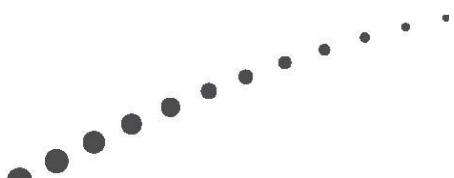




# Citrix Connector for System Center Configuration Manager 2007

Unified and Integrated Application Management  
across the Enterprise.





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Application management is not a new business or technology problem. However, in today's rapidly changing desktop computing environment there are many challenges that didn't exist a few years ago. Managing applications is changing, or has already changed, from device based delivery to a user-centric approach that enables users to access applications and data from anywhere on any device. Today, users own devices, like laptops, netbooks, and smartphones, which are not managed by the IT department. Administrators must provide applications to users regardless of their physical location or target device and manage them as corporate assets. This paper will look at how the Citrix Connector for System Center Configuration Manager provides administrators with the capability of integrated and unified management of application delivery to both managed and non-managed devices (employee owned and even non-Windows devices) from Configuration Manager.

**Microsoft System Center Configuration Manager 2007 R2** is the solution for comprehensively assessing, deploying, and updating your clients, servers, and devices across physical, virtual, distributed, and mobile environments. Optimized for Windows desktop and Windows server platforms, it is the best choice for centralizing management from the data center to the desktop. Configuration Manager is committed to delivering on the user-centric model - providing services to users regardless of device or location.

**Citrix XenApp** enables IT to centralize and manage a single instance of each application in the datacenter and deliver them to users for online or offline use, while providing a high definition experience. It revolutionizes Windows application management by virtualizing applications and delivering them as a centralized on-demand service to any user anywhere on any device.

Today, organizations typically have two separate and distinct administrative functions and processes around application deployment. XenApp and Configuration Manager administrators often don't work together or communicate, even though they are delivering the same applications. Configuration Manager provides end-to-end centralized management for corporate owned and managed Windows computers and Citrix XenApp for on-demand, anywhere access to applications from any device. While organizations see the value in both solutions, the lack of application installation orchestration from one tool has increased costs, complexity, and risks associated with managing two separate application management infrastructures.

Enter the **Citrix Connector for Configuration Manager**, which enables unified management of applications across the desktop and XenApp Server farm environment. The Citrix Connector enhances Configuration Manager, enabling administrators to orchestrate the tasks required to deliver applications to XenApp Servers and publish XenApp hosted applications seamlessly and with minimal impact to the user. With the Citrix Connector for Configuration Manager, administrators can begin delivery of user-centric application management today.

Delivering on user-centric application management is simpler with a Citrix Connector for Configuration Manager enabled infrastructure. For example, a typical mobile user on a business trip loses or damages their laptop. Instead of cancelling meetings and returning home, the user might be carrying a capable device (smartphone or personal laptop/netbook) or could purchase a device and quickly gain access to required applications necessary to complete their business objectives. In this scenario the user is the focus of the application delivery.

This document provides a technical overview of the Citrix Connector for Configuration Manager; explains the benefits that are gained, as well as the general administrative tasks involved with application delivery and publishing when using the Citrix Connector for Configuration Manager.

## LIST OF TOPICS COVERED

The following topics will be covered in this whitepaper:

- What is Citrix Connector for Configuration Manager
- Benefits and Advantages
- Customer Problems Solved
- Installation and Configuration
- Deploying Applications

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## INTENDED AUDIENCE

This whitepaper is intended for IT professionals involved with deploying applications including Configuration Manager and Citrix XenApp.

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## PREREQUISITE KNOWLEDGE

This document assumes a working knowledge of both Configuration Manager and XenApp. Many terms and concepts present will only be familiar to administrators of both technologies.

For additional information please visit:

System Center Configuration Manager: <http://www.microsoft.com/systemcenter/en/us/configuration-manager.aspx>

Citrix XenApp: <http://www.citrix.com/English/ps2/products/feature.asp?contentID=1862682>



## WHAT IS THE CITRIX CONNECTOR FOR CONFIGURATION MANAGER?

The Citrix Connector for Configuration Manager is an add-on to Configuration Manager developed by Citrix that provides integrated management of application deployment to Citrix XenApp servers and publishing XenApp hosted applications from System Center Configuration Manager. The connector enhances the capabilities of Configuration Manager by extending the built in capabilities to perform the series of tasks required to deploy applications to XenApp Servers with the same ease and familiarity used for desktops.

## TECHNICAL OVERVIEW

The Citrix Connector is an add-on to System Center Configuration Manager 2007 R2 and requires XenApp 6. Deploying applications with the Citrix Connector for Configuration Manager creates task sequences (part of Operating System Deployment) that integrate with Citrix Power and Capacity Management to perform application installations on XenApp Servers. With the Citrix Connector, the same administrator for Configuration Manager, using the same packages and programs delivered to Configuration Manager client computers, can deliver applications to XenApp servers and publish applications to XenApp clients.

## DELIVERING APPLICATIONS

The Citrix Connector for Configuration Manager infrastructure enables application deployment to target devices (non-managed, non-Windows, smartphone, and thin client) that couldn't be managed before with Configuration Manager alone. Typical Configuration Manager packages and programs are reused and delivered to XenApp servers. The Citrix Connector for Configuration Manager populates collections with XenApp Farms, Folders and Worker Groups for targeting application deployment. In the end, application deployment is accomplished by a coordination of Configuration Manager task sequence advertisements and Citrix Power and Capacity Management, created with the familiar Configuration Manager console that orchestrates application installation on XenApp servers.

## ORCHESTRATION TASKS

Before the Citrix Connector for Configuration Manager, application deployment across a XenApp Farm from Configuration Manager was not well managed end-to-end. Installing applications on XenApp servers requires draining user connections, installing applications and potentially rebooting the server to complete the installation tasks. Without the Citrix Connector for Configuration Manager, these tasks can't be completed from Configuration Manager as it doesn't manage XenApp user sessions. Configuration Manager couldn't tell how many users are connected to a server before installing an application and couldn't force disconnects of users on XenApp servers, so the only solution was to deliver applications to XenApp servers in "In Maintenance Mode" where user connections are disabled. Because this required communication and coordination between two separated administrative units, the two technologies were managed separately. This changes with the Citrix Connector for Configuration Manager as the "Programs for XenApp" wizard creates Configuration Manager task sequences with the predefined steps to automate these tasks allowing one tool to be used to deliver applications to XenApp servers. Once the "Program for XenApp" is advertised, the following steps are automated with the task sequence:

1. Set a XenApp server in the farm to less preferential priority ranking (Power and Capacity Management). The server is placed in a state that is moving to maintenance mode and prohibiting new user connections.
2. Messages are sent to connected users informing them that maintenance will take place in X hours in the future, asking them to disconnect and reconnect.



3. User connections are diverted across the farm to more preferential servers(drain user connections to servers in farm one at a time).
4. Application install when server becomes cleared of all users (dormant user connections are automatically disconnected).
5. Reboot XenApp server after application install (if needed).
6. Reset Server Ranking by making server more preferential for user connections (Power and Capacity Management).
7. Repeat for additional servers in the farm until all have been updated with the new application.

---

## PUBLISHING APPLICATIONS

Taking the concept of “unified management” one step further, the Citrix Connector for Configuration Manager integrates publishing XenApp hosted applications. After, using Configuration Manager to orchestrate the application installation on XenApp servers, administrators can publish applications with the “XenApp Application Publishing” wizard.

With Citrix Connector for Configuration Manager these integrations can be combined to publish App-V applications to XenApp servers with Configuration Manager. App-V can reduce server silos and enables additional applications that don't typically work with XenApp. Citrix Connector for Configuration Manager enables publishing applications from the XenApp Servers to Receiver and Dazzle to provide on-demand and self-service provisioning of applications to any device.

## BENEFITS OF THE CITRIX CONNECTOR FOR CONFIGURATION MANAGER

Organizations looking to improve their application management gain many benefits with the Citrix Connector for Configuration Manager. The Citrix Connector for Configuration Manager maximizes the investment of Citrix XenApp by increasing the number of applications available to users that have access to XenApp. In turn, the Citrix Connector for Configuration Manager can be utilized to manage application delivery to all devices, even if they are not Windows based. The following is a list of benefits:

- **Single, integrated view and management:** All enterprise applications including on-demand apps by XenApp are managed with a single management infrastructure, toolset, and administrative tasks.
- **Extends System Center applications:** Applications reach a broader set of users, devices and access scenarios. Manage all traditional and virtual (App-V) applications, deliver applications on-demand for Mac (with Citrix Receiver and Dazzle), thin client, smartphone, and other non-config manager clients – lightly managed (again - Citrix Receiver/Dazzle agent) and non-managed devices (no agent installed).
- **Leverage System Center unified management console:** Deploy and publish applications and updates to XenApp servers with minimal impact to user sessions.
- **Orchestrate Application Installation:** Extend existing Configuration Manager components to orchestrate application deployment to XenApp Servers, utilizing advertised task sequences to deploy applications across entire farms by draining user connections to servers and changing load preferences automatically with Citrix Power and Capacity Management.
- **Short learning curve:** Configuration Manager administrators use the same settings, attributes and configurations available on Citrix XenApp server within the Configuration Manager console to publish applications. Administrators can manage the entire lifecycle of XenApp applications (deploy to server, publish to users, etc.) from a single interface.
- **Utilize XenApp Farms, Folders and Worker Groups:** Configuration Manager administrators don't have to create custom collections for delivery to XenApp farms. The Citrix Connector synchronizes XenApp Farms, Folders and Worker Groups with the existing Configuration Manager collections to provide suitable targets for XenApp advertisement.
- **Reuse existing packages and programs:** Application packages and programs that are created for Configuration Manager clients can be used for delivery to XenApp servers. The Citrix Connector creates the task sequence with the required orchestration to facilitate tasks required for installing to XenApp servers.

