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Ellucian CRM Recruit
New Instance Installation and Integration

Release 4.9
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Notices

Contents

About Recruit installation and integration

This document includes information about installing and configuring Ellucian® CRM Recruit software and integration components on premises at your institution.

Who should read this content

Anyone responsible for the installation and initial configuration of Recruit should read this content. Typically, the procedures would be performed by a system administrator.

Additional information is provided for integration with Banner by Ellucian, Colleague by Ellucian, or PowerCampus By Ellucian that will need to be shared with users in your institution's business offices.

What this content covers

This document includes the following information.

- Installing the Microsoft Dynamics CRM software that is required for use with Recruit.
- Installing and configuring the supporting software that is required for use with Recruit.
- Installing and configuring the Recruit Enterprise Resource Planning (ERP) integration components if you are using Banner, Colleague, or PowerCampus.
- Installing the Recruit software components.
- Performing required post-installation tasks.
- Performing optional Recruit diagnostics.

Note: After you have completed the tasks in this document, you must access the Recruit Help within Microsoft Dynamics CRM. The Recruit Help contains post-installation tasks to perform in Recruit and information about how to initially load data into, configure, and use Recruit.

Microsoft Dynamics CRM documentation

Microsoft® provides detailed documentation to help you plan, deploy, and maintain your Microsoft Dynamics CRM 2016 implementation.

Download Microsoft Dynamics CRM documentation

The Planning, Deploying, and Maintaining Guide for Dynamics 365 contains comprehensive information about how to plan for, install, configure, customize, and maintain Microsoft Dynamics CRM 2016.

Note: The Microsoft Dynamics 365 documentation has replaced the Microsoft Dynamics CRM 2016 documentation.

Planning, Deploying, and Maintaining Guide for Dynamics 365 guide includes detailed instructions about hardware and software requirements, installation steps for each component, and configuration details within Microsoft Dynamics CRM 2016. You can download the *Planning, Deploying, and Maintaining Guide for Dynamics 365* guide from the following location: https://www.microsoft.com/en-us/download/details.aspx?id=50039.

Administration Guide for Dynamics 365 guide is also available and can be used to help manage and configure features of CRM deployments.

Note: This manual includes basic steps for retrieving and installing the Microsoft software that is required before you can install Recruit. For comprehensive requirements and configuration details, refer to the *Planning, Deploying, and Maintaining Guide for Dynamics 365* guide.

Plan your deployment

Review the following sections to plan your Microsoft Dynamics CRM and Recruit implementation.

Plan your Microsoft Dynamics CRM security and server deployment

Microsoft provides key security considerations and supported server configurations that you will need to review when planning your Microsoft Dynamics CRM 2016 implementation.

For more information, we recommend that you review the following sections of the *Planning, Deploying, and Maintaining Guide for Dynamics 365* guide that you downloaded in Download Microsoft Dynamics CRM documentation on page 6.

- Security considerations for Microsoft Dynamics CRM 2016
- Security best practices for Microsoft Dynamics CRM
- Administration best practices for on-premises deployments of Microsoft Dynamics CRM
- Network ports for Microsoft Dynamics CRM
- Microsoft Dynamics CRM multiple-server deployment
- Microsoft Dynamics CRM 2016 server roles

Recruit software requirements

The following software is required to support Recruit.

Microsoft provides a list of the compatible software for Microsoft Dynamics CRM 2016. See https://support.microsoft.com/en-us/kb/3124955 for more information. Unless otherwise noted, any version of the software listed is supported by Recruit.

The software requirements are listed by server, not by order of installation. To speed up installation time, the Microsoft Dynamics CRM 2016 server setup and ERP system setup can be performed in parallel.

Microsoft Dynamics CRM 2016 database server

- Microsoft Windows Server
- .NET Framework 4.6.1
- Microsoft SQL Server
- SQL Server Reporting Services
- Microsoft Dynamics CRM 2016 Service Pack 1 Reporting Extensions

Microsoft Dynamics CRM 2016 asynchronous server

- Microsoft Windows Server
- .NET Framework 4.6.1 including Windows Identity Foundation components
- Back End Server role for Microsoft Dynamics CRM 2016 Service Pack 1

Microsoft Dynamics CRM 2016 application server

- Microsoft Windows Server
- .NET Framework 4.6.1 including Windows Identity Foundation components
- Front End Server and Deployment Administration Server roles for Microsoft Dynamics CRM 2016 Service Pack 1
- Microsoft Dynamics CRM 2016 Service Pack 1 Email Router (optional)
- Internet Information Services (IIS)
- Recruit 4.9 CRM components

Recruit 4.9 external website server

- Microsoft Windows Server
- .NET Framework 4.6.1 including Windows Identity Foundation components
- Internet Information Services (IIS)
- Recruit 4.9 external website components
- Ellucian Payment Gateway 1.5 or 1.6 for Recruit payments only

Browser support

Microsoft provides a current list of the browsers that are supported by Microsoft Dynamics CRM 2016. See https://support.microsoft.com/en-us/kb/3124955 for more information.

Banner. Servers vary.

Note: Recruit integrates with Banner, Colleague, or PowerCampus.

Banner Recruit Integration Manager 2.1, 2.1.1, 2.1.2, 2.2, 2.2.1, 2.2.2, or 2.2.3

Note: Banner Recruit Integration Manager 2.1, 2.1.1, 2.1.2, 2.2, 2.2.1, 2.2.2, or 2.2.3 are required for BDM or XCAS integration. BDM is not supported for institutions using Banner Multi-Entity Processing (MEP). Banner Recruit Integration Manager 2.1.1, 2.2.1, 2.2.2 or 2.2.3 is required for multiple organization support.

Note: For more information about the hardware and software requirements and the supported Banner integration components, see the *Integrate Recruit with Banner* manual for the version of Banner Recruit Integration Manager you plan to implement.

Colleague. Servers vary.

Note: Recruit integrates with Banner, Colleague, or PowerCampus.

- Colleague Release 18
- Colleague software updates
- Colleague Web API 1.13, 1.14, 1.14.1, 1.15, or 1.16

PowerCampus. Servers vary.

Note: Recruit integrates with Banner, Colleague, or PowerCampus.

PowerCampus 8.7.1 or higher

Installation checklist

Ellucian recommends that you perform the installation tasks in the order listed in the following table.

Task	Location	Details
Install the Microsoft software		
Install Microsoft Windows Server	CRM asynchronous server, CRM database, and CRM application server	See the Microsoft Dynamics CRM documentation for more information. See https://support.microsoft.com/en-us/kb/3124955 for supported Microsoft Windows Server versions.
Enable .NET Framework 4.6.1	CRM asynchronous server, CRM database, and CRM application server	
Enable Windows Identity Foundation	CRM application server	
Set up Active Directory users	CRM database server	See the Microsoft Dynamics CRM documentation for more information.
Install Microsoft SQL Server	CRM database server	See the Microsoft Dynamics CRM documentation for more information. See https://support.microsoft.com/en-us/kb/3124955 for supported Microsoft SQL Server versions.
Deploy SQL Server Reporting Services	CRM database server	See the Microsoft Dynamics CRM documentation for more information.
Configure security on the SQL server	CRM database server	All CRM data, Recruit data, and private user information is stored inside of a SQL database and should be protected due to its sensitive nature.

Task	Location	Details
		See Configure security on the SQL server on page 17 for more information.
Determine whether to use an Organizational Unit for the CRM security groups in Active Directory	CRM asynchronous server	You can create an Organizational Unit in your Active Directory infrastructure to maintain CRM security groups instead of placing them in the root directory of the Active Directory structure. See Organizational Unit for Active Directory CRM security groups on page 17 for more information.
Install Microsoft Dynamics CRM 2016	CRM asynchronous server and CRM application server	Recruit 4.9 requires Microsoft Dynamics CRM 2016. See Install Microsoft Dynamics CRM 2016 on page 18 for more information.
Install Microsoft Dynamics CRM 2016 Reporting Extensions	CRM database server	The Reporting Extensions are data processing extensions that are required for communications between Microsoft Dynamics CRM and SQL Server Reporting Services. See Install the Microsoft Dynamics CRM 2016 Reporting Extensions on page 19 for more information.
Install the Microsoft Dynamics CRM 2016 Email Router	CRM application server	The Email Router is an optional installation that facilitates communication between Microsoft Dynamics CRM and your email system.

