

**ABC-Deploy
Distribution Point
(ABC-DP)**

Installation Guide

Simple as your first ABC
Flexible as an alphabet

June 2021
V9.0.0

ABC-Deploy

Distribution Point Installation Guide

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Preface

Covid learned us all that it is possible to work efficient from remote. And we also learned that more and more telecommuting workers do not use VPN very often, because with modern software packages like o365 we often do not need it.

This poses a challenge to software distribution and inventory tools, and ABC-Deploy Distribution Point (ABC-DP) is the answer to this challenge.

ABC-DP is a web-app that sits between the end user and the file- and SQL-servers that ABC-Deploy use.

This document will explain how to set this up, and discuss different implementation scenarios.

This V9.0 release of the software support all inventory collection from remote computers if they can just perform normal https communication. This bring much better visibility in regards to asset inventory and security patch status.

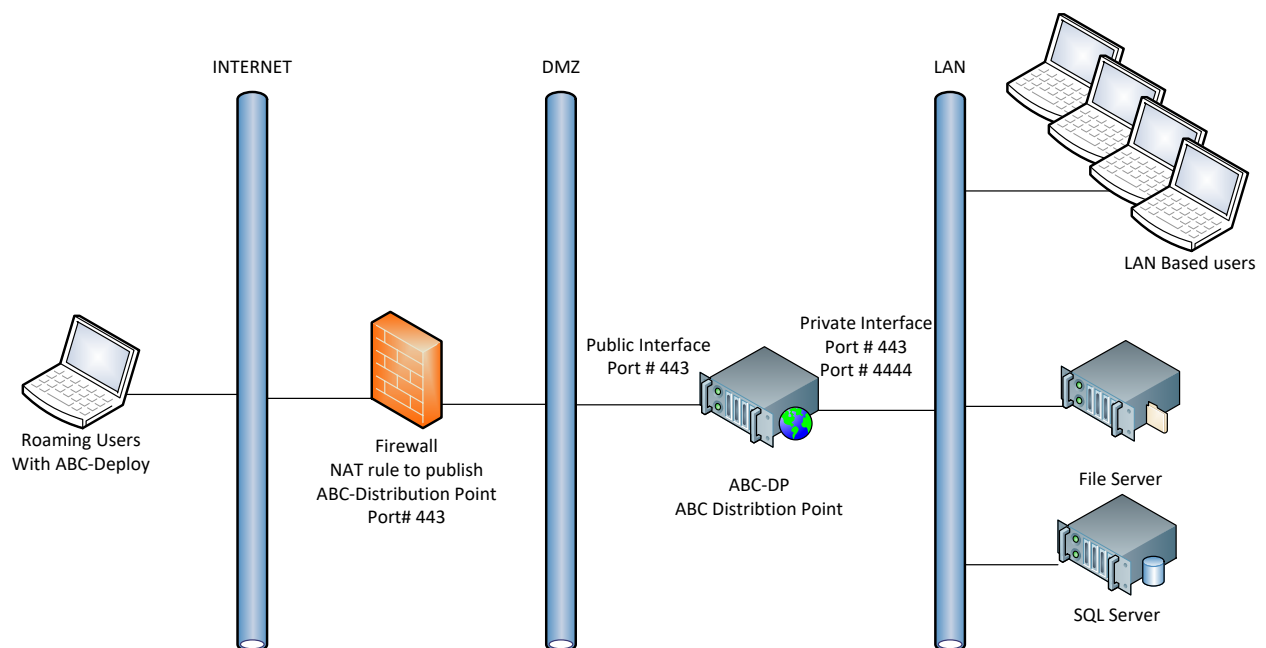
Upcoming versions will add SW distribution capabilities as well.

Topology

ABC-DP can have one or two network interfaces depending on the approved strategy for how organization want to publish SSL services to the Internet.