## CUSTOMER PROBLEMS SOLVED

The Citrix Connector for Configuration Manager is the solution for many common problems experienced within organizations. Typically managing applications is one of the most important - but also most expensive - processes an organization has to implement. The entire lifecycle of an application, from packaging, deploying, supporting, updating and termination all are very resource intensive and expensive. Managing XenApp servers separately from Configuration Manager adds additional resource costs to manage two separate environments. Lack of communication between the two administrative groups increases the chances that applications aren't consistent and compliant with security requirements within an organization. Evaluating and reducing application deployment costs is difficult without a unified process or reporting across targets and users. Application deployment is critical as it provides the gateway to the user population for accessing the data that enables the business to operate. The following are problems that are reduced or eliminated with the Citrix Connector for Configuration Manager:

- **Reduce costs:** Eliminating the need for two separate application deployment processes, Administrators no longer have to manually manage XenApp server application installs / publishing separately from Configuration Manager clients. This reduces the administrative resource requirements as the application management for XenApp and Configuration Manager are combined.
- **Security and Compliance:** XenApp server farms become additional targets for applications within Configuration Manager. Configuration Manager can be used to deploy, publish, upgrade and report application deployment success. This provides administrators tools to ensure uniform installation of applications in the entire XenApp server farm through orchestration of application deployment with the integration of Configuration Manager task sequences and Citrix Power and Capacity Management. In line with the traditional capabilities of Configuration Manager, the process of ensuring all security and compliance requirements across the XenApp farm are now automated.
- **Business continuity and flexibility:** The Citrix Connector for Configuration Manager provides organizations with the ability to use one tool to deliver applications beyond Configuration Manager clients and even to non-Windows based devices. Devices that have the XenApp agent or Internet access can receive applications that were deployed through Configuration Manager. Giving access to additional device types enables additional productivity for home, contract based works and while traveling for all workers.
- **Maximize Investment:** By providing automation of application deployment and publishing from Configuration Manager, administrators can deploy additional applications to a larger base of users. Most applications don't need to be repackaged for XenApp servers, so simply creating the required Programs for XenApp and the advertisements is all that is required of administrators.

**NOTE:** Re-packaging applications may be required when applications have different requirements and configurations when deploying to server operating systems.



## INSTALLING AND CONFIGURING THE CITRIX CONNECTOR FOR CONFIGURATION MANAGER

The Citrix Connector for Configuration Manager installation is performed from selected computers with connectivity to a Configuration Manager Management Point and at least one XenApp server from each managed farm. The installation includes two main components: XenApp Data Connector and Configuration Manager Console Extension. The **XenApp Data Connector** is the component that coordinates the events performed with the unified management. The **Configuration Manager Console Extension** must be installed on any Configuration Manager console that needs to perform unified and integrated management of applications across Configuration Manager and XenApp servers.

### REQUIREMENTS

Installation of the Citrix Connector for Configuration Manager has the following requirements:

#### Configuration Manager Infrastructure

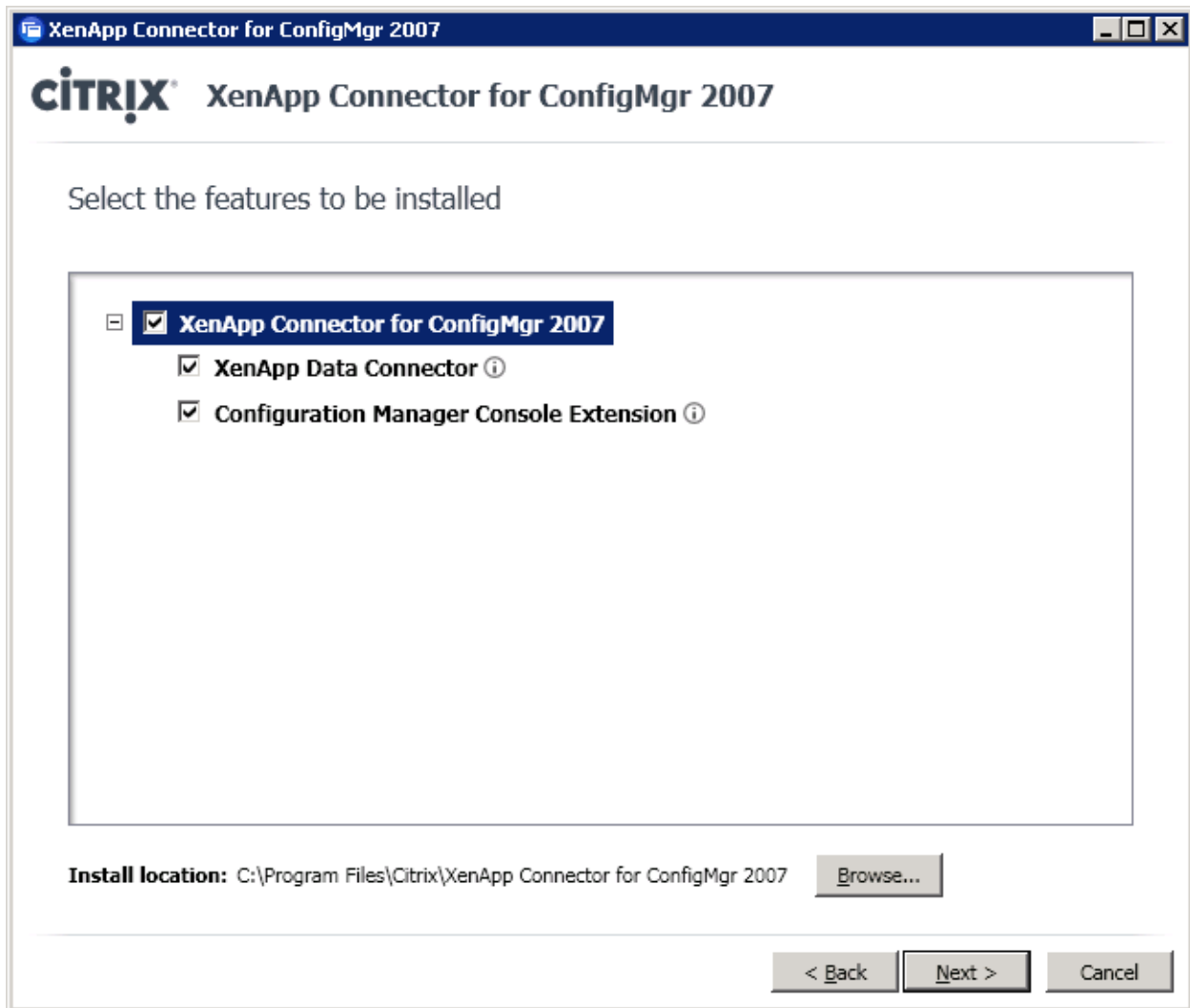
- System Center Configuration Manager 2007 R2
- Connectivity and fully qualified domain name (FQDN) of Configuration Manager Management Point server
- Configuration Manager Site Code
- PowerShell remoting enabled on Configuration Manager Site Server

#### XenApp Infrastructure

- XenApp 6
- Connectivity and fully qualified domain name (FQDN) of at least one XenApp server per farm
- Server running Citrix Power and Capacity Management Concentrator service
- PowerShell remoting enabled on XenApp server(s) and Citrix Power and Capacity Management Concentrator

## FEATURE INSTALLATION

Installation begins with the selection of features that will be installed. As mentioned previously the two features that must be installed are the **XenApp Data Connector** and the **Configuration Manager Console Extension**. The XenApp Data Connector should be deployed to multiple systems to provide higher-availability. The Data Connector install points must have access to at least one server in each farm being managed as well as connectivity to a Configuration Manager Site Server. The Configuration Manager Console Extension is installed on any computers where the Configuration Manager Console is installed and deployment of applications to XenApp servers is desired. Without the Configuration Manager Console Extension, deploying and publishing applications to XenApp servers is unavailable on those management computers.



**NOTE:** The only option other than the feature selection is the installation location. The default is \Program Files\Citrix\XenApp Connector for ConfigMgr2007.

**NOTE:** The installation completes very quickly and will start the configuration wizard. If it is desired to run the configuration of the Connector later, launch the Configuration Wizard (ConfigWizard.exe) from the installation directory selected during installation.

## CONFIGURING THE CONNECTOR SERVICE (XENAPP)

After the installation process finishes, the next step is configuring the connector service. The connector service is the bridge between Citrix XenApp and Configuration manager. Each Connector Server is configured with at least one XenApp server in each farm for management. The administrator must supply a FQDN for XenApp Servers in each farm. The Connector Service servers require PowerShell remoting setup on the XenApp PowerShell Host computer (XenApp server in each farm) and Configuration Manager Site Server. This enables the Connector to use the PowerShell SDK to manage Citrix XenApp servers and gather farm data. Next, the administrator specifies the FQDN of the Power and Capacity Management (PCM) Concentrator service. The Concentrator coordinates the power states of XenApp servers in the PCM-managed farm. The Connector employs the Concentrator service to wake up servers for advertisements and other required tasks.

**XenApp Connector for ConfigMgr 2007 Configuration**

### Connector Servers

The Connector is the bridge between Citrix XenApp and Microsoft System Center Configuration Manager 2007 R2 (ConfigMgr).  
Specify the Citrix servers that Connector will use, with fully qualified domain names (e.g. "server.domain.com").

XenApp PowerShell Host: ⓘ

⚠ Note: You will need to have PowerShell Remoting setup on this system, and on the XenApp PowerShell Host.

Power & Capacity Management Concentrator: ⓘ

✖ The value in field 'XenApp PowerShell Host' is not a valid FQDN.

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## CONFIGURING THE CONNECTOR SERVICE (CONFIGURATION MANAGER)

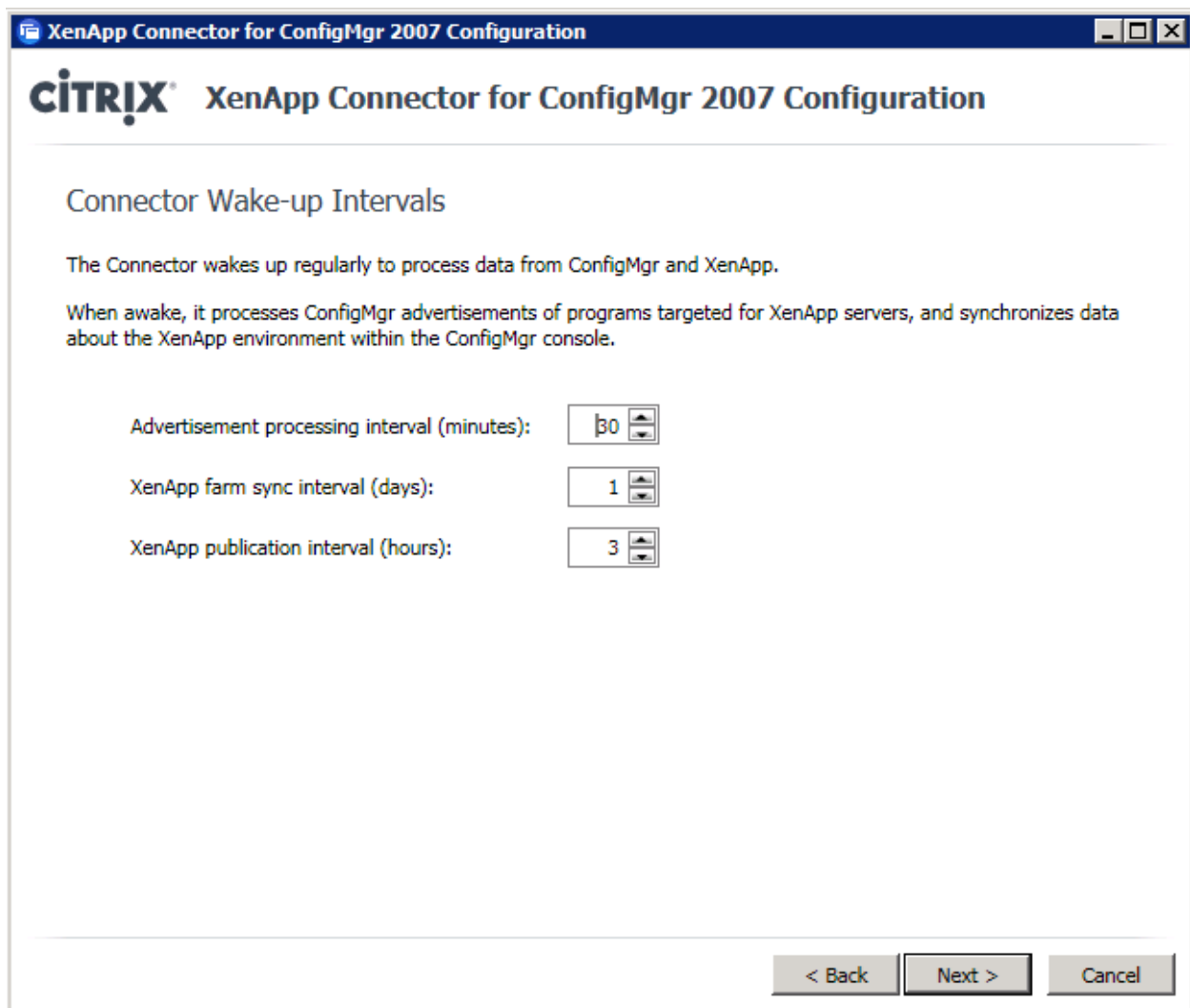
Next, configure the System Center Configuration Manager 2007 R2 Management Point Site Server and Site Code. This enables the Connector to communicate with Configuration Manager for synchronizing the Collections and other required tasks.

