

Deploying Applications

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Starting with V10.0, Cora SeQuence has been renamed to Cora Orchestration.

V10.x

You deploy Cora Orchestration applications using PowerShell.

NOTE

Cora Orchestration applications should be deployed by IT Administrators or DevOps engineers who are familiar with PowerShell.

All Cora Orchestration functions support common parameters. For more information about common parameters, see [this page](#).

Before you begin

Before you deploy the Cora Orchestration application, make sure that:

- ✔ The database is ready.
- ✔ The latest [PowerShell modules](#) are installed.
Click [here](#) to view a sample PowerShell script. Consider this sample for reference only, and do not copy paste from here.
- ✔ The required deployment package is accessible locally, over a network share, or web location.
- ✔ The server is setup with the following requirements:
 - The Windows Server is setup with Windows Server 2016 and later.
 - Required software:
 - Microsoft .NET Framework 4.8
 - SQL 2017 System CLR type
 - The required roles and features have been installed.
For the complete list of required roles and features, see [this article](#).

NOTE

It is recommended to install the roles and features and required software in advance. If these requirements have not been installed prior to the deployment, the deployment script attempts to silently install them.

Procedure

Deploying applications involves the following main steps:

1	Deploy the application
2	Configure bindings—required only the first time you deploy a site
3	Configure authentication for site applications
4	Validate deployment

IMPORTANT

During upgrade, all product application folders are deleted and redeployed:

- Web and App config files are overwritten in each release. You need to reapply your custom configuration settings after the upgrade.
- All custom files located in the application folders are also deleted. Custom files should be packaged as a custom application NuGet.

Deploy the application

1. On the target machine, open Windows PowerShell, and then run the following function: [Install-CoraSeQuenceApplication](#) with the SourcePath parameter pointing to the deployment package location.

Sample:

```
Install-CoraSeQuenceApplication -SourcePath "http://mycomputer.local/Administration.zip"
```

TIP

Use the Verbose parameter when running the PowerShell functions.

2. Repeat **step 1** for every application that you want to deploy.
3. To set the connection to the database for all the deployed applications, run the following function: [Add-CoraOrchestrationSecretEnvironmentVariables](#) with the following parameters: UseEnvironmentVariables, DatabaseConnectionString, and DatabaseProvider to connect to the database.

Sample:

```
Add-CoraSeQuenceSecretEnvironmentVariables -UseEnvironmentVariables -DatabaseConnectionString '<Connection String>' -DatabaseCredentials 'user id=<userDB>;password=<pswdDB>;' -DatabaseProvider 'Microsoft.Data.SqlClient' -Sha256Salt '<Base64Encoded String>' -RijndaelKey '<Base64Encoded String>' -RijndaelSalt '<Base64Encoded String>' -ActiveMQConnectionString '<activeMQ Connection string>' -ActiveMQCredentials 'user id=<user1>;password=<pswd1>;'
```

NOTE

For V10.0, you need to manually add in the system the secret stores environment variables to establish the database connection. For details, see [this article](#).

After the deployment process completes, the applications are located at these default locations:

- Services: `C:\Program Files\Genpact Digital\Cora SeQuence\[ServiceName]`
- Sites: `C:\inetpub\wwwroot\Cora SeQuence\[Site]`

TIP

Refer to the `.appinfo` file located under the application's folder for information on the deployed application. The `.appinfo` provides a list of all the modules included in the application and their versions.

IMPORTANT

After deploying an application, do not make manual changes to the config files.



Click [here](#) to see how to deploy Cora Orchestration in an environment with pre-built applications.

Configure site bindings

You need to change the default site bindings after you deploy a site for the first time.

Following are the default bindings:

Port	80
Protocol	HTTP
Host Name	<SiteName>.<Computer FQDN> Where SiteName can be CoraSeQuenceFlowtime or CoraSeQuenceAdministration.

TIP

To expedite the deployment process, create a deployment script that includes the required binding settings and other required functions.

Configure authentication for site applications

1. After you deploy a site application—Flowtime and Administration, run the following function:
[Set-CoraSeQuenceSiteAuthentication](#).

Sample:

```
Set-CoraSeQuenceSiteAuthentication -SiteType Administration -AuthenticationType Forms
```

IMPORTANT

You need to activate product licenses after you deploy the Administration site for the first time. For more details, see the *Activate your Cora SeQuence license* section of [this article](#).

Validate deployment

To verify that the deployment was successful, do one of the following:

- For site applications: Navigate to the site to verify that it runs properly.
- For service applications: Start the service to verify that it runs properly.

