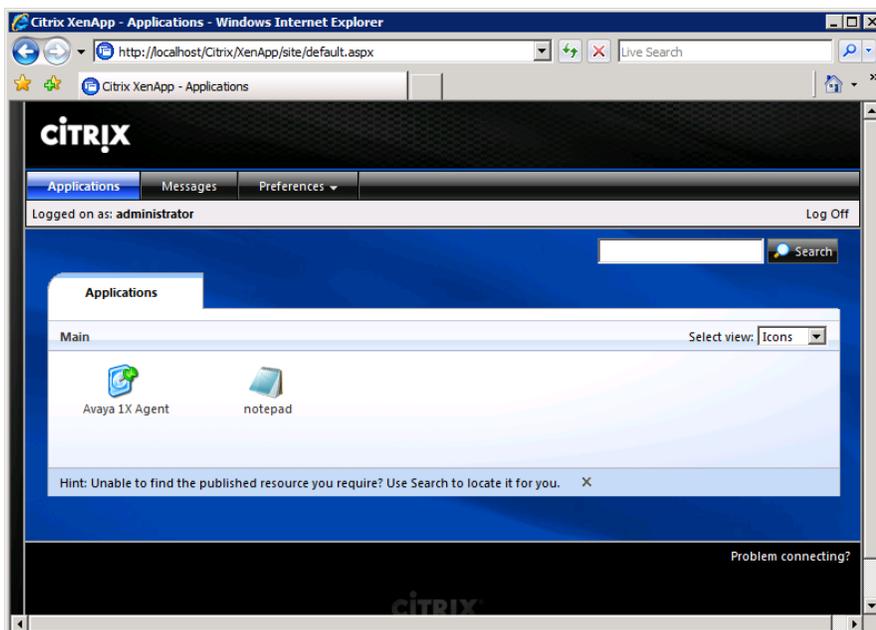
Web Interface

After the Web Interface has been created and the Avaya 1X Agent has been published in XenApp, you should test it on the Web Interface.



Web Interface:

From the XenApp server, launch an Internet Browser, and connect to <http://localhost>.

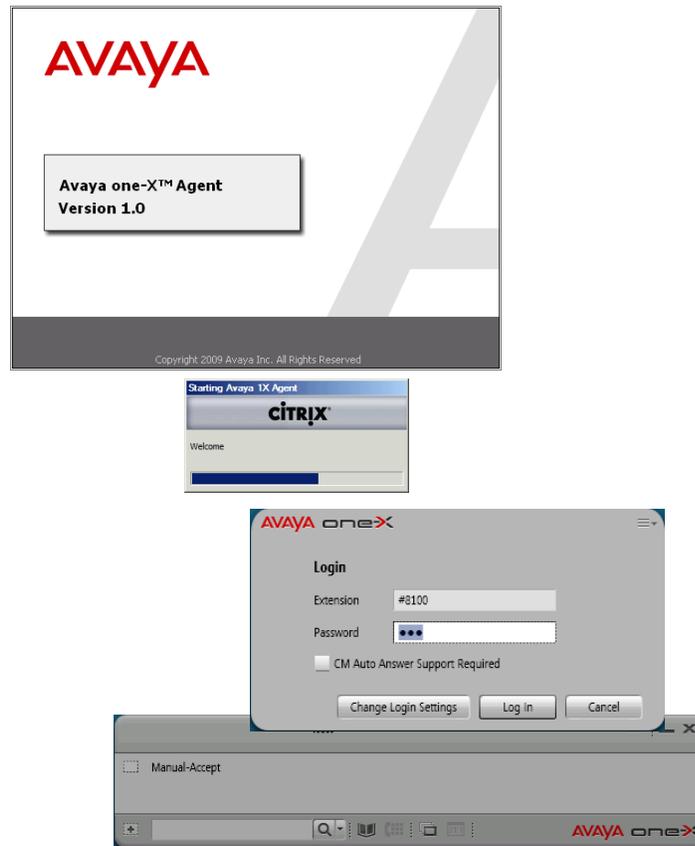


Web Interface:

After a successful authentication the Avaya 1X Agent will appear as an icon in the Web Interface.

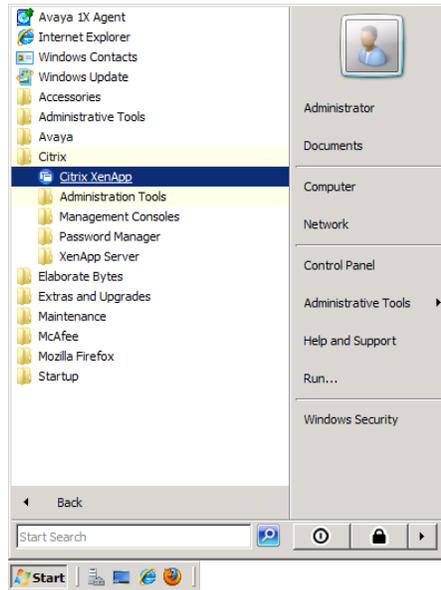
Avaya 1X:

Launch the Avaya 1X Agent

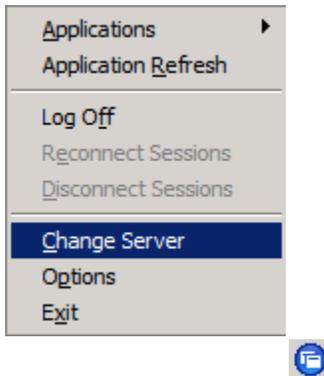


XenApp Plugin

After the XenApp Plugin site has been created and the Avaya 1X Agent has been published in XenApp, you should test it using the XenApp Plugin.