The screenshot shows a Windows-style window titled "XenApp Connector for ConfigMgr 2007 Configuration". The window contains the Citrix logo and the title "XenApp Connector for ConfigMgr 2007 Configuration". Below this is a section titled "Configuration Manager Site". A descriptive text reads: "Identify the ConfigMgr site with which XenApp will be integrated. This information can be found in the ConfigMgr console." There are two input fields: "Site Server:" with a help icon and a text box containing a vertical bar, with the example "(E.g. 'server.yourcompany.com')"; and "Site Code:" with a help icon and a text box, with the example "(E.g. 'ABC')". At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

## CONFIGURING CONNECTOR WAKE-UP INTERVALS

The Citrix XenApp Connector for Configuration Manager requires configuring interval schedules for different tasks the Connector performs. There are three specific configurations required:

- Advertisement processing interval (minutes): The advertisement processing interval specifies how frequently the connector will look for advertisements on XenApp servers. The default is 30 minutes.
- XenApp farm sync interval (days): The XenApp farm synchronization interval specifies how frequently the connector attempts synchronization of the farm configuration with Configuration Manger. The default is 1 day.
- XenApp publication interval (hours): The XenApp publication interval specifies how frequently XenApp servers will process publishing information from Configuration Manager: The default is 3 hours.



The screenshot shows a Windows-style dialog box titled "XenApp Connector for ConfigMgr 2007 Configuration". The main heading is "Connector Wake-up Intervals". Below the heading, there is explanatory text: "The Connector wakes up regularly to process data from ConfigMgr and XenApp. When awake, it processes ConfigMgr advertisements of programs targeted for XenApp servers, and synchronizes data about the XenApp environment within the ConfigMgr console." Three configuration options are listed, each with a numeric input field and up/down arrow buttons: "Advertisement processing interval (minutes):" with a value of 30, "XenApp farm sync interval (days):" with a value of 1, and "XenApp publication interval (hours):" with a value of 3. At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

## CONFIGURING XENAPP SERVER POWER-ON INTERVAL

The Citrix Connector for Configuration Manager, along with the Power and Capacity Management Concentrator service ensure that offline servers are brought online to receive advertisements. During the configuration of the Connector, administrators specify the interval in minutes, before an advertisement is scheduled to run to bring offline servers online. The default value is 15 minutes. This configuration requires XenApp servers that support Wake on LAN or are hosted on XenServer.

XenApp Connector for ConfigMgr 2007 Configuration

### CITRIX XenApp Connector for ConfigMgr 2007 Configuration

#### XenApp Server Power-on Interval

This is the number of minutes before advertisement execution that the Connector will turn on XenApp servers that are offline.

XenApp power-on interval (minutes):

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## CONFIGURING THE MAINTENANCE NOTIFICATION

User connections or sessions must be removed prior to installation of applications on XenApp servers. The Citrix Connector for Configuration Manager provides users with a notice of the Maintenance event that is going to occur. This will facilitate users ending their sessions to a specific server and reconnecting to a different server that has already completed the installation or is scheduled for the installation at a later time. Administrators enable the notification of users and also specify both the interval in hours prior to maintenance and the message that will be displayed to users.

The screenshot shows a Windows-style dialog box titled "XenApp Connector for ConfigMgr 2007 Configuration". The main heading is "Maintenance Notification". Below the heading is a descriptive paragraph: "Before a mandatory advertisement needs to install, you can give connected users advanced notice of the scheduled maintenance." There is a checked checkbox labeled "Notify users of upcoming maintenance". Below this are three fields: "Hours prior to maintenance:" with a spinner box set to "16"; "Notification title:" with a text box containing "Upcoming Maintenance"; and "Notification message:" with a text box containing "[TIMESTAMP] Please save your work and logoff. The server will go offline for maintenance in [HOURSLEFT] hours." A "Preview" button is located to the right of the message field. At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

## CONFIGURING ADVERTISEMENT WAIT SETTINGS

The last step in the Configuration Wizard is specifying how long the advertisement will keep trying before forcing the installation (Days) as well as how much time users are given after the installation before being forced to logoff (minutes).

The screenshot shows a window titled "XenApp Connector for ConfigMgr 2007 Configuration". The main heading is "CITRIX XenApp Connector for ConfigMgr 2007 Configuration". Below this is the section "Advertisement Wait Settings". A descriptive text reads: "Advertisements can be configured to wait before giving connected users advanced notice of scheduled maintenance." There are two settings: "Days an advertisement will wait:" with a value of 3, and "Minutes before forced logoff:" with a value of 5. At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

XenApp Connector for ConfigMgr 2007 Configuration

**CITRIX** XenApp Connector for ConfigMgr 2007 Configuration

### Advertisement Wait Settings

Advertisements can be configured to wait before giving connected users advanced notice of scheduled maintenance.

Days an advertisement will wait: ①

Minutes before forced logoff: ①

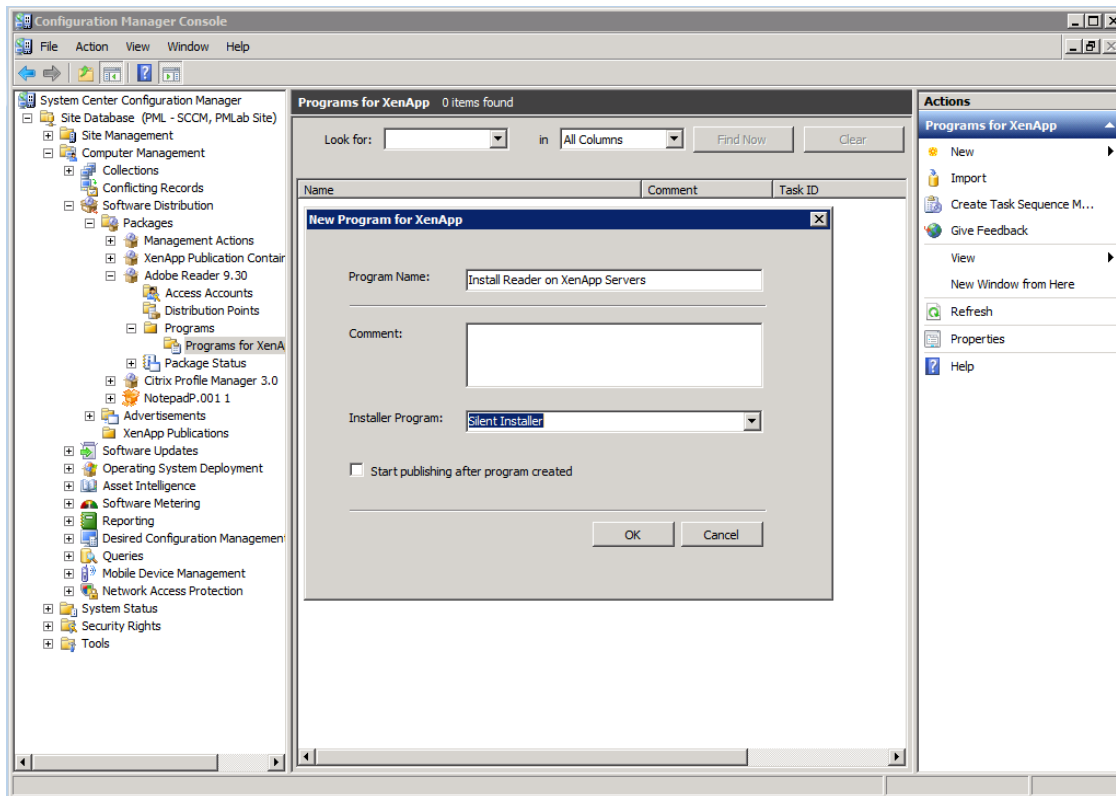
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## DEPLOYING APPLICATIONS WITH CITRIX CONNECTOR FOR CONFIGURATION MANAGER

Configuration Manager Administrators will have a small learning curve when deploying applications to XenApp Servers. The orchestration tasks that are required are automatically added when running the **New Program for XenApp** wizard. During the advertisement, the collections for the XenApp farm as well as folders and work groups are automatically synchronized to Configuration Manager.

