DefendX Software Control-QFS®
Installation Requirements

This guide covers some pre-install items to be considered in preparation for a successful install of DefendX Software Control-QFS®. When the installation is complete, the product is functional. Customers should read through this guide in its entirety for important notes to get the most out of the software.

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Executive Summary

Below is a summary of system and other technical requirements in preparation for a successful install of DefendX Software Control-QFS®:

Windows Server Management Host

CPU	**2.2GHZ or higher**
MEMORY	**8 GB**
DISK SPACE	**10 GB Available HDD Space**
OPERATING SYSTEM	**Windows Server 2008 RD, Windows Server 2012 R2, Windows Server 2016**
VIRTUAL SUPPORT	**VMware (Version 5.5 or higher), MS Hyper-V**
WEB COMPONENTS (OPTIONAL; CAN BE INSTALLED ON SEPARATE SERVER IF DESIRED)	**Microsoft IIS (Internet Information Services) version 6.0 or later** **Active Server Pages (Classic ASP)**

NetApp Filer NAS (required for NetApp installation)

OPERATING SYSTEM	**Data OnTap version 8.1 or later**
SERVICE ACCOUNT	**Domain User & member of local Administrators group on Filer**

EMC VNX NAS (required for EMC installation)

OPERATING SYSTEM	**DART version 5.6.36.2 or later**
LOGIN CREDENTIALS	**Login Credentials to Control Station**
SERVICE ACCOUNT	**Domain User & member of local Administrators group on CIFS Server**
OTHER COMPONENTS	**EMC CEE (Common Event Enabler) version 4.2.2 or later (Required)** **EMC CIFS Management Tools (Required)**

EMC Isilon NAS (required for EMC installation)

OPERATING SYSTEM	**Windows Server 2008 64-bit or later** **WoW 64**
LOGIN CREDENTIALS	**Login Credentials to Control Station**

Hitachi NAS (required for Hitachi NAS installation)

OPERATING SYSTEM	**HOS version 6.1.1684.18 or later**
SERVICE ACCOUNT	**Domain User & member of local Administrators group on CIFS Server**

Important Pre-Install Points

Below are key items which were discussed to consider in preparation for a successful install of DefendX Software Control-QFS®:

- At the start of the installation Control-QFS checks that the DefendX Software Smart Policy Manager Service (also referred to as EASE) is present and if not will prompt for that component to be installed before the Control-QFS installation continues. The Smart Policy Manager is responsible for storing and replicating policies in your environment. This component is required prior to continuing with the installation of the Control-QFS Service

- When the installation is complete the DefendX Software Control-QFS Service and Smart Policy Manager Service will be present on the Server

- The services require a service account that is a member of Domain Users Active Directory group and the service account must be a member of the Administrator group on the local server(s) where Control-QFS is installed. This service account must be granted the right to run as a service

- Policies can be configured to send emails to notify users, but this requires additional inputs to the configuration:

    o In order to resolve user names to emails the system will require access to a directory that maps user names to email addresses. In most organizations this role is fulfilled by Active Directory and only requires the name of the domain or of one or two domain controllers

    o In order to send the emails Control-QFS must have access to an SMTP relay server and be permitted to send messages for delivery through this relay server. In some environments this will require additional configuration or setup to authorize the Control-QFS Server to send messages

    o There is an optional component called the End User Support Infrastructure (EUSI) that provides HTML email templates, a help website that is classic ASP based and a web based component called Storage Investigator that lets users clean up their storage via an Active X control. The EUSI requires an IIS web server to be available in the environment

Windows Edition

For the Windows Edition of Control-QFS there is some additional configuration required:

- You need an ID with administrator rights.
  - DefendX Software Control-QFS for Windows needs a similar account under which to run as a service.
  - You can use the account from which you are installing, or you can use a different account.
- DefendX Software Control-QFS for Windows does not require a server reboot after installation.
  - The advanced File System Filter technology can install from a central console throughout your enterprise without requiring a reboot of any of your servers or workstations.

