



Single Server Without HA Installation Checklists

WE ARE
CORTEX

Overview

This document is designed to help confirm that all the different parts of the CORTEX installation process have been completed based on the installation documentation.

These parts have been grouped into three checklists below:

- Requirements – A list of checks that need to be completed before the installation starts
- Pre-Installation – A list of steps that need to be completed at the start of the installation to ready the server
- Installation – A list of steps to complete the installation of CORTEX

As there are different options for the installation to suit the different needs of customer environments, some of the below checklists have “**EITHER** and **OR**” statements. The related checks will be grouped in these statements for clarity

Requirements

These requirements checklists will guide you through the requirements needed for a CORTEX Multiple Server with HA installation. If you are installing a Single Server without HA, please see this page –

<https://docs.wearecortex.com/docs/latest/getting-started/on-premise/install-innovation-only/multiple-server-with-ha/>

This document is intended to be run alongside your installation and can be checked off as requirements are met.

Hardware Requirements

The following checklist is based on our Hardware Requirements found here

[Hardware Requirements](#)

- ☐ Single Server without HA Architecture confirmed
- ☐ 1 Windows Server available for installation
- ☐ Hardware meets at least the minimum required specification

Software Requirements

The following checklist is based on our Software Requirements found here

[Software Requirements](#)

- ☐ Windows Server 2019/2022 is installed on all servers
- ☐ .Net Framework 4.7.2 or greater installed on all servers
- ☐ PowerShell 5.1 installed on all serversⁱ
- ☐ IIS Installed or available on the Web Application server
- ☐ Server is on a Windows-based domain and is **NOT** a domain controller
- ☐ Active Directory is Windows Server 2003 or later
- ☐ PTR or reverse lookup record is available in DNS for the server
- ☐ Either Chrome, Edge or Firefox web browser is available
- ☐ The following Windows services are enabled and running on the server
 - ☐ Performance Logs & Alerts
 - ☐ Remote Registry
 - ☐ Windows Event Log
- ☐ A domain user is available to perform the installation, and it is a member of the Local Administrators group on the server
- ☐ A domain user is available to run the CORTEX Gateway IIS application poolⁱ
 - ☐ This user has **Log on as a service** permission on the server
 - ☐ This user has **Log on as a batch job** permission on the server
- ☐ Antivirus Exclusions have been added as per documentation²
- ☐ Required ports are opened on the server³

¹ These permissions are granted during install, but may be overridden by Group Policy

² This is done as a part of the installation if using Windows Defender

³ These ports are opened as a part of the installation process if using Windows Defender

Certificate Requirements

The following checklist is based on our Certificate Requirements found here

[Certificate Requirements](#)

- ☐ A valid certificate is available for the installation

EITHER

- ☐ I am using CORTEX generated Self-Signed Certificate (Non-Production only)

OR

- ☐ I have a CA (Certificate Authority) X.509 certificate in a .PFX file with the full certificate chain (includes all root and intermediate certificates)
 - ☐ My certificate subject name is the FQDN (fully qualified domain name) of the server
 - ☐ The Subject Alternative Names (SANs) contains the FQDN, hostname and IP of the server
 - ☐ My certificate file includes the Private Key
 - ☐ My certificate Key Usage extension has a value of **Digital Signature, Key Encipherment (a0)**
 - ☐ My certificate Enhance Key Usage includes **Server Authentication** and **Client Authentication**
 - ☐ I know the password for the .PFX file

Pre-Installation

Prior to installing to CORTEX, it is required that some steps are taken to prepare the server for the installation.

Make Installation Artefacts Available

- ☐ Make Installation Artefacts available – [Steps here](#)
 - ☐ Cortex Innovation <VERSION> – App Server Install Scripts.zip
 - ☐ Cortex Innovation <VERSION> – App Services.zip
 - ☐ Cortex Innovation <VERSION> – Block Packages.zip
 - ☐ Cortex Innovation <VERSION> – Encryption Key Generator.zip
 - ☐ Cortex Innovation <VERSION> – Encryptor.zip
 - ☐ Cortex Innovation <VERSION> – Gateway.zip
 - ☐ Cortex Innovation <VERSION> – Licence Fingerprint Generator.zip
 - ☐ Cortex Innovation <VERSION> – Web App Server Install Scripts.zip
- ☐ App Server Install Scripts extracted
- ☐ Unblocked Pre-Installation Script
- ☐ Executed the Pre-Installation script

Obtain CORTEX Licence

- ☐ Machine ID and Fingerprint generated
- ☐ CORTEX Licence requested
- ☐ Obtained a CORTEX Licence and Feature Identifier

Generate Encryption Key

- ☐ Encryption Key Set
- ☐ Encryption Key Backed up

Installation

Install Application Server

The following checklist is based on installation instructions found here

[Install Application Server](#)

