Installation and Deployment Overview

V10.x

Overview

Cora Orchestration architecture includes several independent modules. The following modules are the building blocks of Cora Orchestration applications:

- Administration
- Cora Orchestration Portal
- Background Runtime Service (BRS)
- Job Execution Service (JES)
- Active Directory Synchronization Service (ADSS)
- WebAPI

Every site and service can be installed and deployed separately.

You create a Cora Orchestration deployment package that can be immediately deployed. You can add your own code to the project to create customized applications.

The modular structure provides programming flexibility, and enables faster response and faster development.

> **IMPORTANT**
> While **upgrading Cora Orchestration,** make sure that **the database version is compatible with the target application version,** for successful upgrade.
> For details, check the compatibility matrix in this article.

Deployment process

You install and deploy Cora Orchestration using PowerShell functions.
All PowerShell functions and other required components are hosted in cloud repositories.

Repository name and link	Contents
CoraSeQuencePowerShell	PowerShell modules and functions required to install and deploy Cora Orchestration applications.
CoraSeQuenceModules	A collection of NuGet packages that deliver Cora Orchestration functionality. The NuGet packages are required to build customized applications.
CoraSeQuenceFiles	- Database packages - Pre-built applications (Premium packages) - VSIX (Visual Studio extension) that installs Cora Orchestration project templates

Portal customization
You need to download a template to apply portal customization and deploy the customized portal application.

For details, see this article and this article.

There are two deployment options:

- Pre-built applications: This path is relevant for systems that do not require any customization or special code.
- Customized applications: Build and deploy your own Cora Orchestration applications. This path is relevant for systems that require code customization, or use custom applications. It includes a different download package and two additional steps before you deploy the applications.

The deployment step is similar for both installation paths and is performed using PowerShell functions.

The custom installation process includes additional steps, such as setting up a "build machine" that includes Visual Studio and project templates and NuGet packages. This is the computer where you build the Cora Orchestration applications. The "build machine" also includes the required PowerShell modules.

You can build Cora Orchestration applications using Visual Studio Build Tools or VSTS Build Agent.

You can install and deploy Cora Orchestration using CI/CD automation tools, or by manually moving the files to the target computers and running the PowerShell scripts.

Getting started

To get started with Cora Orchestration installation and deployment procedures, see the following articles:

	Installation step	Article
1	Setting up the database	Deploying Cora SeQuence Database
2	Building applications	If you are deploying pre-built applications, see this article. If you need to build customized applications, see this article.

	Installation step	Article
3	Deploying applications	Deploying applications

To become familiar with the product terminology, see this article.