Next steps

After you deploy Cora Orchestration for the first time, you need to set up the Active Directory Synchronization Service and add the Windows service user to your organization's list of employees.

For details, see [this article](#).

In addition, you may need to perform any of the following procedures:

- [Changing the Service User Account](#)
- [Changing the Application Pool Account](#)
- [Setting HTTPS Site Bindings](#)

V9.2

You deploy Cora SeQuence applications using PowerShell.

NOTE

Cora SeQuence applications should be deployed by IT Administrators or DevOps engineers who are familiar with PowerShell.

All Cora SeQuence functions support common parameters.

For more information about common parameters, see [this page](#).

Before you begin

Before you deploy the Cora SeQuence application, make sure that:

- ✔ The database is ready.
- ✔ The latest [PowerShell modules](#) are installed.
Click [here](#) to view a sample PowerShell script. Consider this sample for reference only, and do not copy paste from here.
- ✔ The required [deployment package](#) is accessible locally, over a network share, or web location.
- ✔ The server is setup with the following requirements:
 - The Windows Server is setup with Windows Server 2016 and later.
 - Required software:
 - Microsoft .NET Framework 4.7.2 (*V9.5 and earlier*)
 - Microsoft .NET Framework 4.8 (*V9.6*)
 - SQL 2017 System CLR type
 - The required roles and features have been installed.
For the complete list of required roles and features see [this article](#).

NOTE

It is recommended to install the roles and features and required software in advance. If these requirements have not been installed prior to the deployment, the deployment script attempts to silently install them.

Procedure

Deploying applications involves the following main steps:

1	Deploy the application
2	Configure bindings—required only the first time you deploy a site
3	Configure authentication for site applications
4	Validate deployment

IMPORTANT

During upgrade, all product application folders are deleted and redeployed:

- Web and App config files are overwritten in each release. You need to reapply your custom configuration settings after the upgrade.
- All custom files located in the application folders are also deleted. Custom files should be packaged as a custom application NuGet.

Deploy the application

1. On the target machine, open Windows PowerShell, and then run the following function: [Install-CoraSeQuenceApplication](#) with the SourcePath parameter pointing to the deployment package location.

Sample:

```
Install-CoraSeQuenceApplication -SourcePath "http://mycomputer.local/Administration.zip"
```

TIP

Use the Verbose parameter when running the PowerShell functions.

2. Repeat **step 1** for every application that you want to deploy.
3. To set the connection to the database for all the deployed applications, run the following function: [Set-CoraSeQuenceConnectionString](#) with the following parameters: SQLServer, Database, and EncryptedCredentials, if you use SQL authentication to connect to the database.

Sample:

```
Set-CoraSeQuenceConnectionString -SQLServer "dev1234\CoraSeQuence" -Database "CoraSeQuenceDB" -  
EncryptedCredentials "08090808808008808"
```

After the deployment process completes, the applications are located at these default locations:

- Services: `C:\Program Files\Genpact Digital\Cora SeQuence\[ServiceName]`
- Sites: `C:\inetpub\wwwroot\Cora SeQuence\[Site]`

TIP

Refer to the `.appinfo` file located under the application's folder for information on the deployed application. The `.appinfo` provides a list of all the modules included in the application and their versions.

IMPORTANT

After deploying an application, do not make manual changes to the config files.



Click [here](#) to see how to deploy Cora SeQuence in an environment with pre-built applications.

Configure site bindings

You need to change the default site bindings after you deploy a site for the first time.

Following are the default bindings:

Port	80
Protocol	HTTP
Host Name	<SiteName>.<Computer FQDN> Where SiteName can be CoraSeQuenceFlowtime or CoraSeQuenceAdministration.

TIP

To expedite the deployment process, create a deployment script that includes the required binding settings and other required functions.

Configure authentication for site applications

1. After you deploy a site application—Flowtime and Administration, run the following function: [Set-CoraSeQuenceSiteAuthentication](#).

Sample:

```
Set-CoraSeQuenceSiteAuthentication -SiteType Administration -AuthenticationType Forms
```

IMPORTANT

You need to activate product licenses after you deploy the Administration site for the first time. For more details, see the *Activate your Cora SeQuence license* section of [this article](#).

Validate deployment

1. To verify that the deployment was successful, do one of the following:

- For site applications: Navigate to the site to verify that it runs properly.
- For service applications: Start the service to verify that it runs properly.

