Cora OpsManager Deployment Procedure

Last Modified on 08/18/2020 6:06 am EDT

V3.3

xxxxx

V3.2

Prerequisite

1. Make sure you have a Nexus user. In case you do not have it, contact support@pnmsoft.co.il.
2. Prepare clean server(s) for your applications.

For prerequisites, see this article.

We recommend reading other related articles for Cora SeQuence V9.x.

1. Prepare a clean V9.3.1.1 database (DB). For instructions, see this article.

Use the following parameters:

- DatabasePackagePath
  https://repo.corasequence.digital/repository/CoraSeQuenceFiles/Database/PNMsoft.Sequence.SqlDatabase_9.3.1.1.dacpac
- InstallType NewDatabase
- HotOperations

1. Use the Cora SeQuence toolkit to create an encrypted value for the DB.
2. For offline deployment, download the Offline Deployment package from Nexus repository.

Install Procedure

Application installation

If you use only Cora OpsManager, and don't have any custom Cora SeQuence pages, follow the below steps on all the servers:

1. Install Cora SeQuence Module PowerShell:
   - As an Administrator, open PowerShell ISE.
   - Open "InstallSeQuenceModules.txt" (located in Applications folder), and copy and paste script to the PowerShell window.
   - Run the script.
2. Install Cora OpsManager Module PowerShell:
   - Open "InstallOpsManagerModules.txt" (located in Applications folder), and copy the script.
   - In the PowerShell window, click **New**, and paste the script.
   - Run the script.
3. Install Cora OpsManager Applications:
   - Open "InstallOpsManager.txt" (located in the Applications folder), and edit the script per your need. Edit the following parameters:
     - Back end/Front end/Services: delete all from the script except the server type that you are now installing.
       - Back end: Administration
       - Front end: Flowtime and WebAPI
       - Services: JES, BRS, ADDS
   - ExternalResourcesPath: Paste the path of your external resources folder.
   - Database: The DB name.
   - SQLServer: The server on which DB is located.
   - EncryptedCredential:
     - Pass empty value to set a connection with SSPI.
     - Pass the encrypted credentials. (Instructions are provided in the prerequisites).
   - OfflineDeploy: If this flag is enabled then a prompt will ask the location of the Offline Deployment Package folder.
   - **If you are Azure Client and have Single instance DB** you should also pass the parameters, SingleInstanceDB and ServiceBusConnectionString "connection-string".
     - In the PowerShell Window, click New and paste the edited script.
     - Run the script.

Note: You may have to restart the server and run again. Look for this message:

```
restart required- please restart the server and then run again
```

1. Set Authentication Types for the sites:
    - Open "Set AutenticationTypes.txt" (located in the Applications folder), and copy the script.
    - In the PowerShell window, click New and paste the script.
    - You can leave the authentication as "Window" or change it to "Forms" or "Claims".

Note: For clean DB, we recommend using Forms for Administration at the beginning, so you will be able to login to the Admin site, configure the AD LDAP query, and do other configurations. After all users are sync you can change to Windows or Claims.

1. Create Bindings for the sites (Administration, Flowtime, WebAPI):

Note: If you are Cora SeQuence Azure cloud client, ask the support team to do this for you. Ask them to configure your SSO Login as well.

- Open IIS.
- Select one of the sites, and click Bindings...
- Select the URL name, and click **Edit**.
- Change the port and the Hostname as required.
- Repeat for all sites.

1. Activate your license:
    - Follow the instructions on the KB, Activate your Sequence license.

Note: If you use custom Cora SeQuence applications, and you want to add Cora OpsManager product after you create all Cora SeQuence apps (Admin, Flowtime, BRS, JES, ADSS, WebAPI) you should:

- Add Cora OpsManager feed as NuGet package source in your Cora SeQuence projects.
    - Feed: https://repo.corasequence.digital/repository/OpsManagerPackages/
- Install the appropriate NuGet package on the following SeQuence projects.
    - Flowtime
    - Administration
    - WebAPI
    - JES
    - BRS

Manual preparations

1. Log in to the Cora SeQuence Administration as an Admin user.
2. Click **Edit Organization** under Manage Organization tile.
3. Right-click the Entire Organization.
    a. Create "Ops Center", "Helpdesk", and "Cora Ops Manager Lite Users" groups under Entire Organization.
    b. Create "Power Users" group under Ops Center.