XenApp Plugin:
Start ↩
Programs ↩
Citrix ↩
Citrix XenApp.



XenApp Plugin:
The XenApp program will appear in the bottom right corner in the system tray.

Right-Click -> Change Server.

XenApp Plugin:

Enter the path to the XenApp site for the Plugin.

On the XenApp Server:

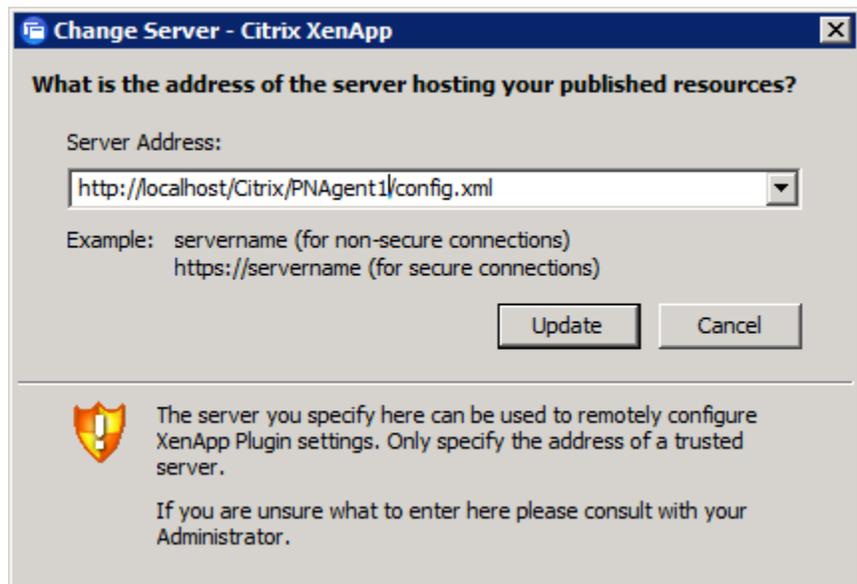
http://localhost/Citrix/
PNAgent1/config.xml.

On remote computers:

http://<ipaddress>/Citrix/
PNAgent1/config.xml

-or-

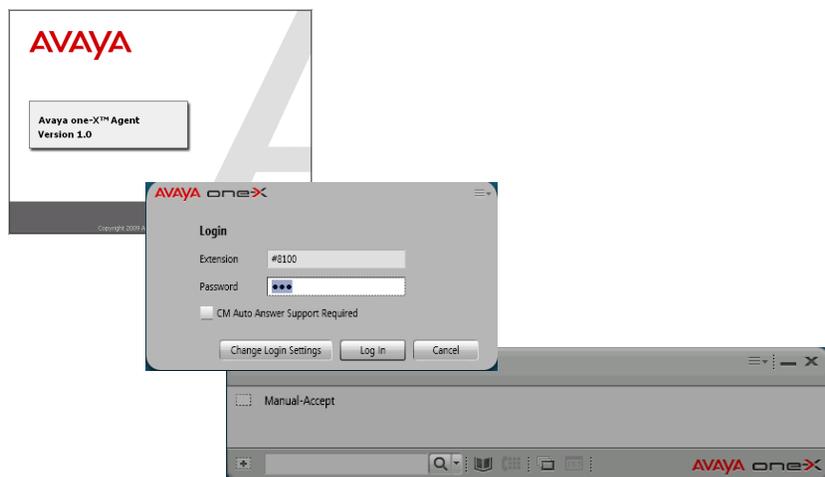
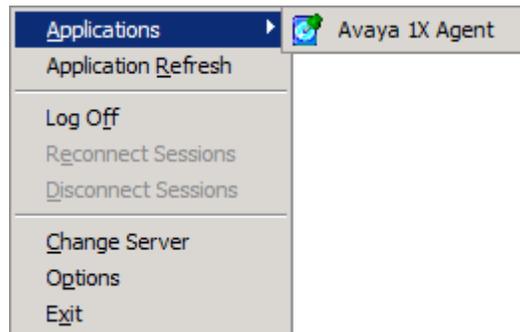
http://<hostname>/Citrix/
PNAgent1/config.xml



XenApp Plugin:

The Avaya 1X Agent application will appear in the Applications list.

Select Avaya 1X Agent to launch the application.





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