- ☐ .NET Framework 4.7.2 installed
- ☐ Recommended Security Measures Applied and Server Restarted
- ☐ Antivirus Exclusions Added
 - EITHER**
 - ☐ CORTEX script for Windows Defender used
 - OR**
 - ☐ Manually added to third-party antivirus
- ☐ Port Usage script run successfully
- ☐ Installation Script configured
 - ☐ AppServicesPath configured
 - ☐ BlockPackagesPath configured
 - ☐ ApiGatewayBasicAuthUsername provided
 - ☐ ApiGatewayBasicAuthPassword provided and encrypted
 - ☐ CustomerName provided
 - ☐ ApplicationServerIPv4Addresses configured
- ☐ Certificate Parameters configured
 - EITHER**
 - Using CA Certificates
 - ☐ ServerCertificatePath directs to certificate file (.pfx)
 - ☐ Encrypted password provided for ServerCertificatePassword
 - OR**
 - Using Self-Signed Certificate
 - ☐ UseSelfSignedCertificates parameter included
- ☐ SkipLoadBalancer parameter included
- ☐ Credential parameter left as default
- ☐ LDAP Connection Information configured
 - ☐ LDAP URL configured to point at domain
 - ☐ UseSSL set to true or false as needed
 - ☐ Encrypted Username and Password configured for dedicated query account
- ☐ AcceptEula parameter left as default
- ☐ Installation Script saved
- ☐ Installation script tested with -WhatIf switch
- ☐ Installation Script run successfully

☐ Code Analyser configured

EITHER

☐ Allowed List updated

OR

☐ Code Analyser disabled

☐ Service Fabric available with no errors reported

☐ Certificate installed into Current User certificate store

☐ Service Fabric Explorer opened via local browser

☐ No errors or warnings are reported

☐ Installation Files are archived for future use

Install Web Application Server

Pre-requisites

☐ Cortex Licence has been uploaded to the correct location

☐ Gateway Application Pool user is NOT an Administrator

☐ Folder permissions granted to Gateway Application Pool user

☐ System32

☐ SysWOW64

EITHER

☐ Certificate already imported with friendly name assigned

OR

☐ Certificate will be imported during installation

Install Gateway

☐ CORTEX Gateway Installation script configured

☐ GatewayPackagePath configured

☐ FeatureFlags has been configured with Feature Identifier as provided by CORTEX Service Portal

☐ ServiceFabricAPIGatewayEndpoint configured

☐ ServiceFabricUsingSelfSignedCertificates Parameter configured

EITHER

☐ If using CA Certificates

☐ ServiceFabricUsingSelfSignedCertificates set to False

OR

☐ If using Self Signed Certificates

☐ ServiceFabricUsingSelfSignedCertificates set to True

☐ ServiceFabricApiGatewayBasicAuthUsername provided and encrypted

☐ ServiceFabricApiGatewayBasicAuthPassword provided and encrypted

☐ DotNetFlowDebuggerEndpoint configured

☐ DotNetFlowDebuggerBasicAuthUsername provided and encrypted

☐ DotNetFlowDebuggerBasicAuthPassword provided and encrypted

☐ DotNetFlowDebuggerUsingSelfSignedCertificates set

EITHER

☐ If using CA Certificates

☐ DotNetFlowDebuggerUsingSelfSignedCertificates set to False

OR

☐ If using Self Signed Certificates

☐ DotNetFlowDebuggerUsingSelfSignedCertificates set to True

☐ GatewayApplicationPoolUsername specified

☐ WebRootFolder configured

☐ WebsitePort configured

☐ ImportCertificate configured

EITHER

☐ using already imported CA Certificate

☐ ImportCertificate set to false

OR

☐ using different CA Certificate

☐ ImportCertificate set to True

☐ Certificate Parameters configured

EITHER

☐ ImportCertificate is false

☐ CertificateFilePath left as default

☐ CertificateFriendlyName configured as per imported certificate

OR

☐ ImportCertificate is True

☐ CertificateFilePath configured to .PFX certificate file location

☐ CertificateFriendlyName is configured with required friendly name

☐ ConfigureSiteRedirect setIf site redirect is required

EITHER

☐ ConfigureSiteRedirect set to True

OR

☐ ConfigureSiteRedirect set to False

☐ Apply Security Measures set to True

☐ Using Windows Defender set to True if applicable

☐ All other parameters left as default

☐ Install script saved

☐ Install Script run successfully

☐ CORTEX Gateway opened in a local browser

☐ Additional Folder Permissions granted

☐ CORTEX Blocks Provider Host

☐ CORTEX Repo

☐ IIS Reset performed

☐ Installation folders archived for future use

Setup Gateway

- ☐ Default Administrator password changed
- ☐ LDAP Connection Set
 - ☐ LDAP Connection User is a dedicated service account
- ☐ LDAP Authorisation Set

Try it Out

The following checklist confirms that all the [Try it out](#) steps have been completed successfully

- ☐ Test Debugging Flows
 - ☐ Created a flow
 - ☐ Added and configured blocks
 - ☐ Flow executed and results displayed
 - ☐ Flow committed
- ☐ Test Publishing Production Flows
 - ☐ Packages page opened
 - ☐ New package created
 - ☐ Package published
- ☐ Test Executing Production Flows
 - ☐ Suitable HTTP client identified
 - ☐ REST call configured
 - ☐ REST call successfully run

ⁱ Shipped with Windows Server 2019/2022