1. Expand **Administration** > **Organization Settings**
    a. Right-click Calendars, select Manage Permissions.
    b. Click Add Permission, and add "Power User" group with "Read & Write" permission.
    c. Right-click Employee Roles, and select Manage Permissions.
    d. Click Add Permission, and add "Power User" group with "Read & Write" permission.
2. Right-click **Solutions**, and select Import solution.
    - Import the "**Ops Manager -3.2.zip**" from Solutions folder.

3. Click **Employees.**
    a. Edit the Administration user you used while installing the application, and add password.
    b. Click **Add Employee**, and add the user that runs the JES services.
    Usually, the domain is 'NT Authority', and the username is 'System'.

Import workflows

- Add Connection String to SeQuence Administration:
- Go to Cora SeQuence Administration > Global Settings > Connection String.
- Click **Add New Record**, and add the details:
- Name: CoraOpsAnalytics
- Provider: System.Data.SqlClient
- Connection String in this structure:

SSPI:

Data Source=;Initial Catalog=; Integrated Security=SSPI

Username & Password:

Data Source=;Initial Catalog=;User ID=**userName>;Password=UserName password>;**

Note: This Connection String will be used to invoke queries. We highly recommend to use high-availability, and create Read-only DB for running queries.

Azure users need to upgrade their DB to Business premium to use this feature.

- **Add Credentials for File Writer Activity:**

Note: You can skip this step and perform it later.

1. **Go to SeQuence Administration à Global Settings à Credentials.**
2. **Add credentials for user name and password. (Select username if you are using windows authentication or OAuth2 client credentials if you use claims authentication):**
3. **Name: Cora OpsManager Store**
4. **User Name: domain\username (this user should be in tblemployees)**
5. **Password: the user password**
6. **Confirm Password: same password**

For OAuth2 client credentials use the same name and contact the support for configuration assistance.

- **Install the workflows:**
- **For offline deployment, download the Offline Deployment package from Nexus repository.**
- **Log in to the Back-end server (make sure the logged in user is a global admin in tblemployees)**
- **Open "InstallOpsManagerWFs.txt" (located in the Workflows folder), and edit the script per your need. Edit the following parameters:**
    - **Database: DB name**
    - **SQLServer: The server where DB is located.**
    - **EncryptedCredential:**
        - **Pass empty value to set a connection with SSPI.**
        - **Pass the encrypted credentials. (Instruction were provided in the prerequisites).**
- **OfflineDeploy: If this flag is enabled then a prompt will ask the location of the Offline Deployment Package folder.**
- **If you are Azure Client and have Single instance DB you should also pass the parameter, SingleInstanceDB and ServiceBusConnectionString "connectionstring".**

1. **On one of the servers, open PowerShell ISE as an Administrator, or click New if you have an Open PowerShell window.**
2. **Paste the edited script.**
3. **Run the script.**
4. **After the script is run successfully, perform iisreset in all servers.**

Note: If you have "Timeout" error during the workflows deployment, you need to increase the machine timeout by doing the following:

- **Locate the machine.config: open powershell ISE as administrator, and run [System.Runtime.InteropServices.RuntimeEnvironment]::SystemConfigurationFile.**
- **Go to the location and edit with notepad++ the machine.config.**
- **Below paste this:**

```
```

- **Start all Services:**
  In each server, start the following services:
  - **ADSS**
  - **BRS**
  - **JES**

- **Import manually the ICM File Listener workflow:**
  1. **Log in to Cora SeQuence Administration.**
  2. **Download ICM File Listener-3.2.zip workflow from the workflows folder.**
  3. **Right-click All workflows.**
  4. **Select Import Workflow.**
  5. **Select ICM File Listener-3.2.zip, and click Restore.**
  6. **Clear "System Tables", "user data model", and "external data models" check boxes.**
  7. **Click Next.**
  8. **Select "Ignore extension", and click Next.**
  9. **Choose your target host.**
  10. **Click Import.**

- **Only for Cora SeQuence Azure Cloud Users:**
  Import manually ICM Wake Up Service workflow:
- **Download ICM Wake Up Service-3.2.zip workflow from the workflows folder.**
- **Right-click All workflows.**
- **Select Import Workflow.**
- **Select ICM Wake Service-3.2.zip, and click Restore.**
- **Clear "System Tables" > tblcredentials.**
- **Clear Databaseobjects > Table (tblinstanceworkflowsclosed).**
- **Click Next.**
- **Click Import.**