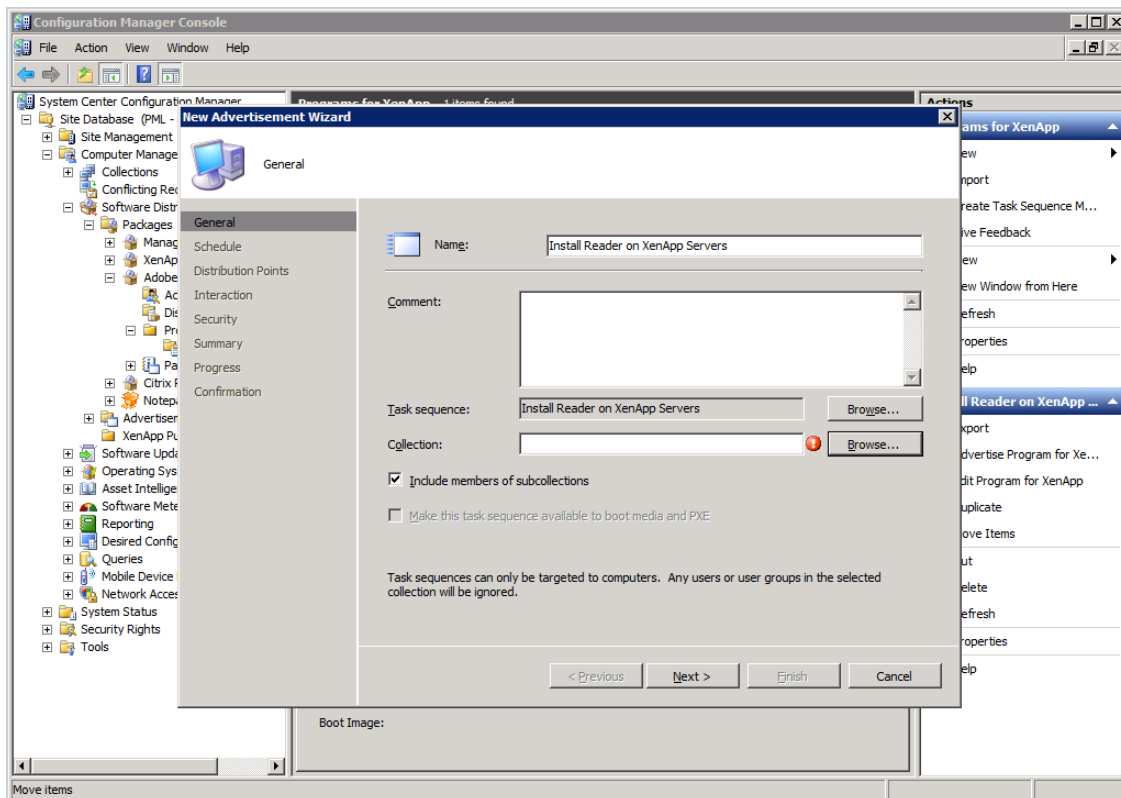
### PROGRAMS FOR XENAPP (TASK SEQUENCE)

With the Citrix Connector for Configuration Manager, administrators are presented with additional containers in the Configuration Manager console. The **Programs for XenApp** container is located under the **Programs** container for a Configuration Manager package. Running the **Programs for XenApp** wizard creates a task sequence that orchestrates the application installation to XenApp servers from a previously created **Program** in the application package. The same programs used to deliver applications to Configuration Manager clients can be reused to deliver applications to XenApp servers. Next, the program for XenApp must be advertised to the XenApp servers before application installation occurs.



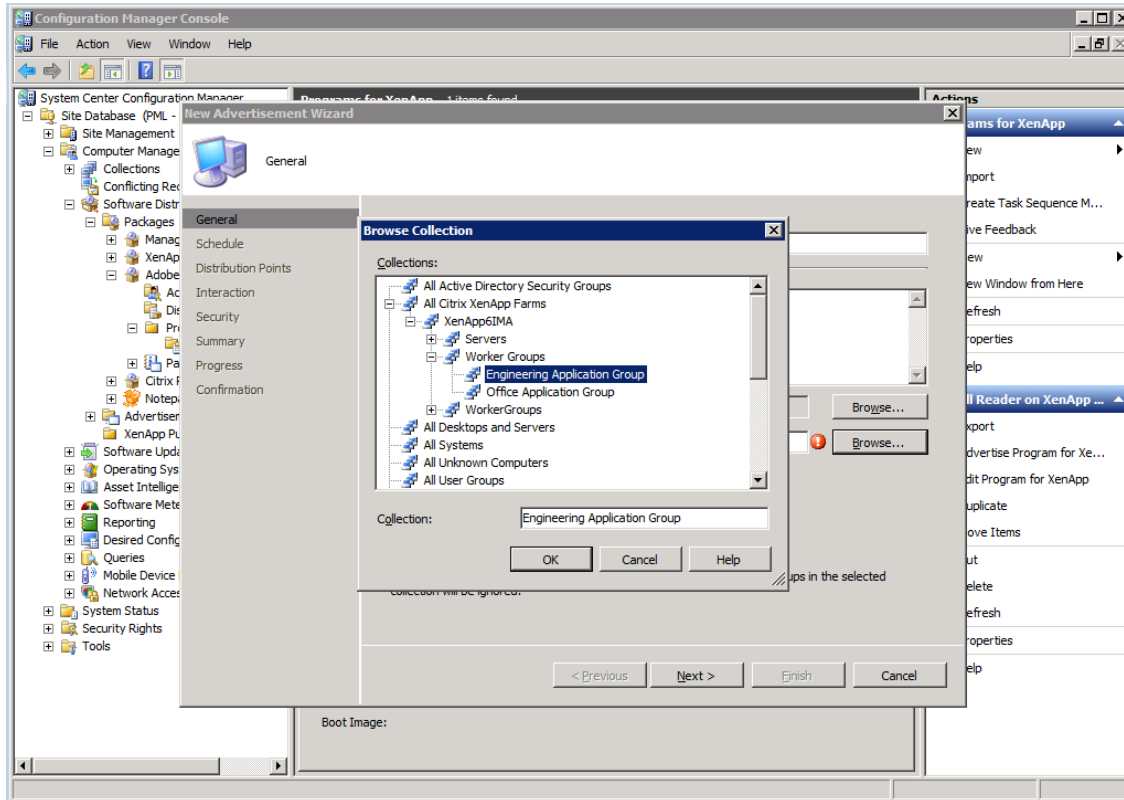
## ADVERTISING TO XENAPP

After creating the Program for XenApp, the next step is to advertise the task sequence to XenApp servers. This task is similar to deploying applications to Configuration Manager clients with a few changes - since applications can't be delivered to XenApp servers with user connections - the task sequence that is advertised must include the capability of managing user connections. The first step in the New Advertisement Wizard is selecting the task sequence and target collection.



## XENAPP COLLECTIONS

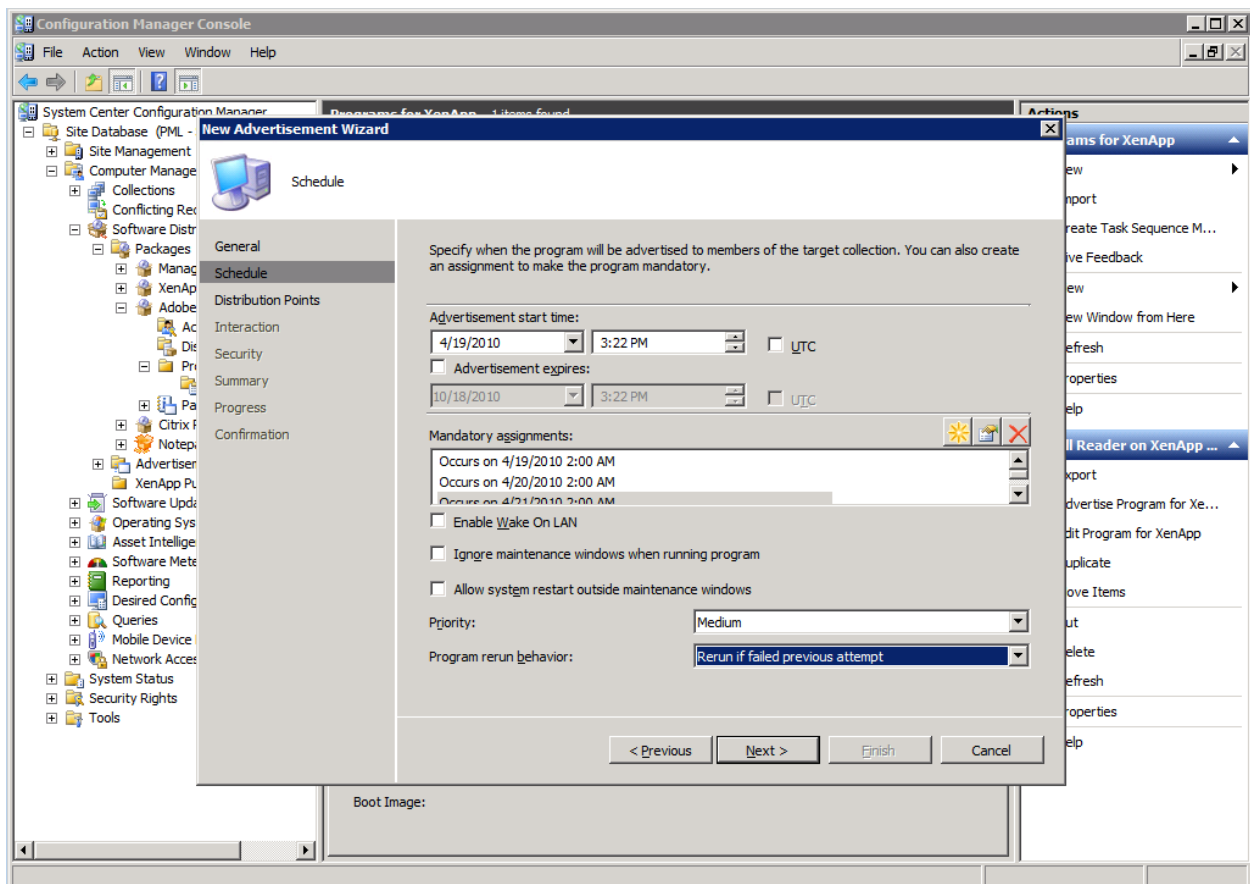
During the New Advertisement wizard, administrators will find all XenApp farms, folders and worker groups presented as traditional Configuration Manager collections. The Citrix Connector for Configuration Manager synchronizes the list of XenApp collections available in the Configuration Manager database. Create additional collections if the synchronized XenApp collections don't meet all required scenarios for application delivery.



## ADVERTISEMENT SCHEDULE

Next, the advertisement schedule is configured which ensures that users aren't connected during installation. The advertised task sequence fails if users are connected to the XenApp server. Therefore, the advertisement assigned schedule must be configured with the following settings:

- The advert must contain multiple mandatory assignments, one for each installation attempt.
- The advertisement rerun behavior must be "Rerun if failed previous attempt".
- Citrix Connector for Configuration Manager advertisements have a timeout period. After that time, the Citrix Connector will notify and logoff users instead of failing.
- Create a set of mandatory assignments, one for each maintenance window before the timeout period; and at least one after the timeout period.