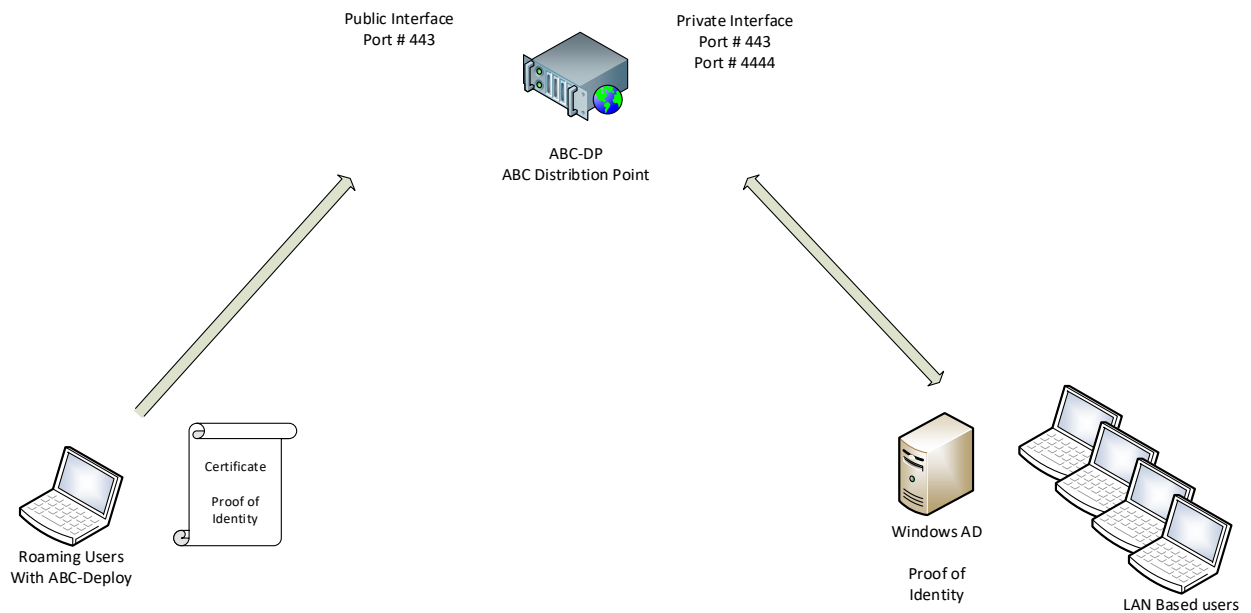
- Some organizations will prefer to have a dedicated interface in a DMZ (DeMilitarized Zone) and another interface in the LAN (Local Area Network)
- Others might choose to have only one network interface which they then expose to the Internet by a reverse proxy or maybe even just a simple NAT router.

A modern reverse proxy server or firewall will be able to make deep package inspection and will have better logging and alarm routines, compared to NAT only devices.



Authentication

- Access to ABC-DP from the LAN is authenticated by clients presenting their Windows AD credentials.
- Access to ABC-DP from the Internet is authenticated by clients presenting a certificate that is issued and trusted by ABC-DP.



Requirements

ABC-Deploy

Both console and agents must be version 9.0 or newer.

Web server

ABC-DP can be installed on any Windows server from Windows 2012 and up. The installation procedure will install IIS and needed features if they are not available. Refer to Appendix A for a list of features installed.

Internet connection

10 Mbit/sec or better depending on how much software you want to deploy.
ABC-DP SSL port 443 published to a public IP Address.
Firewall, Reverse Proxy or NAT device of choice to publish the server to the Internet.

External DNS

We need a DNS A record on the public Internet.
The record can be any name that point to the external IP address where ABC-DP is published.
Recommended name: *abc-dp.mydomain.com*

Internal DNS

We need a DNS A record on the LAN.
The record can be any name that point to the internal (LAN) IP address of ABC-DP.
Recommended name: *abc-dp.mydomain.com*

SSL Certificate

ABC-DP has a build in certificate server and it create its own SSL certificate during installation. You can use this SSL certificate or you can chose to use another SSL certificate from any other provider you choose to trust.

The auto created SSL certificate can be used with these names or IP addresses:

127.0.0.1
::0
localhost
computername
computername.mydomain.com
abc-dp
abc-dp.mydomain.com

If you need other names to reference the distribution point then you will need another SSL certificate from one of your trusted providers, or from an internal PKI certificate authority if such is available.