Task	Location	Details
		See Install the Microsoft Dynamics CRM 2016 Email Router (optional) on page 20 for more information.
Install Service Pack 1 for Microsoft Dynamics CRM 2016	CRM database server, CRM asynchronous server, and CRM application server	See Install Service Pack 1 for Microsoft Dynamics CRM 2016 on page 21 for more information.
Create a Microsoft Dynamics CRM organization	CRM application server	You must create an organization in Microsoft Dynamics CRM before you can install Recruit 4.9. See Create a Microsoft Dynamics CRM organization on page 21 for more information.
Install and configure ERP integration components		
Install and configure the Banner integration	Banner servers	For Banner institutions only. See Install and configure the Banner integration components on page 22 for more information. For additional information, see the following learning paths in the Ellucian On Demand Subscription Library (ODSL). • Managing the ERP Provisioning Process • Integrating CRM Recruit with the ERP
Install and configure Colleague integration	Colleague servers	For Colleague institutions only. See Install and configure the Colleague integration components on page 23 for more information.

Task	Location	Details
		For additional information, see the following learning paths in the Ellucian On Demand Subscription Library (ODSL). • Managing the ERP Provisioning Process • Integrating CRM Recruit with the ERP
Install and configure PowerCampus	PowerCampus servers	For PowerCampus institutions only. See Install and configure the PowerCampus integration components on page 27 for more information. For additional information, see the "Managing the ERP Provisioning Process" learning path in the Ellucian On Demand Subscription Library (ODSL).
Install the Recruit software		
Locate the CRM connection details	CRM application server	Before you can install Recruit, you must locate your Microsoft Dynamics CRM connection settings. This information will be required during the Recruit installation. See Locate CRM connection details on page 28 for more information.
Locate the CRM administrator details	CRM application server	Before you can install Recruit, you must locate your Microsoft Dynamics CRM account domain and username. This information will be required during the Recruit installation. See Locate CRM administrator details on page 28 for more information.

Task	Location	Details
Perform pre-installation tasks	CRM application server	See Recruit pre-installation verification on page 29 for more information.
Start the required Windows service	CRM application server	See Start the required Windows service on page 29 for more information.
Deploy Recruit assemblies to the GAC	CRM application server	See Deploy Recruit assemblies to the GAC on page 30 for more information.
Install the Recruit CRM components	CRM application server	See Install the Recruit CRM components on page 32 for more information.
Install the Recruit external website	Recruit external website server	You must install the Recruit external website to allow prospective students to create accounts, register for events, and submit applications. See Install the Recruit external website on page 36 for more information.
Update the external website timezone	Recruit external website server	See Update the external website timezone on page 39 for more information
Prevent cross frame scripting on the external website	Recruit external website server	See Prevent cross frame scripting on page 39 for more information.
Encrypt credentials in the web.config	Recruit external website server	See Encrypting credentials in the web configuration file on page 40 for more information.
Install the Recruit ERP response services	CRM application server	You must install the Recruit ERP services to integrate Recruit with you ERP system. See Install the Recruit ERP response services on page 40 for more information.
Install the ECommerce website	CRM application server	You must install the Ellucian Payment Gateway 1.5 or 1.6 to be able to collect

Task	Location	Details
		application fees through your Recruit external website. See Set up the ECommerce website on page 44 for more information.
Install the Ellucian Messaging Service	CRM application server	See Install the Ellucian Messaging Service on page 47 for more information.
Install the Recruit task service	CRM application server	See Install the Recruit task service on page 47 for more information.
Complete the text messaging configuration in Recruit	CRM application server	See Install Recruit text messaging components for more information.
Complete the Ellucian Analytics Ethos integration configuration in Recruit	CRM application server	See Install Ellucian Analytics Ethos integration components for more information.
Complete the communication plans configuration in Recruit	CRM application server	See Complete the communication plans configuration in Recruit on page 58 for more information.
Perform post-installation tasks on the servers		
Change Internet Information Services (IIS) settings to improve performance	Recruit external website server	It is recommended that you change certain settings in IIS to improve Recruit performance. See Change Internet Information Services (IIS) settings to improve performance on page 59 for more information.
Set up URL redirects in IIS	Recruit external website server	See Set up URL redirects for the external website on page 60 for more information.
Perform optional Recruit diagnostics		

Task	Location	Details
Verify the CRM installation	CRM application server	See Verify the CRM installation on page 61 for more information.
Verify the integration settings	CRM application server	See Verify the integration settings on page 61 for more information.
Configure and use the Recruit software	CRM application server	See Configure and use the Recruit software on page 63 for more information.

Install the Microsoft software

This section contains steps for installation the Microsoft software that is required before you can install Recruit.

Microsoft software prerequisites

Before performing the tasks in this section, you must have installed the following software on each server.

- Database server. The database server must be running Microsoft Windows Server, .NET Framework 4.6.1, Microsoft SQL Server, and SQL Server Reporting Services.

- CRM application server. The CRM application server must be running Microsoft Windows Server, .NET Framework 4.6.1, and Windows Identity Foundation.

For additional details and recommended order of installation components, see the

Configure security on the SQL server

All CRM data, Recruit data, and private user information is stored inside of a SQL database and should be protected due to its sensitive nature.

Note: We recommend that you allow access to the CRM databases to only required CRM services and any other network service for your specific environment, such as a database backup service account. Exclude any other direct access.

- Microsoft SQL Server Security and Protection (Database Engine): https://technet.microsoft.com/en-us/library/bb510589%28v=sql.110%29.aspx

- Microsoft SQL Server Best Practices Analyzer: https://technet.microsoft.com/en-us/library/dn283329.aspx

Organizational Unit for Active Directory CRM security groups

You can optionally create an Organizational Unit (OU) for the CRM security groups in Active Directory.

Active Directory must be installed and configured before installing SQL Server and Microsoft Dynamics CRM 2016. During the Microsoft Dynamics CRM 2016 installation, security groups are created and updated in your Active Directory infrastructure. You can choose to create an OU in your Active Directory infrastructure to maintain these CRM security groups rather than placing them in the root directory of the Active Directory structure.

Microsoft Dynamics CRM security groups

The following table lists the security groups created by CRM. These security groups are automatically maintained by the CRM application. You should not modify them unless you are required to for a process.

Security Group	Description
PrivReportingGroup	The Privileged CRM reporting group is for reporting functions. This group is created during the Microsoft Dynamics CRM installation and is configured during the Reporting Extensions installation.
PrivUserGroup	The Privileged CRM user group is for special administrative functions, including CRMAppPool identity (domain user or NetworkService). The users who configure CRM must be added to this group.
ReportingGroup	All CRM users are included in this group. This group is updated automatically as users are added and removed from CRM. By default, all CRM Reporting Services reports grant Browse permission to this group.
SQLAccessGroup	The SQL Access Group is for all server processes and service accounts that require access to SQL Server, including CRMAppPool identity (domain user or NetworkService).

Install Microsoft Dynamics CRM 2016

Recruit requires that you install Microsoft Dynamics CRM 2016.

About this task

The installation files and instructions for this software are available from Microsoft. Microsoft Dynamics CRM 2016 components must be installed on both the Recruit CRM asynchronous server and the Recruit CRM application server.

Note: For Recruit, the Microsoft Dynamics CRM 2016 "Back End Server" and "Front End Server" roles must be installed on separate servers.

Procedure

1. On the CRM asynchronous server, install the server roles associated with the "Back End Server" role group for Microsoft Dynamics CRM 2016.

   To download the software, go to http://www.microsoft.com/en-us/download/details.aspx?id=50372.

   For instructions on installing the software, see the "Install Back End Server role" section of the following documentation: https://technet.microsoft.com/en-us/library/jj612874(v=crm.8).aspx.

Note: While you are running the Microsoft Dynamics CRM 2016 installer, select "No" for the option to use the Windows Update feature.