Example: An organization has ten Citrix XenApp servers that need Adobe Reader installed. They are using the Citrix Connector for Configuration Manager to deploy applications to XenApp. The Configuration Manager administrator has already deployed Adobe Reader to Windows desktops and already has the package and program(s) defined. Using the Configuration Manager console the administrator creates the Program for XenApp using the existing Adobe Reader program definition. This creates a task sequence that, if properly advertised, will deploy Adobe Reader to the ten XenApp servers. While creating the new advertisement the administrator comes to the **Schedule** screen. The administrator knows the default timeout period is 3 days. The XenApp server environment has maintenance windows every day, from midnight until 2AM. The advertisement schedule would be as follows:

- D @12:00
- D+1 @12:00
- D+2 @12:00
- D+3 @12:00

Most servers would be patched during the first 3 maintenance windows. Any remaining server would be patched at the 4th. Users still connected at that time would be notified in advance to exit their applications and are logged off enabling the application installation on the remaining servers that weren't available during the normal maintenance window.

**Note:** The parameters depend on the characteristics of the XenApp sessions. If administrators force idle sessions to logoff (a common practice), then application installation will happen much more quickly since only "stale" sessions will be disconnected.

## XENAPP APPLICATION ORCHESTRATION

The advertisement will run the task sequence that performs orchestration and installation. Citrix Power and Capacity Management changes the connection preference for servers targeted in the collection and that haven't processed the advertisement to drain user connections. Next, after a mandatory assignment, three different scenarios are handled to orchestrate the installation of the advertised Program for XenApp.

The first scenario happens 15 minutes before the collection maintenance. All offline servers that haven't processed the advertisement are powered on for installation (Wake on Lan or XenServer hosted servers). The second scenario occurs on servers inside the maintenance window that have user connections, where the server will fail the advertisement. The third scenario occurs on servers that have no user sessions which will start the Program for XenApp task sequence. The task sequence performs several steps to install the application.

First, the task sequence checks for user connections and if the configured timeout has not been reached the task sequence will fail. The configurable timeout starts counting from the first time the server processes any mandatory assignment. If the installation hasn't completed before the configurable timeout, users are notified that their server is entering maintenance mode and they need to disconnect and reconnect or their connection is disconnected after a configurable period of time. Once user connections are cleared from the servers they enter maintenance mode preventing any new user connections, changing the server to install mode and executing the linked program installation. After the application is installed the XenApp server is restarted if necessary and user logons are enabled.

In the scenario where user connections are still present during the maintenance window, but after the configured timeout period has been reached, users are informed prior to the next collection maintenance windows giving them time to log-off cleanly before the next maintenance window enabling the application installation.

The screenshot displays the XenApp Management console interface. The main window shows a summary of workloads and a detailed view of the 'Office 2007 App Group Workload'.

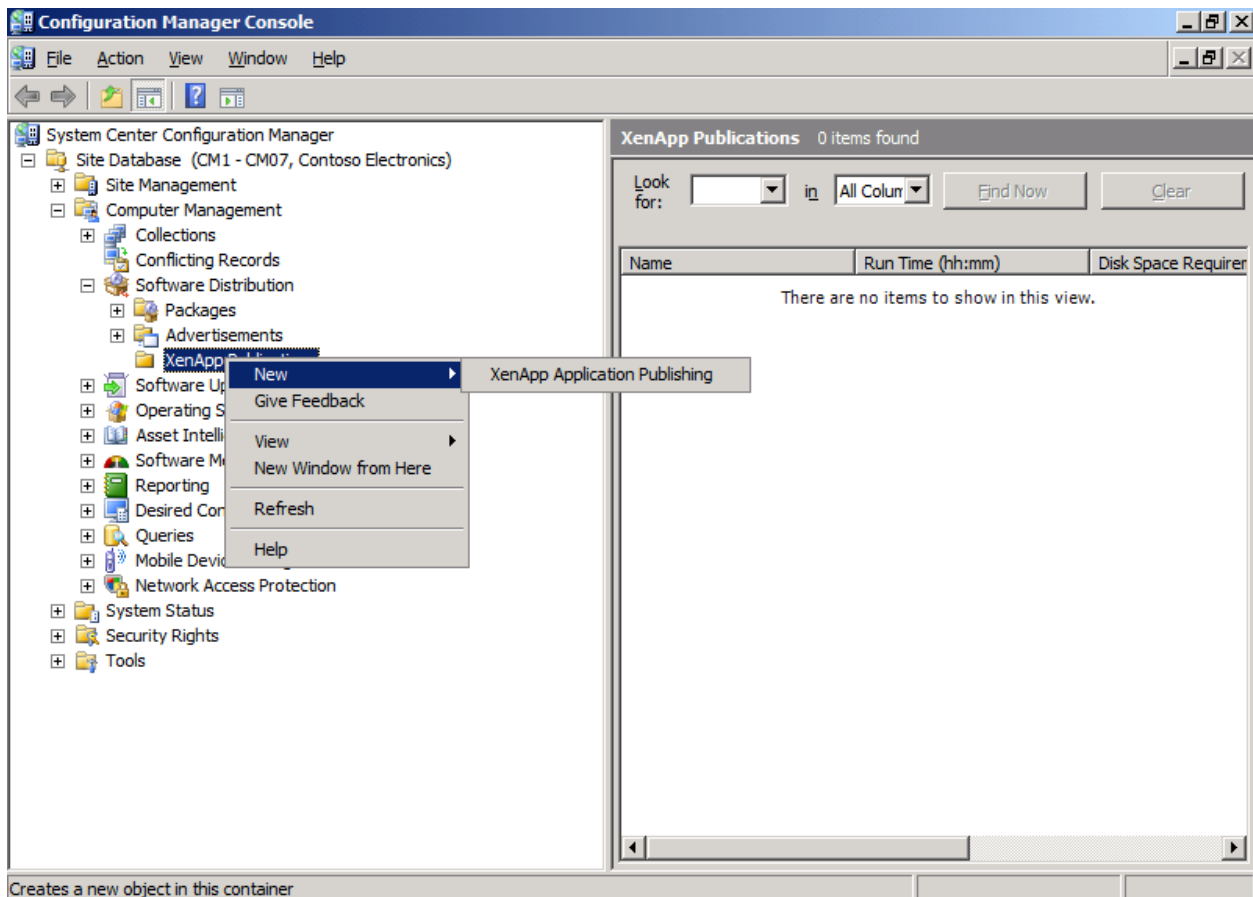
Workload	Power Managed	Load Consolidated	Utilization	Sessions	Servers
All Workloads	✓	✓	13.3%	2 load 13 u... 0 off...	2 on 0 off
Office 2007 App Gr...	✓	✓	13.3%	2 load 13 u... 0 off...	2 on 0 off

Server	Control Mode	State	Utilization	Sessions	Session Capacity
ptsw30.pmlab.local VM: Intel Xeon E5345 @ 2.33GHz,...	Managed 5th choice	Online	28.6%	2 load 15 unu...	7 (estimated)
PTSW31.pmlab.local VM: Intel Xeon E5345 @ 2.33GHz,...	Managed 5th choice	Online	0.0%	0 load 8 unu...	8

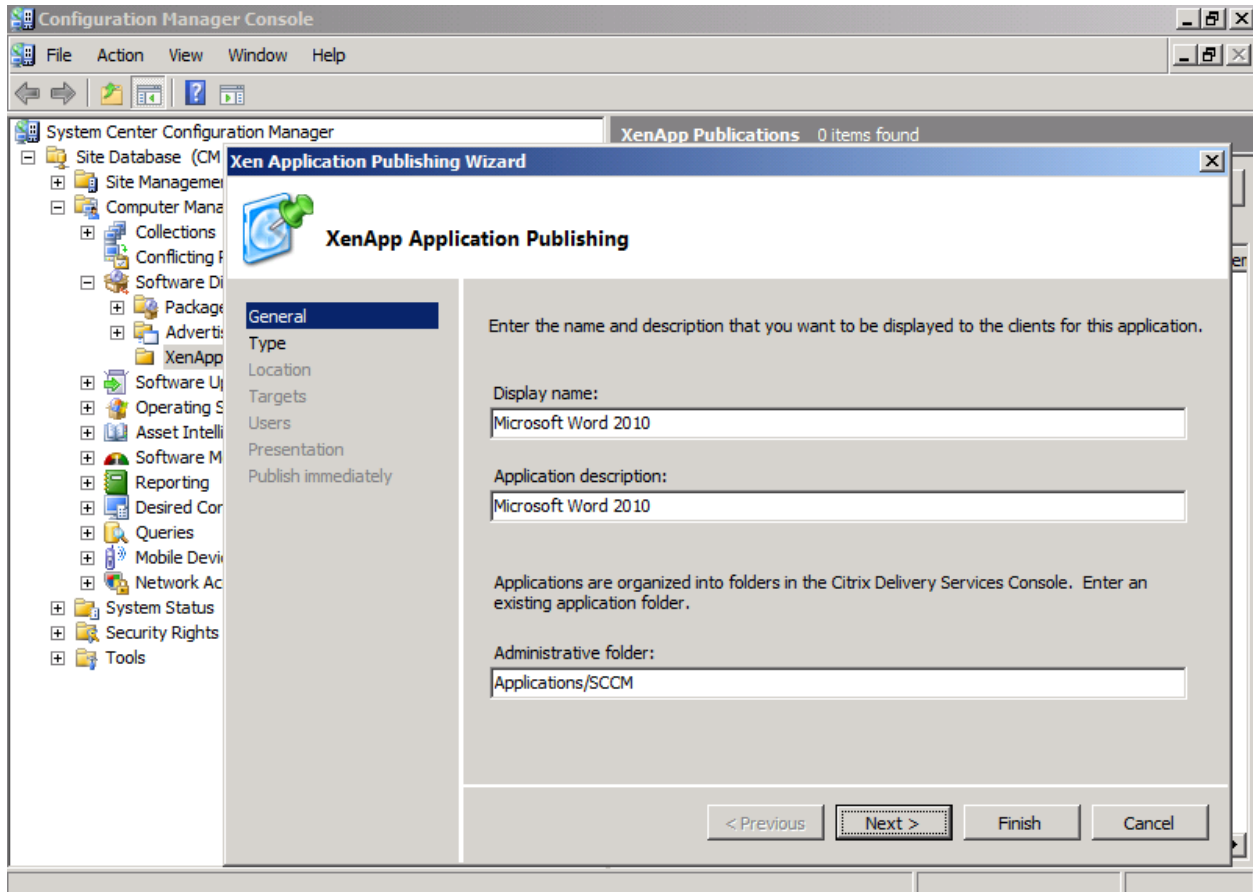
## XENAPP PUBLISHING WIZARD

XenApp Servers can also have the publishing information and settings published via Configuration Manager. Using the **XenApp Application Publishing** wizard administrators can define the location, targets, users, presentation and schedule for publishing. The XenApp publishing wizard can be launched directly from the XenApp Publication container in Configuration Manager, launched automatically on completion of the Programs for XenApp wizard, or by selecting Edit Program for XenApp.