Installation Guide

1. Logon to the server to be used as a web server for the distribution point.
Use an account with administrator privileges.
2. Install ABC-DP from: <https://abc-deploy.com/files/abc-deploy%20distribution%20point.msi>
This also install IIS and any needed features, see Appendix A for details of what gets installed.
3. Configure ABC-DP by editing a configuration file you will find in the installation.
ABC-DP must know where to find ABC-Deploy resources. File is named setup.ini
Insert path to the ABC-Deploy Share

[ABC-DP]

DeployShare = [\\myserver.com\abc-deploy](https://myserver.com/abc-deploy)

4. Configure ABC-Deploy
ABC-Deploy clients must know the URL of the distribution point LAN interface.
Start ABC-Deploy and insert the URL like shown.

The screenshot shows the ABC-Deploy configuration window. The title bar reads 'ABC-Deploy' and the window title is 'ABC-Deploy'. The main area is titled 'ABC-DP Distribution Point' and contains the following text:

Connect with Remote Computers

The ABC-DP Distribution point works as a proxy to get/put ABC-Deploy data on behalf of a remote client. For the clients to be able to locate the ABC-DP Distribution point you need to tell the internet address.

Leave this parameter blank if you have not yet installed an ABC-DP Distribution point
[Click for more information about ABC-DP](#)

The diagram illustrates the network architecture. It shows three vertical bars representing the Internet, DMZ, and LAN. On the Internet side, there is a laptop labeled 'Roaming Users With ABC-Deploy'. A firewall labeled 'Firewall NAT rule to publish ABC-Distribution Point Port# 443' is positioned between the Internet and DMZ. The DMZ contains the 'ABC DP ABC Distribution Point' server, which has a 'Public Interface Port # 443' and a 'Private Interface Port # 443' and 'Port # 4444'. The LAN side shows 'LAN Based users' (laptops), a 'File Server', and an 'SQL Server'.

At the bottom, the text reads: 'Address to Internet Distribution Point ie. <https://abc-dp.mydomain.com> Leave blank if no distribution point'. The URL 'https://abc-dp.mydomain.com' is highlighted with a red circle.

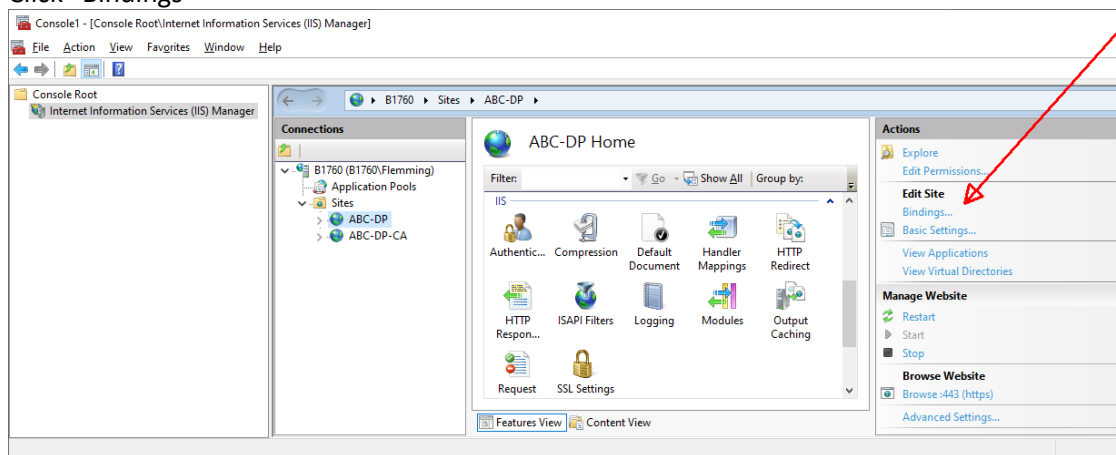
Apply

5. Verify installation by browsing to <https://localhost:4444/default.aspx>
 - Accept the warning about an invalid certificate, and continue to page.
 - This process initializes the build in certificate server and will take a few minutes. Process build a ROOT certificate to use for all communication, and also a SSL certificate to authenticate and encrypt communication.
 - Be patient and do NOT refresh the page forcefully.
 - Watch the page load, and make sure the configuration you inserted in step 3 is visible.