Note: You will be prompted for a product key during the installation. Use the product key provided to you by Ellucian with your purchase of Microsoft Dynamics CRM 2016, not the temporary license key provided by Microsoft when you downloaded Microsoft Dynamics CRM 2016.

2. On the CRM application server, install the server roles associated with the "Front End Server" and "Deployment Administration Server" role groups for Microsoft Dynamics CRM 2016.

   To download the software, go to http://www.microsoft.com/en-us/download/details.aspx?id=50372.

   For instructions on installing the software, see the "Install Front End Server role" section of the following documentation: https://technet.microsoft.com/en-us/library/jj612874(v=crm.8).aspx.

   Note: While you are running the Microsoft Dynamics CRM 2016 installer, select "No" for the option to use the Windows Update feature.

   Note: You will be prompted for a product key during the installation. Use the product key provided to you by Ellucian with your purchase of Microsoft Dynamics CRM 2016, not the temporary license key provided by Microsoft when you downloaded Microsoft Dynamics CRM 2016.

What to do next

If you are using for Microsoft Office Outlook, you must also install the appropriate 32-bit or 64-bit Microsoft Outlook connector client on each user's computer.

Install the Microsoft Dynamics CRM 2016 Reporting Extensions

The Reporting Extensions are data processing extensions that are required for communication between Microsoft Dynamics CRM and SQL Server Reporting Services.

Before you begin

You will need to uninstall the Microsoft Dynamics CRM 2015 Reporting Extensions before you can perform this task.

About this task

The installation files and instructions for the Reporting are available from Microsoft. The Reporting Extensions must be installed on the Recruit CRM database server.

Procedure

On the CRM database server, install the Reporting Extensions for Microsoft Dynamics CRM 2016.

For instructions on locating and installing the Reporting Extensions, go to https://msdn.microsoft.com/en-us/library/hh699807(v=crm.8).aspx.

Install the Microsoft Dynamics CRM 2016 Email Router (optional)

The Email Router is an optional installation that facilitates communication between Microsoft Dynamics CRM and your email system.

About this task

You can use server-side synchronization (preferred option), CRM for Outlook, or the Email Router for email communications within Microsoft Dynamics CRM. Whether you need to install the Email Router depends on your email service configuration. For information about each option, see http://technet.microsoft.com/en-us/library/dn832099(v=crm.8).aspx. For information about supported email service configurations for server-side synchronization, which is the preferred option, see http://technet.microsoft.com/en-us/library/dn531050.aspx. You can find configuration details for server-side synchronization and CRM for Outlook in the Microsoft Dynamics CRM Help.

Note: If you are using server-side synchronization or CRM for Outlook, you do not need to install the Email Router.

The installation files and instructions for the Email Router are available from Microsoft. The Email Router must be installed on the Recruit CRM application server.

Note: To use the Email Router, you must be using a Microsoft Exchange Server or have access to a POP3-compliant email server.

Procedure

On the CRM application server, install the Email Router for Microsoft Dynamics CRM 2016.

To download the Email Router, go to http://www.microsoft.com/en-us/download/details.aspx?id=50373.

For instructions on installing the Email Router, go to https://technet.microsoft.com/en-us/library/hh699734(v=crm.8).aspx.

Install Service Pack 1 for Microsoft Dynamics CRM 2016

The upgrade for Recruit requires that you install Service Pack 1 (SP1) for Microsoft Dynamics CRM 2016.

Before you begin

You must have already installed the Microsoft Dynamics CRM 2016 components on each server.

About this task

The installation files and instructions for this software are available from Microsoft. The SP1 components must be installed on the appropriate CRM server.

To download SP1, go to https://www.microsoft.com/en-us/download/details.aspx?id=52662.

Procedure

1. On the CRM database server, install SP1 for the Reporting Extensions.
2. On the CRM asynchronous server, install SP1 for the Microsoft Dynamics CRM 2016 Server.
3. On the CRM application server, install SP1 for the Microsoft Dynamics CRM 2016 Server

Create a Microsoft Dynamics CRM organization

Recruit requires that you create at least one organization in Microsoft Dynamics CRM 2016 to make the deployment available for users.

Before you begin

You must have already installed Microsoft Dynamics CRM 2016 on the CRM asynchronous and CRM application servers and the Microsoft Dynamics CRM 2016 Reporting Extensions on the CRM database server. For more information, see Install Microsoft Dynamics CRM 2016 on page 18 and Install the Microsoft Dynamics CRM 2016 Reporting Extensions on page 19.

Procedure

On the CRM application server, create a CRM organization.

For instructions on creating an organization in CRM, see https://technet.microsoft.com/en-us/library/dn920256.aspx.

Warning! To prevent Recruit installation issues, you must enter the same value in the **Display Name** field and **Unique Database Name** field when creating the CRM organization.

Install and configure the Banner integration components

This section provides instructions for preparing your Banner ERP system to integrate with Recruit. If you are using Colleague or PowerCampus as your ERP system, you do not need to perform the steps in this section.

Retrieve Banner integration components

If you are integrating Banner with Recruit, you must retrieve and install the Banner Recruit Integration Manager.

You can retrieve the software components by using the "Banner, PowerCampus, Advance, and all other Ellucian products" link in the Download Code section of the Ellucian Support Center.

See the *Integrate Recruit with Banner* manual appropriate for the version of the Banner Recruit Integration Manager you are installing to see the required and supported Banner software.

Configure Banner for integration

You must configure Banner and the Banner Recruit Integration Manager before you perform any additional integration steps.

Review and perform the steps in the *Integrate Recruit with Banner* manual appropriate for the version of the Banner Recruit Integration Manager you are using.

Install and configure the Colleague integration components

This section provides instructions for preparing your Colleague ERP system to integrate with Recruit. If you are using Banner or PowerCampus as your ERP system, you do not need to perform the steps in this section.

Set up a Recruit administrator in Colleague

If you are integrating Colleague with Recruit, you must set up a Recruit administrative user role in Colleague.

Create an operator record for the administrative user

Perform the following steps to create an Operator records for the administrative user.

Procedure

1. In Colleague UI, create a Person record for the user on the Name and Address Entry (NAE) form.
2. In the **Search** window, enter `UT-SOD` to access the Operator Definition (SOD) form.
3. At the Operator ID LookUp prompt, create an Operator ID for the user (for example, `RECRUIT`). Click **OK**, and then click **Add**.
4. In the **Name** field, enter a name (for example, `RECRUIT`).
5. In the **Security Classes** field, enter `ST-RECRUITER.IMPORTS`.
   RECRUITER.IMPORTS is an Ellucian-delivered security class that contains the Envision processes needed by the administrative user.
6. Save your changes on the SOD form.

Create a user record for the administrative user

Perform the following steps to create a user record for the administrative user

Procedure

1. Access the DMI Registry User Setup (DRUS) form.
2. At the Person LookUp prompt, enter the ID of the person that you created, and then click **OK**.
3. In the **Person User ID** field, enter the desired user ID (for example, recadmin).
4. In the **New User Password** field, create a temporary default password for the user.

5. In the **Env Operator Equivalent** field, enter the Operator ID that you created on the SOD form for this user.

6. Save your changes on the DRUS form.

Change the default password

Perform the following steps to change the default password.

Procedure

1. Access the Colleague System Credentials Def (CCDF) form.

2. In the Credential ID column of the Colleague Systems Credentials table, enter the ID of the person that you created previously.

3. On the Colleague System Credential Setup (CCSU) form, change the value in the **Credential Password** field.

   Note: Record the new password. You will need to enter the user ID and this password during the Recruit installation.

4. Save your changes on the CCSU form.

5. If not already set, set up an email notification on the CCDF form to notify you when the password is going to expire.

   You can use the following fields to set up the notification. For more information, see the Colleague help.

   • Days Before Expiration to Notify

   • Email Address to Notify

   • Days Between Email Notifications

6. Save your changes on the CCDF form.

Create a staff record for the administrative user

Perform the following steps to create a staff record for the administrative user.