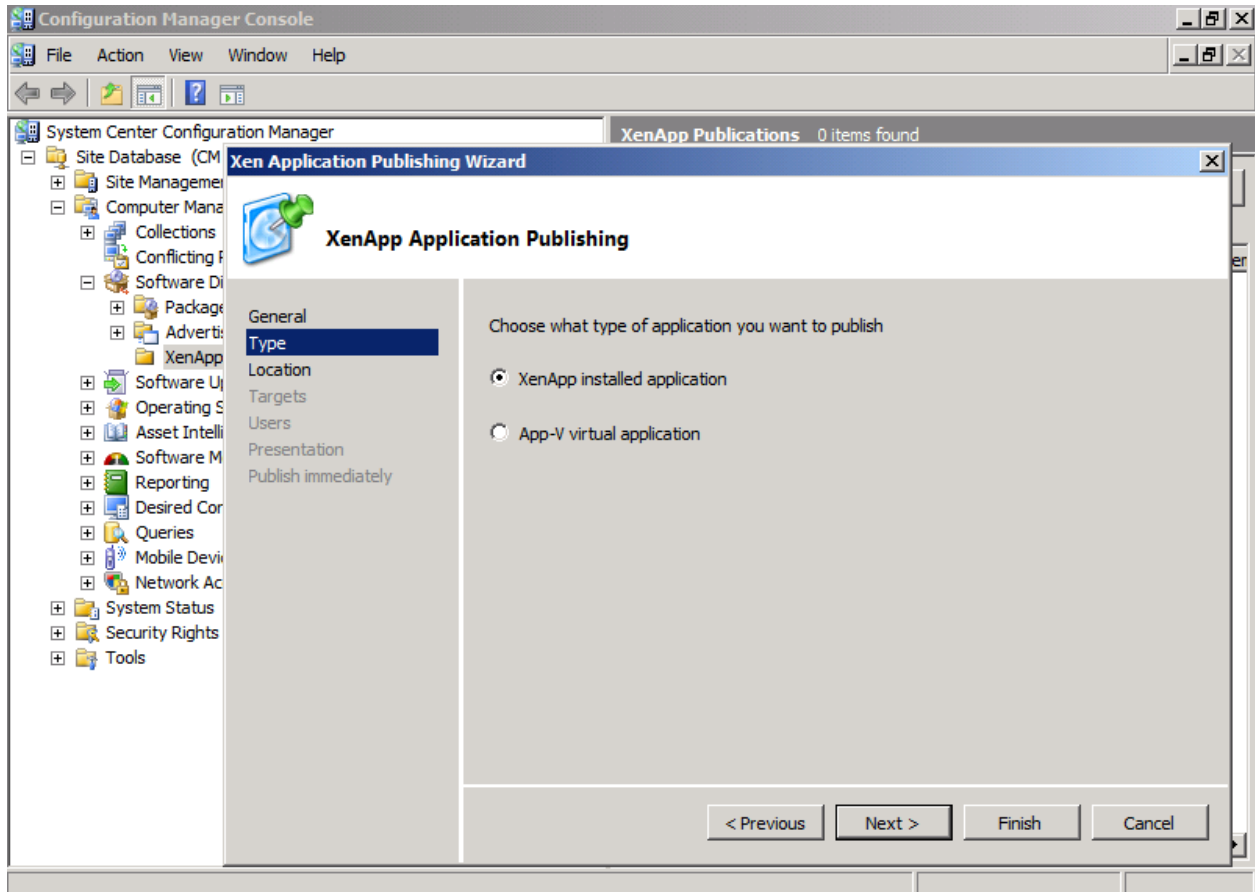
## XENAPP APPLICATION PUBLISHING GENERAL

The first step in the XenApp Application Publishing wizard is the General information screen. Administrators provide a display name and description of the application that is being published. In order to organize applications in the Citrix Delivery System an existing application folder is specified.



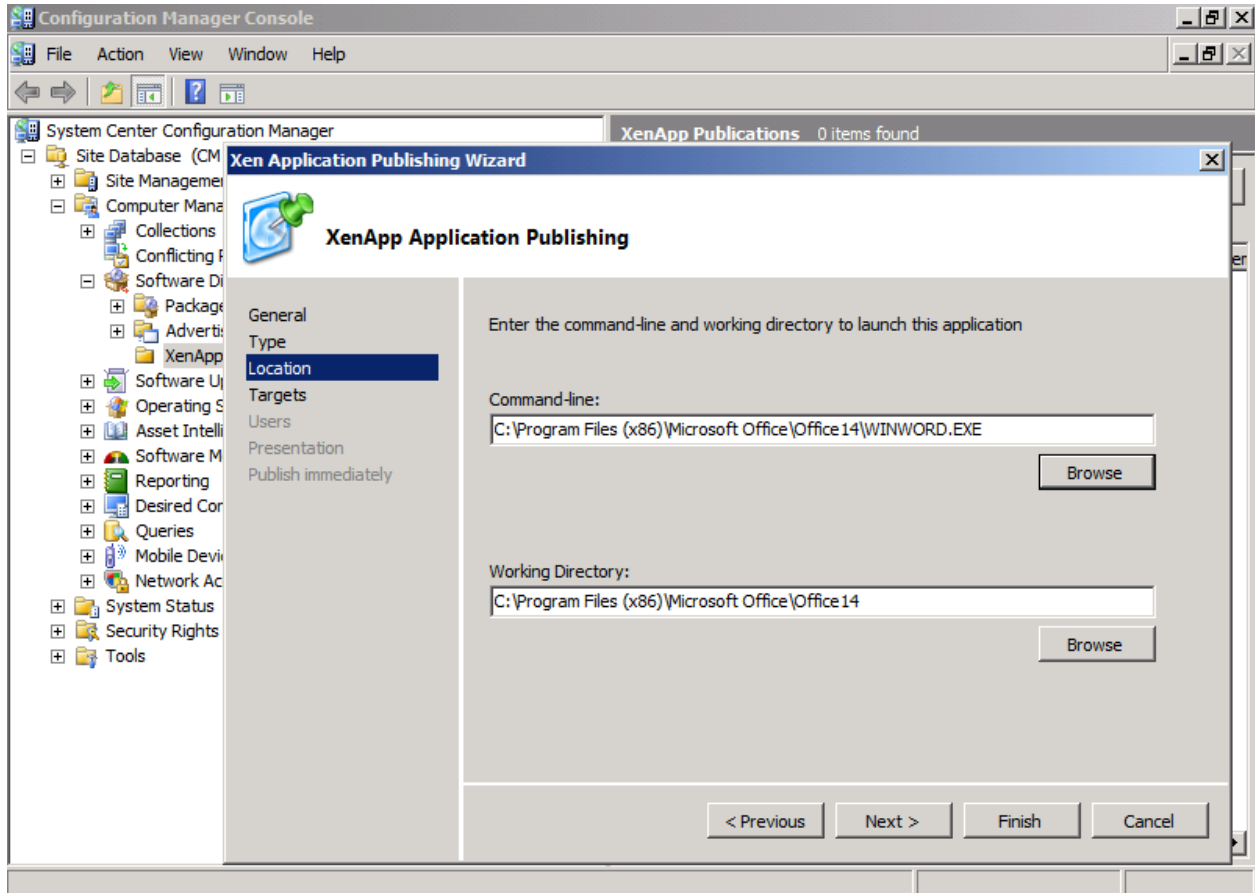
## XENAPP APPLICATION PUBLISHING TYPE

The next step in the Application Publishing wizard is selecting the type of application. Administrators choose whether the application is a traditionally installed (XenApp installed application) or a virtual application (App-V virtual application).



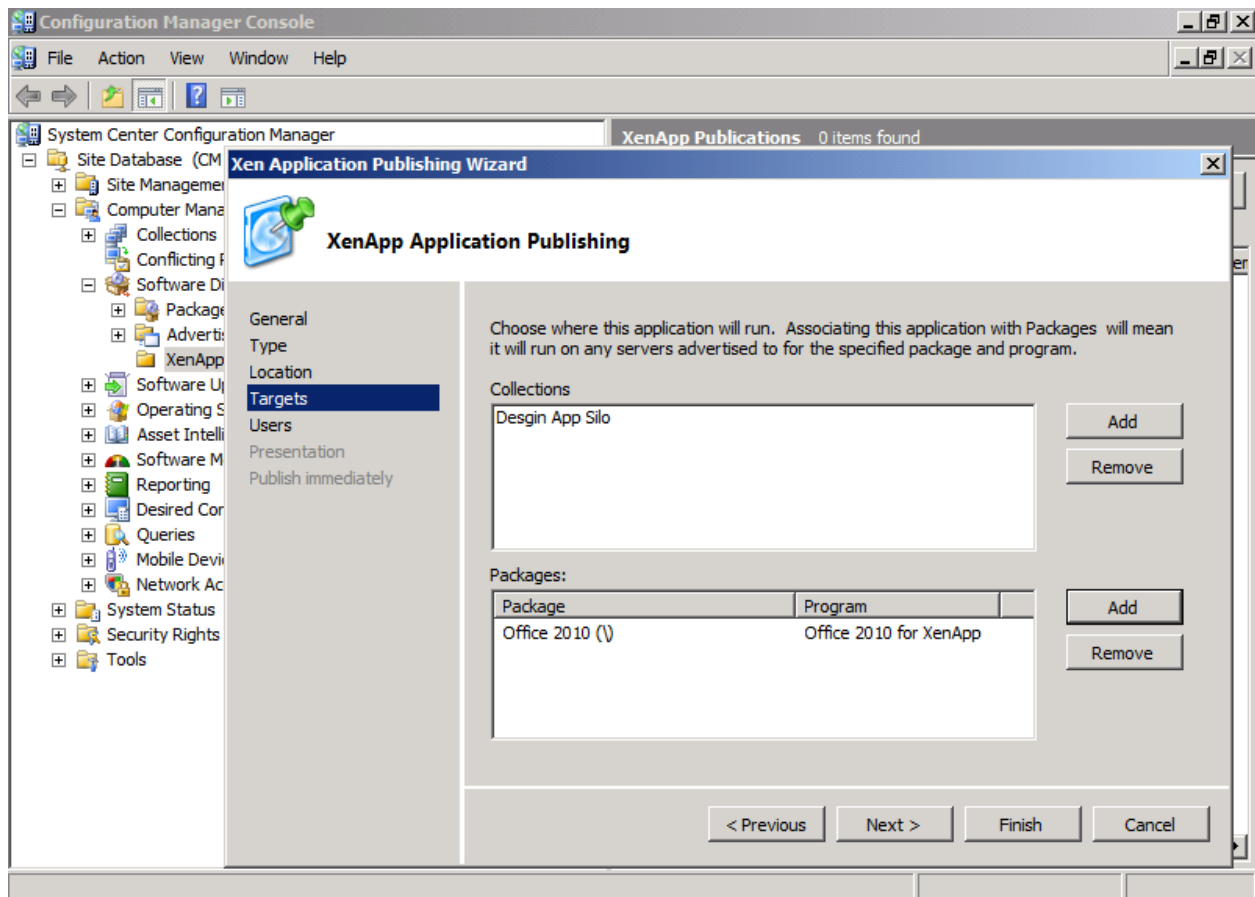
## XENAPP APPLICATION PUBLISHING LOCATION

After selecting the type the administrator will specify the command-line for launching the application as well as the working directory. The following example demonstrates a location for a XenApp installed application.