Next steps

After you deploy Cora SeSequence V9.0 for the first time, you need to set up the Active Directory Synchronization Service and add the Windows service user to your organization's list of employees.

For details, see [this article](#).

In addition, you may need to perform any of the following procedures:

- [Changing the Service User Account](#)
- [Changing the Application Pool Account](#)
- [Setting HTTPS Site Bindings](#)

V9.0-V9.1

You deploy Cora SeSequence applications using PowerShell.

NOTE

Cora SeSequence applications should be deployed by IT Administrators or DevOps engineers who are familiar with PowerShell.

All Cora SeSequence functions support common parameters.

For more information about common parameters, see [this page](#).

Before you begin

Before you deploy the Cora SeSequence application, make sure that:

- ✔ The database is ready.
- ✔ The required deployment package is accessible locally, over a network share, or web location.
- ✔ The server is setup with the following requirements:
 - The Windows Server is setup with Windows Server 2016 and later.
 - Required software:
 - .NET Framework Runtime 4.7.2
 - SQL 2017 System CLR type
 - The required roles and features have been installed.
For the complete list of required roles and features see [this article](#).

NOTE

It is recommended to install the roles and features and required software in advance. If these requirements have not been installed prior to the deployment, the deployment script attempts to silently install them.

Procedure

Deploying applications involves the following main steps:

1	Installing PowerShell modules
2	Deploying the application
3	Configuring bindings—required only the first time you deploy a site
4	Configure authentication for site applications
5	Validate deployment

IMPORTANT

During upgrade, all product application folders are deleted and redeployed:

- Web and App config files are overwritten in each release. You need to reapply your custom configuration settings after the upgrade.
- All custom files located in the application folders are also deleted. Custom files should be packaged as a custom application NuGet.

Install PowerShell modules on the target server

You install the PowerShell modules on the target server in this location: `c:\Program`

`Files\WindowsPowerShell\Modules` . Perform this procedure once per target server. You can install the modules using NuGets CLI or PowerShell.

Click [here](#) to download a sample PowerShell script.

Deploy the application

1. On the target machine, open Windows PowerShell, and then run the following function: `Install-CoraSeQuenceApplication` with the `SourcePath` parameter pointing to the deployment package location.

Sample:

```
Install-CoraSeQuenceApplication -SourcePath "http://mycomputer.local/Administration.zip"
```

TIP

Use the `Verbose` parameter when running the PowerShell functions.

2. Repeat **step 1** for every application that you want to deploy.
3. To set the connection to the database for all the deployed applications, run the following function: `Set-CoraSeQuenceConnectionString` with the following parameters: `SqlServer`, `Database`, and `EncryptedCredentials`, if you use SQL authentication to connect to the database.

Sample:

```
Set-CoraSeQuenceConnectionString -SQLServer "dev1234\CoraSeQuence" -Database "CoraSeQuenceDB" -  
EncryptedCredentials "08090808808008808"
```

After the deployment process completes, the applications are located at these default locations:

- Services: `C:\Program Files\Genpact Digital\Cora SeQuence\[ServiceName]`
- Sites: `C:\inetpub\wwwroot\Cora SeQuence\[Site]`

TIP

Refer to the `.appinfo` file located under the application's folder for information on the deployed application. The `.appinfo` provides a list of all the modules included in the application and their versions.

IMPORTANT

After deploying an application, do not make manual changes to the config files.

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To expedite the deployment process, create a deployment script that includes the required binding settings and other required functions.

Configure authentication for site applications

1. After you deploy a site application—Flowtime and Administration, run the following function:
[Set-CoraSeQuenceSiteAuthentication](#).

Sample:

```
Set-CoraSeQuenceSiteAuthentication -SiteType Administration -AuthenticationType Forms
```

IMPORTANT

You need to activate product licenses after you deploy the Administration site for the first time.

For more details, see the *Activate your Cora SeQuence license* section of [this article](#).

Validate deployment

1. To verify that the deployment was successful, do one of the following:
 - For site applications: Navigate to the site to verify that it runs properly.
 - For service applications: Start the service to verify that it runs properly.

Next steps

After you deploy Cora SeQuence V9.0 for the first time, you need to set up the Active Directory Synchronization Service and add the Windows service user to your organization's list of employees.

For details, see [this article](#).

In addition, you may need to perform any of the following procedures:

- [Changing the Service User Account](#)
- [Changing the Application Pool Account](#)
- [Setting HTTPS Site Bindings](#)