Install Dashboards

1. **In Cora SeQuence Administration, go to Administration > Analytics > Dashboard Suite.**
2. **Click Import Dashboard Suite.**
   1. **Import all the packages from 'Dashboards' folder (Clear system tables à tbl credentials).**
3. **Give permissions to the following dashboards:**
   1. **OpsManagerDashboard_Measurements**
      - **Click the edit icon.**
      - **Click Set Permissions.**
      - **Click Edit on the Read Permission row.**
      - **Search and click Ops Center.**
      - **Select "HotOperationsManager" in the Role in group combo box.**
      - **Select Include Children check box.**
      - **Click OK.**
      - **Click Close.**
4. **OpsManagerDashboard_Trends**

Follow same steps i to viii as in step 3 a.

1. **TeamLeaderDashboard_Measurements**
    - **Click on the edit icon.**
    - **Click Set Permissions.**
    - **Click Edit on the Read Permission row.**
    - **Search and click Ops Center.**
    - **Select "Team Leader" in the Role in group combo box.**
    - **Select Include Children check box.**
    - **Click OK.**
    - **Click Close.**
2. **TeamLeaderDashboard_Trends**

Follow same steps i to viii as in step 3 c.

Modifications on Cora SeQuence Administration site

1. **Go to Cora SeQuecne Administration > Global Settings > Applications Variables, edit the following Applications Variables:**
    1. **OPM.APISite.BaseURL: insert the Flowtime site URL+/WebAPI (for example: webapi)**
    2. **OPM.AdminSite.BaseURL: insert the Admin site URL (for example:)**
    3. **OPM.FlowtimeSite.BaseURL: insert the Flowtime site URL (for example:)**
2. **Go to Cora SeQuence Administration site, and create the following Jobs.**
    1. **Administration > Global Settings> Jobs Management.**
    2. **Add the jobs in the list below.**
    3. **Configure the jobs below with the following:**
        - **Set Job supports redundancy check box.**
        - **Set 'If a job is currently running…' check box.**

Job Type	Job Name	Workflow Name	Interval
Start Workflow	Close Case	ICM Wake Up Service	Every 15 Minutes
Start Workflow	Status Label Update	ICM Case Status Update	Every day at 04:00
Start Workflow	Aggregate Personal Reminders	ICM Aggregate Personal Reminders	Every 15 Minutes
Start Workflow	Send Personal Notification	ICM Send Personal Notifications Manager	Every 10 Minutes
Start Workflow	Time Before Target Date Alert	ICM Automatic Alerts Target Date Aggregation	Every 10 Minutes
Start Workflow	Status Duration Aggregation	ICM Automatic Alerts Status Duration Aggregation	Every 10 Minutes
Start Workflow	Process automatic alerts for sending	ICM Process Automatic Alerts for Sending	Every 10 Minutes
Start Workflow	Calculate Automatic Alerts Recipients	ICM Calculate Automatic Alerts Recipients	Every 10 Minutes
Start Workflow	Move sent personal notifications to closed table	ICM Move Personal Notifications To Closed	Every day at 04:00

Job Type	Job Name	Workflow Name	Interval
Start Workflow	Send Daily Summary	ICM Send Email Summary Manager	Every day at 21:00
Start Workflow	Close Read notifications	ICM Close Read Notifications	Every day at 04:00
Start Workflow	Clear Hash Records	ICM Clear Email Message Identity Records	Every 1 Hour

1. **Go to Organization Settings > Employee Roles.**
    1. **Click Add New Record, and add the details.**
        - **Name: SME**
        - **Alias: SME**
2. **Click Add.**
3. **Run one instance of Ops Center Admin.**
    1. **Go to Edit Organization à add the user (you are installing with) to the power user group.**
    2. **Go to All Workflows and open the ICM CoraOps Core workflow.**
    3. **Click Process lab, and start a new instance of Ops Center Admin.**

New recommended Cora SeQuence feature

Case search feature

Cora SeQuence introduces Search feature in V9.3

To enable this feature, refer to the KB article, https://knowledgecenter.gcora.genpact.com/help/configuring-elasticsearch-service.

We have created an example for index in the Case Search folder within the deployment folder. You may change the last table that is an example to the Client properties table, with your client properties table.

File storage in external location feature

The file storage feature allows you to save attachments in any external location, not on the DB. This is extremely recommended as it will free up space in your DB. To implement this feature, refer to the article on KB, http://knowledgecenter.gcora.genpact.com/help/set-up-external-storage-location-for-attachment-files.