Procedure

1. Access the Staff and Volunteers (SVM) form.

2. At the Staff LookUp prompt, enter the ID of the person that you created, and then click **OK**.

3. At the Record not on STAFF file prompt, click **Y** to create the staff record.

4. In the **Staff Code** field, enter a code for this user (for example, `RECADMIN`).

5. In the **Operator ID** field, enter the Operator ID that you created on the SOD form for this user.

6. In the **Staff Type** field, select **Staff**.

7. Save your changes on the SVM form.

Retrieve the Colleague integration components

If you are integrating Colleague with Recruit, you must retrieve the following software components or updates using SA Valet. You must also be using Colleague Release 18.

About this task

See the *Updating Colleague Software* manual for detailed procedures for retrieving the SA Valet software components and installing the software updates.

Procedure

1. From SA Valet, retrieve the software components that are listed in the following table.

   Any software updates that are defined as prerequisites to the listed software updates will be automatically installed if they are not already installed.

Software Component	Product	Description
SU012823-4.1.0	DMI	DMI update in support of Recruit 3.6 and higher.
SU63015.19-1805	Colleague	Colleague update in support of Recruit 3.6 and higher.
SU015086-485	Envision	Envision update in support of Colleague Web API 1.13, 1.14, 1.14.1, 1.15, or 1.16.
SU015233-1805	Colleague	Colleague update in support of Colleague Web API 1.13, 1.14, 1.14.1, 1.15, or 1.16.
IN015132	Installer	Colleague Web API 1.13, 1.14, 1.14.1, 1.15, or 1.16

2. From Colleague UI, install the Envision and Colleague software updates.

   For information about installing the Colleague Web API, see

Install and configure the Colleague Web API

If you are integrating Colleague with Recruit, you must install and configure the Colleague Web API.

About this task

We recommend that the Colleague Web API be installed on a separate server. This server can be shared by all applications that use the Colleague Web API, such as Pilot, Recruit, and Colleague

Self-Service. This web server must be able to communicate with both the Colleague application server and the Recruit application server.

Procedure

1. Create a new IIS website, and install the Colleague Web API to the website. See the "Installing Colleague Web API" section of the *Setting Up Colleague Web API* manual for information about running the Colleague Web API InstallShield.

2. Configure the web services parameters, Colleague Web API settings, and security settings. See the "Configuring and Administering Colleague Web API" section of the *Setting Up Colleague Web API* manual.

Install and configure the PowerCampus integration components

This section provides instructions for preparing your PowerCampus ERP system to integrate with Recruit. If you are using Banner or Colleague as your ERP system, you do not need to perform the steps in this section.

Retrieve the PowerCampus integration components

If you are integrating PowerCampus with Recruit, you must retrieve and install the required software components.

You can retrieve the software components by using the "Banner, PowerCampus, Advance, and all other Ellucian products" link in the Download Code section of the Ellucian Support Center.

The following table shows the software component, description, and where to go to find additional information.

Software	Description
PowerCampus 8.7.1 or higher	Contains the version of PowerCampus that integrates with Recruit 4.9. See the appropriate *PowerCampus Installation Guide* for more information. This is a required component for Recruit integration.

Configure PowerCampus for integration

You must configure PowerCampus before you any additional integration steps.

Review and perform the steps in the *PowerCampus Integration with Recruiter - Installation and Configuration Guide*.

Install the Recruit software

This section contains steps for installing the Recruit software.

Locate CRM connection details

Before you can install Recruit, you must locate your Microsoft Dynamics CRM connection settings. This information will be required during the Recruit CRM installation.

Procedure

1. Access your CRM application server as an administrator.
2. In a browser, open CRM. From the URL, you will need the CRM server URL and the CRM organizations name.

   These values are the URL of the server, including the port number, and the organization to which you are installing Recruit.
3. Record the values.

   ```
   https://recruit.mycollege.edu:5555/Recruit/main.aspx
   ```

   Where the address components are:
   • CRM Server URL = https://recruit.mycollege.edu:5555
   • CRM Organization Name = Recruit

Locate CRM administrator details

Before you can install Recruit, you must locate your Microsoft Dynamics CRM administrator account domain and username. This information will be required during the Recruit CRM installation.

Procedure

1. Access your CRM application server as an administrator.
2. Access the CRM Deployment Manager.
3. In the left pane, click **Deployment Administration**.
4. From the right pane, obtain the CRM administrator domain and username.

   These values are the domain and the username of the CRM system user who is set up as an administrator for Recruit.
5. Record the values.

   ```
   mycollege\crmadmin
   ```

Where the account components are:

- Account Domain: mycollege
- Account Username: crmadmin

Recruit pre-installation verification

Before you install Recruit, Ellucian recommends verifying the following items to ensure that you do not experience issues during the installation.

Verify that the CRM administrator has a primary email address

Before you install Recruit, Ellucian recommends verifying the following items to ensure that you do not experience issues during the installation.

Procedure

1. Open CRM at `http://server:port/Recruit`.
2. Go to **Settings** > **Security**.
3. Click **Users**.
4. Open the CRM administrator account, and enter an email address in the **Primary Email** field.

Verify the ERP integration components

Make sure that you have installed and configured the appropriate ERP integration components.

Procedure

For ERP integration information, see Install and configure the Banner integration components on page 22, Install and configure the Colleague integration components on page 23, or Install and configure the PowerCampus integration components on page 27.

Start the required Windows service

You must start the required Windows service for the Recruit installation.

Procedure

1. On your CRM asynchronous server, access Windows Services (**Start** > **Administrative Tools** > **Services**).
2. In the **Services** window, locate **Microsoft Dynamics CRM Asynchronous Processing Service**.

3. If "Running" is not displayed in the **Status** column, right-click the service name, and then click **Start**.

Deploy Recruit assemblies to the GAC

The Recruit assemblies must be added to the GAC on your CRM servers.

Before you begin

Your CRM application server must be able to connect to the Ellucian licensing servers. For more information about the ports used by Microsoft Dynamics CRM, see https://technet.microsoft.com/en-us/library/hh699823.aspx.

About this task

You must deploy the Recruit assemblies to the GAC before you install Recruit into your CRM organization.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.

   Note: You must run the Recruit installer on the server where you have Microsoft Dynamics CRM installed.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Deploy Ellucian CRM Recruit Assemblies to the GAC**.

4. On the **Welcome** window, click **Next**.

5. On the **License Agreement** window, read the license agreement, select **I accept the terms of the license agreement**, and then click **Next**.

6. On the **Server Information** window, enter your connection information.

Server connection setting	Description	Example
Server URL	The URL of your CRM application server, including the port number.	http://recruit.mycollege.edu:5555
Domain	Domain of the user set up as a system administrator on the server.	mycollege
Username	Username of the user set up as a system administrator on the server.	crmadmin

Server connection setting	Description	Example
Password	System administrator account password	
IFD	Indicates whether the CRM server is set up as an Internet-Facing Deployment.	
	To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the Deployment Summary section of the page.	

7. Click **Add Info** to add another server, or click **Next**.

   The installer will automatically install the assemblies to other servers, such as the asynchronous server, that are part of the same deployment. If you have multiple Recruit deployments, you use the **Add Info** button to include an application server from each additional deployment.

8. On the DLL selection screen, select **Current Version** and the version from which you are upgrading, and then click **Next**.

   Note: You may need to select additional DLL versions depending on your upgrade history. In your existing Recruit environment, click **Settings** > **Customization** > **Customize the System** > **Plugin Assemblies**. If any additional DLL versions are listed, you must also select the option for those versions in the installer.

   Note: Your selections will be applied to all of the remote servers you entered.

   If any of the servers in your CRM deployment are remote, you will have the option to restart the asynchronous services and to recycle the CRM application pools on those servers after the assemblies have been deployed to the GAC. These options are not required, but performing them may make the installation process faster.

9. After each assembly you selected has been successfully deployed, click **Next**.

   Note: If the an assembly does not deploy successfully, review the error log and the trace log.

Results

The Recruit assemblies have been deployed to the GAC. You can now install Recruit into your CRM organization.

Install the Recruit CRM components

The Recruit CRM application installs the CRM components for Recruit on the CRM application server.