NetApp Edition

For the NetApp Edition of Control-QFS there are two additional services installed and some additional configuration:

- The NAS Connector Service manages the communication between the Control-QFS Server and the Filer.

  - The NAS Connector Service requires that the service account is a member of the local administrator group on the Filer(s) and/or vFiler(s) being managed
  - The Filer(s) and/or vFiler(s) must have FPolicy enabled. FPolicy is the interface that allows Control-QFS to be notified with file operations
  - One of the most important considerations during implementation will be to make sure the connection has low latency The Filer will disconnect if our server does not reply quickly enough to screening requests and the most likely cause of this is latency on the connection. For this reason we recommend a dedicated network connection between the Control-QFS Server and the Filer

EMC VNX Edition

For the EMC VNX Edition of Control-QFS there is an additional service installed and some additional configuration:

- The EMC Connector Service manages the communication between the Control-QFS Server and the NAS

    o There needs to be a CIFS Server that is on the physical data mover (i.e. Server_2) that our services can use as a bridge to manage CIFS Servers that are on Virtual Data Movers. The CIFS Server that is on the physical data mover does not require a File System assigned to it, but it does help with diagnostics
    o The EMC Connector Service requires that the service account is a member of the local administrator group on the CIFS Server(s) being managed
    o The NAS must have the Server_CEPP service enabled and the CEPP.CONF file must be configured according to the instructions in the installation guide
    o EMC will need to provide to you the appropriate versions of their Common Event Enabler (CEE) as well as the Data Mover Management MMC

EMC Isilon Edition

For the EMC Isilon Edition of Control-QFS there is an additional service installed and some additional configuration:

- To prepare the EMC Isilon, the following needs to be taken into consideration:

    o Each Isilon managed by DefendX Software Control-QFS must join the same domain as the Control-QFS machine.
    o The logon account used to register with the EMC Isilon (the account that will be assigned to the Control-QFS connector service) needs to be a member of the Isilon's local Administrators group.

- To prepare the Control-QFS Machine, you need to add HOSTS and LMHOSTS file entries that include the IP address and the CIFS server name of the Isilon. If the Isilon has multiple IP addresses, the IP of the dedicated network should be used.

Hitachi Edition

For the Hitachi Edition of Control-QFS there is some additional configuration required:

- Logging on with administrator rights is needed. You will be installing three different services: the DefendX Software Smart Policy Manager™ service, the DefendX Software Control-QFS service, and the DefendX Software Control-QFS Hitachi Connector service.
- The DefendX Software Smart Policy Manager service should be installed with a domain user account as its service account so that it can communicate with your mail system and other storage servers with which it may share policies.
  - o The DefendX Software Control-QFS service requires a domain user account with local administrative rights on the Hitachi NAS Server. The Hitachi NAS Connector service uses this account as well.
- Your hardware should be appropriate for the services running on each machine. The connector itself and DefendX Software Control-QFS for NAS, Hitachi Edition impose almost no load on either machine.

Things to Remember

- Our software will not affect the system performance on the storage system nor will a reboot be required to complete the installation
- The storage will not be taken offline or restarted in any way. There will be zero down time for the users accessing the storage
- When the installation is complete, the product is functional but not enabled. Control-QFS will not manage the environment until policies are configured and enabled

About DefendX Software

DefendX Software helps organizations secure their critical business files and maximize the value of their enterprise file storage resources. From comprehensive intelligence, modeling, costing and chargeback to seamless file movement, protection and archiving, DefendX provides industry-leading capabilities to eliminate waste and align the value of files with the storage resources they consume. With DefendX, important file locations and the users who access them can be monitored to provide governance, protect against theft and enforce compliance policies. For more than 20 years, DefendX Software has been helping public and private sector customers around the world save money and eliminate risk every day.

DefendX Software Professional Services

DefendX Software's Professional Services offers consulting, training, and design services to help customers with their storage management challenges. We have helped hundreds of customers to implement cost-effective solutions for managing their storage environments. Our services range from a simple assessment to in-depth financial analyses.

For further assistance in creating the most cost-effective Storage Management Infrastructure, please contact your DefendX Software Representative at 800-390-6937.

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