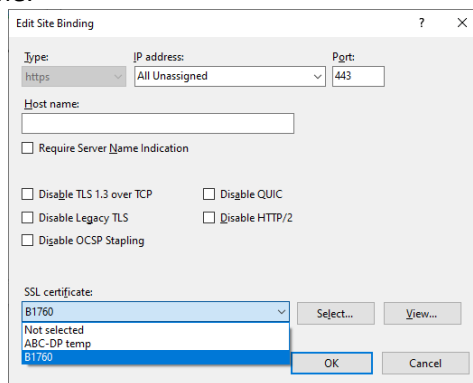
6. Change bindings to use the correct SSL certificate.

During the initial setup that happened in step 5, a new SSL certificate with your domain name and computer name has been created, and now is the time to go into MS Internet Information Services (IIS) and start using this new SSL certificate.

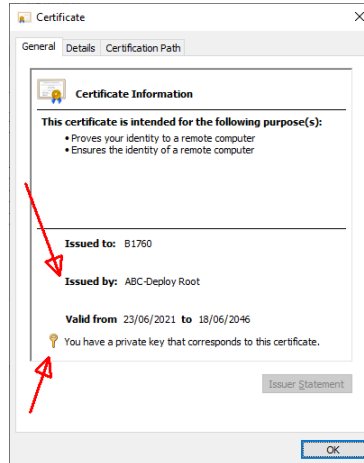
- Start IIS Manager
- Select site “ABC-DP”
 - Click “Bindings”



- Replace certificate “ABC-DP-Temp” with the new SSL certificate that has your server name.



- Click “view” and verify the selected certificate has a valid private key, and is issued by “ABC-Deploy Root”.



- Select site “ABC-DP-CA” and make the same binding
 - Click “Bindings”
 - Select the new SSL Certificate.
 - Click “view” and verify the selected certificate is issued today, has a valid private key, and is issued by ABC-Deploy Root”

7. Test SSL

Browse to <https://abc-dp.mydomain.com:4444>

The page shall show without any certificate warning

Depending on your browser setup you might get prompted to enter username/password

Certificates

ROOT Certificate, issuing and distribution

The newly installed ABC-DP is not only a proxy server, it is also a certificate server which is capable of issuing and distributing certificates to the client computers.

First time the server is contacted by an ABC-Deploy agent, it will check if it has a ROOT certificate that it can use to issue client certificates. If no valid ROOT certificates is found, then this happens:

- A new self-signed CA ROOT certificate is issued.
- The new CA ROOT certificate and private key is installed in the certificate store on the server.
- Root cert is saved as a .cer file in the file system \certificates\ABC-Deploy Root.Cer
- Root cert is saved as a .pfx file in the file system \certificates\ABC-Deploy Root.Pfx
This .pfx file is password protected and contain the private key, and should be backed up to a safe place, and then delete the file!

You will need this file if you are to later move the distribution point to another server. In which case you will also need the password for the PFX file. You can get that password by contacting ABC-Deploy and provide proper identification. Make sure the .PFX file is kept in a safe place.

Client certificates, issuing and distribution

1. Computer with ABC-Deploy agent start on the LAN.

IF a valid ABC-Deploy ROOT certificate is not present
Then Agent connect to port #4444 and request one.

If a valid ABC-Deploy client certificate is not present
Then Agent connect to port #4444 and request one.

2. ABC Agent authenticate using its AD account information *domain\computername\$*
ABC-DP validate the request, and issue the certificate(s), and distribute it in encrypted format to client, where it is installed.
3. When the client later connects from the Internet then it can identify itself by presenting the certificate.

SSL Certificate

The distribution point require SSL encrypted communication, and when first installed it issue a self-signed server certificate for SSL use.

Users who prefer can replace this certificate with any other SSL server certificate, as long as the clients trust this certificate. It is up to the local IT to decide.

APPENDIX A

Listing features installed by the installation program if not already present
In addition to the IIS features shown, we also install .NET Framework 4.7.2 if not already present.