Before you begin

• You must deploy the Recruit assemblies to the GAC. For more information, see Deploy Recruit assemblies to the GAC on page 30.

• Your CRM application server must be able to connect to the Ellucian licensing servers.

• If you have enabled auditing, it is recommended that you disable it to prevent large numbers of audit entries from being created during the installation process. To disable auditing, click **Settings** > **Auditing**, click **Global Auditing Settings**. In the **System Settings** dialog box, clear the **Start Auditing** option, and then click **OK**.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.

   Note: You must run the Recruit installer on the server where you have Microsoft Dynamics CRM installed.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Install Ellucian CRM Recruit into a CRM Organization**.

4. On the **Welcome** window, click **Next**.

5. On the **License Agreement** window, read the license agreement, select **I accept the terms of the license agreement**, and then click **Next**.

6. On the **Customer Information** window, enter your organization name, code, and password provided to you by Ellucian.

7. Click **Next**.

8. On the **CRM Connection** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment. To view your IFD setting, access the Microsoft Dynamics CRM Deployment	

CRM connection setting	Description	Example
	Manager and view the Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege.edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege.edu:5555
Organization Name	Name of the CRM organization to which you are installing Recruit.	Recruit
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	mycollege
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	
Use Executing User For SQL Authentication	Indicates whether you want to use the admin account credentials when connecting to the SQL database.	
SQL Username	Username of the SQL account to use when connecting to the SQL database.	sqladmin
SQL Password	Password for the SQL user account.	

The installer will test the connection information. If the test is not successful, you will receive an error message with additional details.

9. To save the connection information for future use, enter a name, and then click **Save**. Otherwise, click **Skip Saving**.

10. On the **Recruit Locale Configuration** window, select your locale, select any optional solutions, and then click **Next**.

Option	Description
XCAS Solution	This option installs the XCAS solution that provides a common framework for Centralized Applications.
UCAS Solution	This option installs the UCAS solution that provides support for UCAS applications.

11. On the time zone window, select the time zone where your institution is located, and then click **Next**.

    Warning! Setting this value incorrectly can cause dates to be displayed incorrectly in Recruit and on the external website.

12. On the **Select Language To Install** window, click **Next**.

    The language is automatically selected based on the language configured in the organization to which you are installing Recruit. It is recommended that you do not change this setting.

13. On the list of servers and organizations window, add additional servers and organizations or install Recruit to the listed servers and organizations.

Option	Description
Add an additional server and organization to which you want to install Recruit.	1. Click **Yes**. 2. Repeat steps 8 on page 32 and 9 on page 33.
Install Recruit to the listed servers and organizations.	Click **No**.

14. On the **Install Recruit Help** window, create a new website or use an existing website.

Option	Description
Create Website	This option will create an entirely separate IIS website for the Recruit Help website. 1. Select the **Create Website** option. 2. In the **New Site Name** field, enter a name for the Recruit help website. 3. In the **New Site Port** field, enter a unique port number for the Recruit help website. 4. Click **Next**.
Use Existing Website	This option will create the Recruit Help website in a new folder under an existing IIS website. 1. Select the **Use Existing Website** option.

Option	Description
	2. From the **Select Existing Site** drop-down list, select the website to which you want to install the Recruit help website.
	3. Click **Next**.
	4. On the **Install Recruit Help** window, verify that the URL for the Recruit help was generated correctly, and then click **Set Setting**.

15. On the registry settings window, update the settings if necessary, and then click **Next**.

Setting	Description
TraceEnabled	This setting enables detailed logging in CRM.
MaxUploadFileSize	This setting determines the maximum file size, in bytes, that can be uploaded in CRM.
OLEDBTimeout	This setting determines the timeout, in seconds, for importing customization files into CRM.
ExtendedTimeout	This setting determines the timeout, in seconds, for long-running operations in CRM.

16. On the ready to install window, click **Next**.

17. After the installation has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

   Note: If the `Incomplete Import Source File Found` error message is repeated for a long time, the asynchronous service may no longer be responding and should be restarted.

18. On the **Install Recruit Help** window, verify that the URL for the Recruit help was generated correctly, and then click **Set Setting**.

   Note: This window is only displayed if you created a new website for the Recruit help.

What to do next

If you disabled auditing before running the installation, you must re-enable auditing. To enable auditing, click **Settings** > **Auditing**, click **Global Auditing Settings**. In the **System Settings** dialog box, select the **Start Auditing** option, and then click **OK**.

Install the Recruit external website

You must install the Recruit external website to allow prospective students to create accounts, register for events, and submit applications.

Before you begin

• You must run the installer on the server that you want to host the Recruit external website. The installer cannot be run remotely.

• You must have already installed the Recruit CRM components into an organization before you can install the external website. For more information, see Install the Recruit CRM components on page 32.

• Your Recruit external website server must be able to connect to the Ellucian licensing servers.

Note: The Recruit external website must be configured to use the same language as the Recruit organization.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the server on which you are installing the Recruit external website.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Install Ellucian CRM Recruit External Website**.

4. On the **Welcome** window, click **Next**.

5. On the **License Agreement** window, read the license agreement, select **I accept the terms of the license agreement**, and then click **Next**.

6. On the **Customer Information** window, enter your organization name, code, and password provided to you by Ellucian.

7. Click **Next**.

8. On the **CRM Connection** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment. To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the	

CRM connection setting	Description	Example
	Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege.edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege.edu:5555
Organization Name	Name of the CRM organization to which you installed Recruit.	Recruit
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	crm
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	

9. To save the connection information for future use, enter a name, and then click **Save**. Otherwise, click **Skip Saving**.

10. On the **Select Language To Install** window, click **Next**.

    The language is automatically selected based on the language configured in the organization to which you are installing Recruit. It is recommended that you do not change this setting.

11. On the **Choose Install Location** window, select the folder to which you want to install the external website, and then click **Next**.

    Warning! If you are planning to install the external website to an existing IIS website, you must make sure that the folder you select is the same folder as the existing IIS website.

12. On the **Install Recruit External Website** window, create a new website or use an existing website.

Option	Description
Create Website	This option will create an entirely separate IIS website for the Recruit external website. 1. Select the **Create Website** option.

Option	Description
	2. In the **New Site Name** field, enter a name for the Recruit external website.
	3. In the **New Site Port** field, enter a unique port number for the Recruit external website.
	4. Click **Next**.
Use Existing Website	This option will create the Recruit external website in a new folder under an existing IIS website.
	1. Select the **Use Existing Website** option.
	2. From the **Select Existing Site** drop-down list, select the website to which you want to install the Recruit external website.
	3. In the **Virtual Directory Name** field, enter a name for the virtual directory that will contain the Recruit external website. If no name is entered, the default directory, `Ellucian.ERecruiting.Web.External`, is used.
	4. Click **Next**.

13. On the **Site ID** window, enter an ID to use for this external website, and then click **Next**.

    Note: If you are only using a single external website, enter `1` in the site ID field.

    You can have multiple external websites associated with a single Recruit environment. For example, a site for prospective undergraduate students and a site for prospective graduate students. Recruit uses the site ID to identify the resource records in CRM that are used for styling and customizing each external website.

    See the "Manage the external website" topic in the Recruit Help for more information about using resource records.

14. On the ready to install window, click **Next**.

15. After the site has been created or updated, click **Next**.

    Note: If the installation does not complete successfully, review the error log and the trace log.

16. On the **Recruit External Site Configuration** window, enter the locations of the external application form and the client external CSS file if different from the default values, and then click **Next**.

    Note: If the location includes `Datatel.ERecruiting.Web.External` in the URL, you must replace *Datatel* with *Ellucian*.

17. After the installation has completed, indicate whether you want to install another instance of the external website.

Option	Description
Add an additional external website.	1. Click **Yes**. 2. Repeat steps 4 on page 36 and 17 on page 39.
Install only a single external website	Click **No**.

Update the external website timezone

If your external website is deployed on a server that is in a different time zone than that of your institution, you must update the `web.config` of the external website to prevent times, such as event times, from being displayed incorrectly.