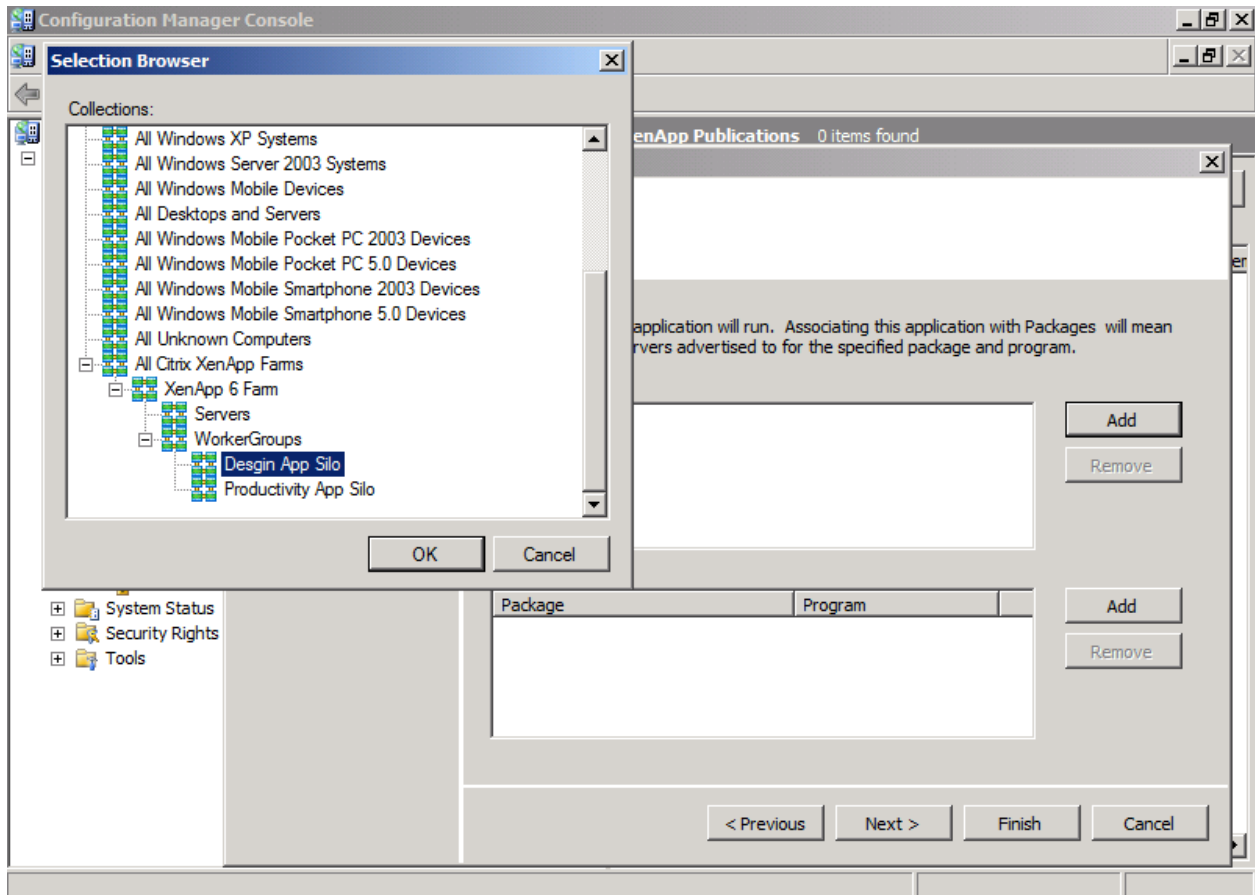


## XENAPP APPLICATION PUBLISHING TARGETS

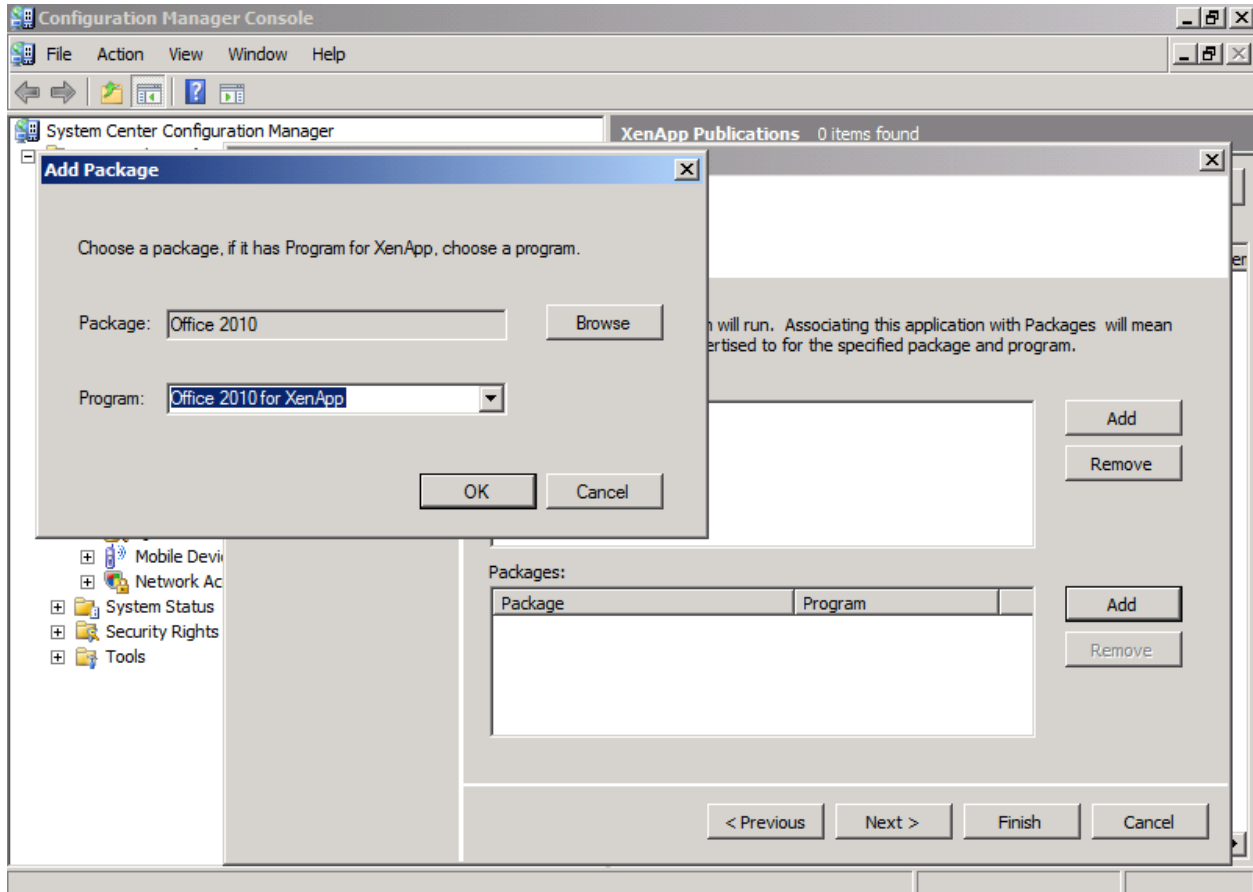
Targeting XenApp application publishing can be done in one of two methods. XenApp published applications configured with a collection target are created by pointing to all elements of the collection. The collection target is best suited for applications that are always installed on the server (e.g. Internet Explorer). XenApp published applications configured with a package target will be created by pointing to all servers that have successfully processed advertisements of the package and program. Package targets are best suited for applications that are installed via Configuration Manager advertisements. The package target ensures that the XenApp publication list matches servers that have the software installed, avoiding failed application launch requests from XenApp. If the XenApp Application Publishing wizard is launched from the Programs for XenApp wizard or by selecting Edit Program for XenApp, the target page is suppressed and the Program for XenApp is linked to the publication.