Procedure

1. Log into the server that hosts your Recruit external website.

2. Open Windows Explorer, and then navigate to the folder containing your external website.

   By default, `C:\Program Files (x86)\Ellucian\Ellucian CRM Recruit 4.7.0.0\Ellucian.ERecruiting.Web.External\`.

3. Open the `web.config` file in a text editor.

4. Locate the `<connectionStrings>` section.

5. Below the `<connectionStrings>` section, add the following entry:

   ```
   <appSettings>
      <add key="ClientTimeZone"
           value="YourInstitutionTimeZone">
   </appSettings>
   ```

   Replace *YourInstitutionTimeZone* with the name of the time zone where your institution is located, such as "Eastern Standard Time". See https://msdn.microsoft.com/en-US/library/ms912391.aspx for a list of time zones.

6. Save the `web.config` file.

Prevent cross frame scripting

Placing external website forms in iFrames can create a security vulnerability.

About this task

If your institution displays forms from the external website in iFrames, they can be vulnerable to cross frame scripting. To prevent this, you can create a whitelist of websites that are allowed to display the external website forms in an iFrame.

Procedure

1. On your external website server, open **Internet Information Services (IIS) Manager**.
2. In the Connections pane, expand the server node, expand **Sites**, and then select your Recruit external website.
3. In the Features View, open **HTTP Response Headers**.
4. In the Actions pane, click **Add**.
5. In the **Name** field of the **Add Custom HTTP Response Header** dialog box, enter `Content-Security-Policy`.
6. In the **Value** field, enter `frame-ancestors` *https://yourschool.edu:5555*.

   Replace *https://yourschool.edu:5555* with the URL of the website that will frame the external website.
7. Click **OK**.
8. In the Actions pane, click **Add**.
9. In the **Name** field of the **Add Custom HTTP Response Header** dialog box, enter `X-Frame-Options`.
10. In the **Value** field, enter `ALLOW FROM` *https://yourschool.edu:5555*.

    Replace *https://yourschool.edu:5555* with the URL of the website that will frame the external website.
11. Click **OK**.
12. Restart IIS.

Encrypting credentials in the web configuration file

If you want to encrypt CRM credentials in the `web.config` file on the Recruit external website, you can use Microsoft Internet Information Services (IIS) to do this.

You must do this after you initially install the external website and each time you upgrade it. For more information, see the following Microsoft resources:

http://msdn.microsoft.com/en-us/library/zhhddkxy(v=vs.100).aspx

http://msdn.microsoft.com/en-us/library/dtkwfdky(v=vs.100).aspx

Install the Recruit ERP response services

You must install the Recruit ERP response services to integrate Recruit with your ERP system.

Before you begin

- You must have already installed the Recruit CRM components into an organization before you can install the ERP response services. For more information, see Install the Recruit CRM components on page 32.
- Your CRM application server must be able to connect to the Ellucian licensing servers.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you installed Recruit.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Install Ellucian CRM Recruit ERP Response Services**.

4. On the **Welcome** window, click **Next**.

5. On the **License Agreement** window, read the license agreement, select **I accept the terms of the license agreement**, and then click **Next**.

6. On the **Customer Information** window, enter your organization name, code, and password provided to you by Ellucian.

7. Click **Next**.

8. On the **CRM Connection** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment. To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege. edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege. edu:5555
Organization Name	Name of the CRM organization to which you installed Recruit.	Recruit

CRM connection setting	Description	Example
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	mycollege
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	

9. On the **Choose Install Location** window, select the folder to which you want to install the response service, and then click **Next**.

10. On the **Install Recruit ERP Response Services** window, create a new website or use an existing website.

Option	Description
Create Website	This option will create an entirely separate IIS website for the Recruit ERP response services website. 1. Select the **Create Website** option. 2. In the **New Site Name** field, enter a name for the ERP response service website. 3. In the **New Site Port** field, enter a unique port number for the ERP response service website. 4. Indicate whether the site will be secured using HTTPS. 5. Click **Next**.
Use Existing Website	This option will create the Recruit ERP response services website in a new folder under an existing IIS website. 1. Select the **Use Existing Website** option. 2. From the **Select Existing Site** drop-down list, select the website to which you want to install the ERP response service website. 3. In the **Virtual Directory Name** field, enter a name for the virtual directory that will contain the ERP response service website. If no name is entered, the default directory, `Ellucian.ERecruiting.Erp.Response.Services`, is used.

Option	Description
	4. Indicate whether the site will be secured using HTTPS.
	5. Click **Next**.

11. On the ready to install window, click **Next**.

12. After the site has been created or updated, click **Next**.

13. On the **Ellucian CRM Recruit API and ERP Configurations** window, enter the configuration information, and then click **Next**.

API and ERP setting	Description	Example
ERP Settings		
ERP System	The Enterprise Resource Planning system that you are using for this installation	Colleague
Endpoint URL	The URL of the ERP service endpoint that supports the integration with Recruit. This is either the URL of the Banner Recruit Integration Manager, the Colleague Web API, or the PowerCampus Web API. **Note:** If the Banner Recruit Integration Manager, the Colleague Web API, or PowerCampus Web API were set up on a secured port, you must use "https" and the secured port number when you enter the URL.	http://integrationserver. com:8090/ColleagueApi
Username	The user login for the ERP administrative user.	admin
Password	The user password for the ERP	
Recruit Settings		
Endpoint URL	The URL of the Recruit Response Service REST endpoints.	http://recruit.mycollege. edu:5555/ Ellucian.ERecruiting. Erp.Response.Services/ DatatelRecruiterResponse.svc/ RESTService

API and ERP setting	Description	Example
Username	The user login for the Recruit Response Service administrative user. **Note:** Typically, this is an administrator account on the server, or credentials for the Recruit Response Service website if authentication has been configured.	admin
Password	The user password for the Recruit Response Service administrative user.	

14. On the ready to install window, click **Next**.

15. After the installation has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Set up the ECommerce website

You must install the Ellucian Payment Gateway 1.5 or 1.6 to be able to collect application fees through your Recruit external website.

Before you begin

• You must have installed the Ellucian Payment Gateway 1.5 or 1.6. For more information about installing the Ellucian Payment Gateway 1.5 or 1.6, see the *Payment Gateway Installation Procedures (1.3)* or *Payment Gateway Installation Procedures (1.4)* manual.

• Your CRM application server must be able to connect to the Ellucian licensing servers.

About this task

Note: This task is not necessary if you do not want to collect application fees through your Recruit external website.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you installed Recruit.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Set Up ECommerce Web Site**.

4. On the **Welcome** window, click **Next**.

5. On the **License Agreement** window, read the license agreement, select **I accept the terms of the license agreement**, and then click **Next**.

6. On the **Customer Information** window, enter your organization name, code, and password provided to you by Ellucian.

7. Click **Next**.

8. On the **CRM Connection** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment. To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege.edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege.edu:5555
Organization Name	Name of the CRM organization to which you installed Recruit.	Recruit
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	mycollege
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	

9. On the **Choose Install Location** window, select the folder to which you want to install the Ellucian Payment Gateway 1.5 or 1.6, and then click **Next**.

10. On the **Install Recruit Ecommerce Services Website** window, create a new website or use an existing website.

Option	Description
Create Website	This option will create an entirely separate IIS website for the Recruit Ecommerce Services website. 1. Select the **Create Website** option. 2. In the **New Site Name** field, enter a name for the ecommerce services website. 3. In the **New Site Port** field, enter a unique port number for the ecommerce services website. 4. Click **Next**.
Use Existing Website	This option will create the Recruit Ecommerce Services website in a new folder under an existing IIS website. 1. Select the **Use Existing Website** option. 2. From the **Select Existing Site** drop-down list, select the website to which you want to install the ecommerce services website. 3. In the **Virtual Directory Name** field, enter a name for the virtual directory that will contain the ecommerce services website. If no name is entered, the default directory, `Ellucian.Core.Crm.Ecomm.Services`, is used. 4. Click **Next**.

11. On the ready to install window, click **Next**.

12. After the site has been created or updated, click **Next**.

13. In the **Payment Gateway Server URL** field on the **Payment Gateway Configuration** window, enter the URL, including the .aspx extension, of the server that hosts the Payment Gateway service.

14. In the **Payment Gateway Provider Key** field, enter the Payment Provider Account ID from the Payment Gateway MMC snap-in.

15. Click **Next**.

16. After the installation has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Install the Ellucian Messaging Service

You must install the Ellucian Messaging Service to receive change notifications from Recruit.

About this task

Note: If you have already installed the Ellucian Messaging Service, continue to the next task.

Procedure

1. From the Ellucian Download Center, locate the Ellucian Messaging Service installer, and save the file.
2. Right-click on the installer, and then click **Run as administrator**.
3. On the **Welcome** window, click **Next**.
4. On the **License Agreement** window, read the license agreement, select **I accept the terms of the license agreement**, and then click **Next**.
5. On the **Destination Folder** window, select the folder to which you want to install the Ellucian Messaging Service, and then click **Next**.
6. On the **Base Configuration Information** window, enter a username and password that will be used to connect to the service.
7. In the **Virtual Host** field, enter /, and then click **Next**.
8. On the **Ready to Install the Program** window, click **Install**.
9. After the installation has completed successfully, click **Finish**.

Install the Recruit task service

The task service is used by Recruit to connect to API-based services, such as Ellucian Ethos Integration.

Install the task service database

You must create an SQL database to store the organization connection information the service will use to connect to CRM.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.
2. Right-click on the installer, and then click **Run as administrator**.
3. Click **Recruit Service**.

4. Click **Install Service Database**.

5. On the **Welcome** window, click **Next**.

6. On the **SQL Connection Information** window, enter the connection information, and then click **Next**.

Field	Description
SQL Server	Enter the name of the SQL server on which you want to create the task service database.
Database Name	Enter a name for the task service database that will be created.
Use Integrated Security	Indicate whether you want to use the admin account credentials when connecting to the SQL database.
Username	Username of the SQL account to use when connecting to the SQL database.
Password	Password for the SQL user account.

The installer will test the connection information. If the test is not successful, you will receive an error message with additional details.

7. On the ready to install window, click **Next**.

8. After the installation has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Create or update the task service database user information

For security purposes, you must configure a username and password in the task service database. These will be used as the credentials for accessing the task service.

About this task

Note: Only one user is required.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Recruit Service**.

4. Click **Create/Update Service Database User Information**.

5. On the **Welcome** window, click **Next**.

6. On the **SQL Connection Information** window, enter the connection information, and then click
   Next.

Field	Description
SQL Server	Enter the name of the SQL server on which you want to create the task service database.
Database Name	Enter a name for the task service database that will be created.
Use Integrated Security	Indicate whether you want to use the admin account credentials when connecting to the SQL database.
Username	Username of the SQL account to use when connecting to the SQL database.
Password	Password for the SQL user account.

   The installer will test the connection information. If the test is not successful, you will receive an
   error message with additional details.

7. On the **Input User Information** window, enter a username and password, and then click
   Create/Update User.

8. After the user creation or update has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Set the task service database settings

You must configure the database settings for the Message Queue.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file
   on the CRM application server on which you are installing Recruit.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Recruit Service**.

4. Click **Set Service Database Settings**.

5. On the **Welcome** window, click **Next**.

6. On the **SQL Connection Information** window, enter the connection information, and then click
   Next.

Field	Description
SQL Server	Enter the name of the SQL server on which you want to create the task service database.

Field	Description
Database Name	Enter a name for the task service database that will be created.
Use Integrated Security	Indicate whether you want to use the admin account credentials when connecting to the SQL database.
Username	Username of the SQL account to use when connecting to the SQL database.
Password	Password for the SQL user account.

7. On the **Encryption Certificate Information** window, enter the the name or thumbprint of the certificate that you used during installation of the task service, and then click **Next**.

8. On the **Queue Connection Settings** window, enter the connection information, and then click **Next**.

Field	Description
Hostname	Enter the name of the server where the Ellucian Messaging Service is installed.
Port	Enter 5672.
Virtual Host	Enter /.
Username	Enter the username for the Ellucian Messaging Service.
Password	Enter the password for the Ellucian Messaging Service user.
Uri	Enter the URL of the Ellucian Messaging Service.
SSL Enabled	Indicate whether the Ellucian Messaging Service uses SSL encryption.
SSL Server Name	Enter the name of the name of the server that contains the SSL certificate.
SSL Cert Path	Enter the path to the SSL certificate.
SSL Cert Passphrase	Enter the passphrase used for the SSL certificate.

9. After the database settings have been stored successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Install the Windows service

You must install the Windows service that is used to handle sending messages.

About this task

Note: The task service must be installed on a server that is externally facing or it must be routed through your firewall.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.

    Note: You must run the installer on the server on which you want the Windows service installed.

2. Right-click on the installer, and then click **Run as administrator**.
3. Click **Recruit Service**.
4. Click **Install Windows Service**.
5. On the **Welcome** window, click **Next**.
6. On the **SQL Connection Information** window, enter the connection information, and then click **Next**.

Field	Description
SQL Server	Enter the name of the SQL server on which you want to create the task service database.
Database Name	Enter a name for the task service database that will be created.
Use Integrated Security	Indicate whether you want to use the admin account credentials when connecting to the SQL database.
Username	Username of the SQL account to use when connecting to the SQL database.
Password	Password for the SQL user account.

    The installer will test the connection information. If the test is not successful, you will receive an error message with additional details.

7. On the **Service Settings** window, enter the necessary information, and then click **Next**.

Field	Description
Encryption Certificate Name	Enter the name or thumbprint of the certificate that the service will use to mask passwords stored in the task service database.
	It is recommended that you use the certificate's thumbprint. To find the thumbprint, in the Certificate Manager, double-click the certificate name, and then select **Properties**. Click the **Details** tab.
	Note: The certificate must have a minimum length of 2048 and have a private key.
Service URL	Enter the URL, including port number, where the Windows service will run.
	Note: The port cannot be used by any other sites on the server.
	The URL must be accessible by the CRM servers used by Recruit.
	Ellucian recommends securing the service using SSL. For additional information about securing the service, see Configure SSL for the task service on page 53.
Install Folder	Enter the physical location where the service will be installed.
Install Util Path	Enter the location of the .NET Framework utility to use during installation.
Run Service As	Select the user that will execute the service and access the SQL server. The user or account that you select must have access to the SQL database you created for the task service, and be have domain access to the service URL.
Service Username	Enter the username for the service user or account.
Service Password	Enter the password for the service user or account.

8. On the ready to install window, click **Next**.

9. After the installation has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Configure SSL for the task service

Ellucian strongly recommends that the task service be secured using SSL.

About this task

• If you have previously configured SSL for the server and port used by the task service, you do not need to complete this task again.

• You must complete this task only one time per server.

• You can use either the same encryption certificate you used during the installation of the service or a different certificate.

• After you configure SSL, you should access the service URL in a browser to view the confirmation message.

Note: If you are using Twilio for text messaging, the URL of the service must be externally accessible so that Twilio can post messages to the service endpoint for status updates and replies. Twilio does not provide a range of IP addresses used by their service due to its dynamic nature.

Procedure

1. On the server that hosting the task service, open a Windows command prompt as an administrator.

2. Run the following command.

   ```
   netsh http add urlacl url=https://yourdomain:yourport/ user=Everyone
   ```

   Replacing *yourdomain* with the domain name of the server where the task service is installed and *yourport* with the port number configured for HTTPS used by the task service.

3. Run the following command.

   ```
   netsh http add sslcert ipport=0.0.0.0:yourport
   certhash=yourcerthash
   appid={yourappid}
   ```

   Replacing the following:

   • *yourport* with the port number configured for HTTPS used by the task service.

   • *yourcerthash* with the thumbprint of the certificate to use. Do not include any spaces.

   • *yourappid* with the unique GUID of the task service installation. You can use any valid GUID value. It is only used to allow you to identify the binding later.