COLLECTION TARGET SELECTION

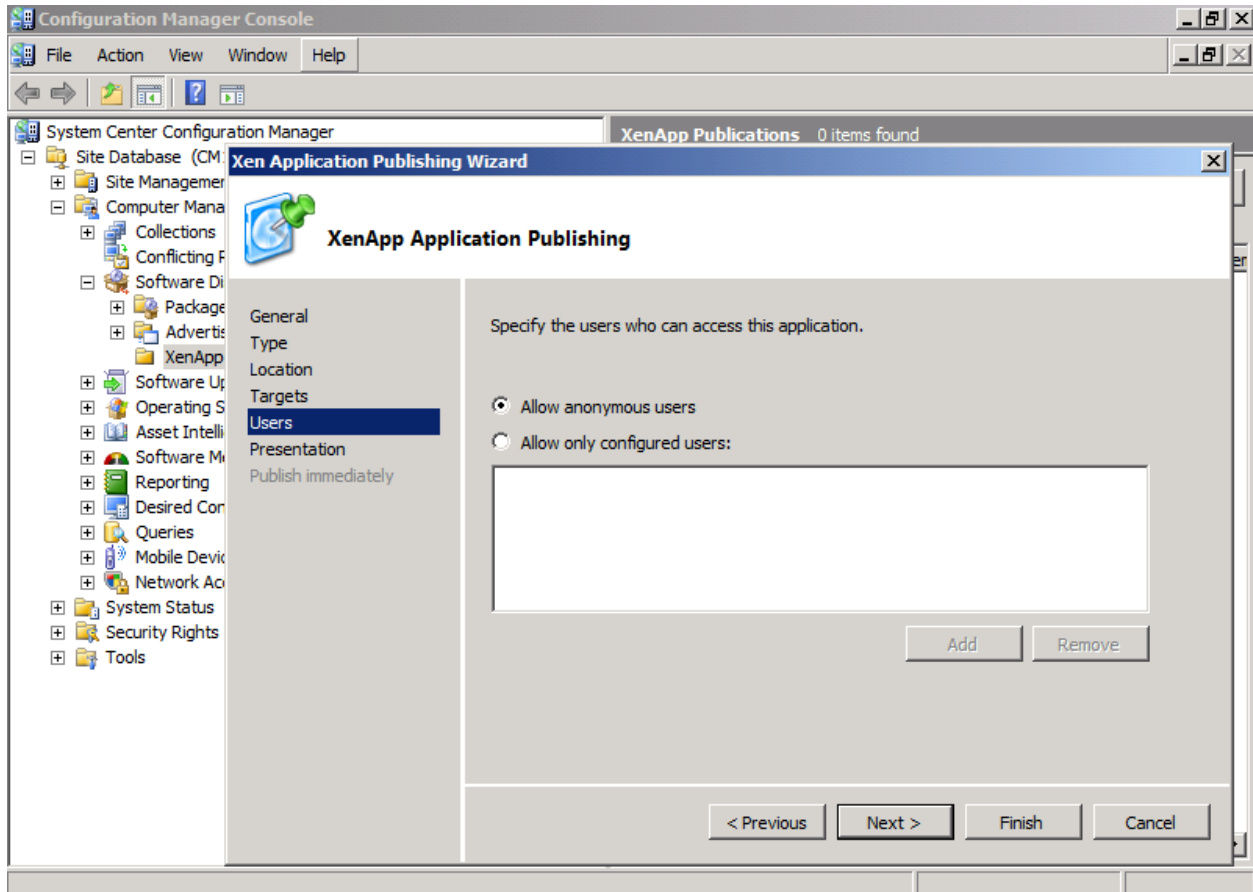


## PACKAGE TARGET SELECTION



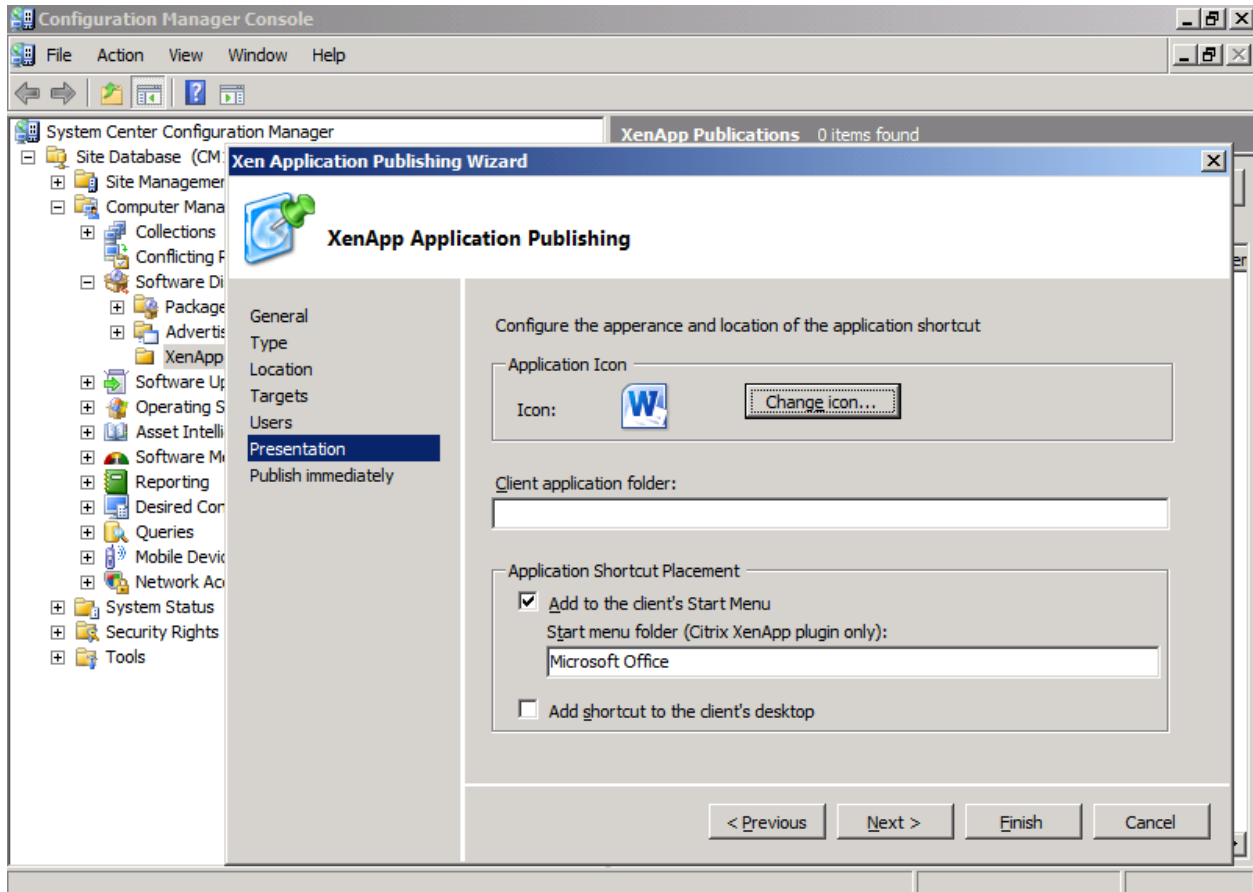
## XENAPP APPLICATION PUBLISHING USERS

Configure the users that can access the publication by selecting “allow anonymous users” or “Allow only configured users”. Selecting “Allow only configured users” enables publishing XenApp applications to specific users and security groups via Active Directory.



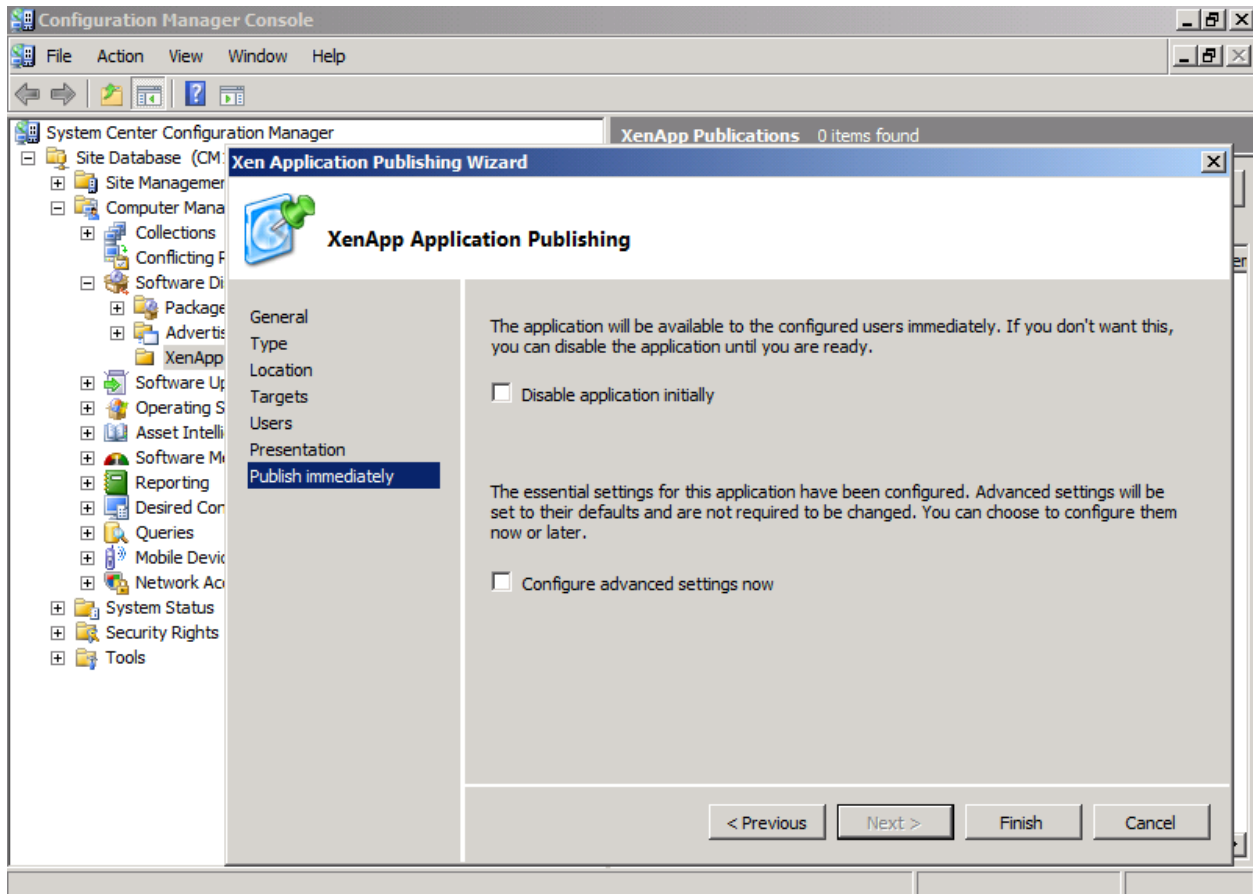
## XENAPP APPLICATION PUBLISHING PRESENTATION

The presentation configuration in the XenApp Application Publishing wizard allows administrators to configure the icon that is displayed for the publication, the client application folder and shortcut placement.



## XENAPP APPLICATION PUBLISHING PUBLISH IMMEDIATELY

The last phase of the XenApp Application Publishing wizard displays two options. The first option “Disable application initially” gives administrators the ability to disable the application until a later time when the application should become available to the user. The second option enables the configuration of advanced settings.



## CONCLUSION

The Citrix XenApp Connector for Configuration Manager gives organizations the capability of unified and user-centric application management. This document has shown how Configuration Manager provides a single, integrated view and management of all applications across the enterprise. The Connector extends the reach of Configuration Manager applications to a broader set of users, devices and access scenarios. The Connector leverages the Configuration Manager console to deploy and publish application and updates to XenApp servers with minimal impact to user sessions.

After reading this document administrators will understand the goals of the Citrix Connector for Configuration Manager, be able to install and configure the Connector, and deploy and publish applications. Please reference the links in the additional information section below for a more complete understanding of how Citrix and Microsoft are delivering a comprehensive user-centric application management solution across the enterprise.



## ADDITIONAL INFORMATION

- For more information or to download Citrix XenApp 6, MDOP and Configuration Manager, please visit <http://www.citrix.com/xenapp/appv>
- For more information on Microsoft System Center Configuration Manager please visit <http://www.microsoft.com/systemcenter/configurationmanager/en/us/default.aspx>
- For more information on App-V and MDOP please visit the MDOP Blog at <http://blogs.technet.com/mdop/>
- To download Microsoft App-V, please visit the Microsoft Volume Licensing Center at <https://www.microsoft.com/licensing/servicecenter/>

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Citrix Systems, Inc. (NASDAQ:CTXS) is the leading provider of virtualization, networking and software as a service technologies for more than 230,000 organizations worldwide. It's Citrix Delivery Center, Citrix Cloud Center (C3) and Citrix Online Services product families radically simplify computing for millions of users, delivering applications as an on-demand service to any user, in any location on any device. Citrix customers include the world's largest Internet companies, 99 percent of Fortune Global 500 enterprises, and hundreds of thousands of small businesses and prosumers worldwide. Citrix partners with over 10,000 companies worldwide in more than 100 countries. Founded in 1989, annual revenue in 2008 was \$1.6 billion.

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