4. Confirm the task service URL in a browser.

Set the organization connection information

You must enter the connection information for the CRM organizations that will use the task service.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.
2. Right-click on the installer, and then click **Run as administrator**.
3. Click **Recruit Service**.
4. Click **Set Service Organization Connection Information**.
5. On the **Welcome** window, click **Next**.
6. On the **SQL Connection Information** window, enter the connection information, and then click **Next**.

Field	Description
SQL Server	Enter the name of the SQL server on which you want to create the task service database.
Database Name	Enter a name for the task service database that will be created.
Use Integrated Security	Indicate whether you want to use the admin account credentials when connecting to the SQL database.
Username	Username of the SQL account to use when connecting to the SQL database.
Password	Password for the SQL user account.

7. On the **CRM Organization Connection Information** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment. To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the	

CRM connection setting	Description	Example
	Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege.edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege.edu:5555
Organization Name	Name of the CRM organization to which you are installing Recruit.	Recruit
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	mycollege
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	
Encryption Certificate Name	Enter the name or thumbprint of the certificate that you used during installation of the task service. **Note:** If you used a different certificate for the SSL configuration task, do not enter that certificate here.	

The installer will test the connection information. If the test is not successful, you will receive an error message with additional details.

8. After the organization information has been stored successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Perform the handshake between the task service and the organization

For each CRM organization that uses the task service, you must perform an authentication handshake between CRM and the SQL server to ensure valid communications between the systems.

Procedure

1. From the Ellucian Download Center, locate the Recruit installer for Recruit 4.9, and save the file on the CRM application server on which you are installing Recruit.

2. Right-click on the installer, and then click **Run as administrator**.

3. Click **Recruit Service**.

4. Click **Perform Task Service CRM Organization Handshake**.

5. On the **Welcome** window, click **Next**.

6. On the **CRM Connection** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment. To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege. edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege. edu:5555
Organization Name	Name of the CRM organization to which you are installing Recruit.	Recruit

CRM connection setting	Description	Example
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	mycollege
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	

The installer will test the connection information. If the test is not successful, you will receive an error message with additional details.

7. On the service task connection window, enter the connection information, and then click **Next**.

Field	Description
Service URL	Enter the URL and port of the task service.
Username	Username of the database user you created.
Password	Password for the database user you created.

8. After the handshake has completed successfully, click **Done**.

   Note: If the installation does not complete successfully, review the error log and the trace log.

Complete the text messaging configuration in Recruit

If you are using the text messaging functionality in Recruit, you must complete additional configuration steps in Recruit. See **Recruit configuration** > **Configure Twilio / Recruit settings** in the Recruit Help.

Complete the Ellucian Analytics integration configuration in Recruit

If you are using the Ellucian Analytics integration in Recruit, you must complete additional configuration steps in Recruit. See **Recruit configuration** > **Configure Ellucian Analytics integration** in the Recruit Help.

Complete the communication plans configuration in Recruit

If you are using the communication plans functionality in Recruit, you must complete additional configuration steps in Recruit. See **Recruit configuration** > **Configure email service settings** in the Recruit Help.

Perform post-installation tasks on the servers

after you install Recruit and before you log into the software, Ellucian recommends that you perform the tasks in this section. Before you begin, you must have completed the installation of all prerequisite software and Recruit software.

Change Internet Information Services (IIS) settings to improve performance

Ellucian recommends that you change certain settings in IIS to improve Recruit performance.

Change the IIS application pool refresh cycle

You can change the refresh cycle of the IIS application pools to reduce page load times in certain instances.

About this task

By default, IIS is configured to refresh the cache that contains the external website pages every 29 hours. The first user to access each page on the external website after cache has been refreshed may experience longer load times as the cache is recreated. Changing the refresh cycle to a monthly cycle will greatly reduce the number of users affected by the cache recreation.

Procedure

1. Log into the server that hosts your Recruit external website.

2. Open the Internet Information Services (IIS) Manager.

3. In the IIS Manager folder tree, expand the server node, and then select the **Application Pools** node.

4. Right-click the **Ellucian.ERecruiting.Web.External** application pool, and then select **Recycling**.

5. In the **Regular time intervals** field, enter `43200`, which equals the Ellucian recommended 30 day cycle.

6. Click **Next**, and then click **Finish**.

7. Repeat steps 4 on page 59 through 6 on page 59 for the **DefaultAppPool** application pool.

Change the IIS application pool timeout settings

You can change the timeout settings for the IIS application pool using this task.

About this task

IIS stops application pools after they have been idle for a set amount of time. When the application pool is restarted, IIS recycles the application pool, which clears the cache. The first user to access each page on the external website after the cache has been cleared might experience longer page load times as the cache is recreated. Turning off the application pool timeout setting will reduce the number of users affected by the cache recreation.

Procedure

1. Log into the server that hosts your Recruit external website
2. Open the Internet Information Services (IIS) Manager.
3. In the IIS Manager folder tree, expand the server node, and then select the **Application Pools** node.
4. Right-click the **Ellucian.ERecruiting.Web.External** application pool, and then select **Advanced Settings**.
5. In the **Idle Time-out** field, enter 0, which turns off the idle time-out feature.
6. Click **OK**.
7. Repeat steps 4 on page 60 through 6 on page 60 for the **CRMAppPool** and the **DefaultAppPool**.

Set up URL redirects for the external website

If you have sent communications from your previous Recruit environment with links to your external website, you may need to create a URL redirect for those links to your Recruit 4.9 external website.

In Recruit 4.9, the folder path for the external website was changed from Datatel.ERecruiting.Web.External to Ellucian.ERecruiting.Web.External. To ensure that previously sent links continue to work, you must set up a URL redirect in IIS. See http://www.iis.net/ for additional information and resources for configuring a URL redirect.

Perform optional Recruit diagnostics

Using the Recruit installer, you can perform optional diagnostic test to aid in your application deployment.

Verify the CRM installation

You can run this diagnostic test on the CRM application server to determine if your CRM connection is working and that the correct software version is installed.

Procedure

1. On the CRM application server on which you are installed Recruit, locate the Recruit installer.
2. Right-click on the installer, and then click **Run as administrator**.
3. Click **CRM Version Diagnostics**.

   Green indicators show whether the installed versions of Microsoft Dynamics CRM and CRM Update are supported by Recruit. If either indicator is red, you must update to a versions supported by Recruit.
4. Click **Done**.

Verify the integration settings

You can run this diagnostic test on the CRM application server to determine if your integration settings are set and enabled. This diagnostic test checks for existing integration settings and performs basic connection testing.

Procedure

1. On the CRM application server on which you are installed Recruit, locate the Recruit installer.
2. Right-click on the installer, and then click **Run as administrator**.
3. Click **Integration Settings Diagnostics**.
4. On the **CRM Connection** window, enter your connection information, and then click **Next**.

CRM connection setting	Description	Example
Select Connection	Select the connection information from a previously entered CRM organization.	
Internet Facing Deployment	Indicates whether the CRM server is set up as an Internet-Facing Deployment.	

CRM connection setting	Description	Example
	To view your IFD setting, access the Microsoft Dynamics CRM Deployment Manager and view the Deployment Summary section of the page.	
CRM Server URL	The URL of the machine, including the CRM port number, to which you are installing Recruit.	http://recruit.mycollege.edu:5555
Deployment Server URL	The URL of the deployment service if the deployment service is located on a separate server. For typical installations, this field should be the same as the CRM Server URL field.	http://recruit.mycollege.edu:5555
Organization Name	Name of the CRM organization to which you installed Recruit.	Recruit
Admin Account Domain	Domain of the CRM system user set up as a system administrator.	mycollege
Admin Account Username	Username of the CRM system user set up as a system administrator.	crmadmin
Admin Account Password	Password for the CRM admin user.	

A green indicator shows whether the connection test was successful. If the indicator is red, you must review the error log and correct any issues. After you have correct the issues, perform this task again.

5. Click **Done**.

Configure and use the Recruit software

After you have completed the tasks in this document, you must access the Recruit Help within Microsoft Dynamics CRM. The Recruit Help contains post-installation tasks to perform in Recruit and information about how to initially load data into, configure, and use Recruit.