

---

**Dynamics 365**

**Migration from  
Adxstudio v7 Portals to  
Portal Capabilities for  
Dynamics 365**

VERSION: 1.0

COMPANY: Microsoft

RELEASED: February 2018

---

---

## Copyright

This document is provided as-is. Information and views expressed in this document, including URL and other Internet Web site references, may change without notice.

Some examples depicted herein are provided for illustration only and are fictitious. No real association or connection is intended or should be inferred.

This document does not provide you with any legal rights to any intellectual property in any Microsoft product. You may copy and use this document for your internal, reference purposes. You may modify this document for your internal, reference purposes.

The videos and eBooks might be in English only. Also, if you click the links, you may be redirected to a U.S. website whose content is in English.

© 2018 Microsoft. All rights reserved.

---

# Contents

<b>Definition of common terms</b> .....	<b>5</b>
<b>Introduction</b> .....	<b>5</b>
<b>Supportability and subscription awareness</b> .....	<b>6</b>
<b>Key differences   Solutions compared</b> .....	<b>6</b>
Adxstudio Portals .....	6
Portal Capabilities for Microsoft Dynamics 365 .....	6
Portal Capabilities for Microsoft Dynamics 365—Self-hosted .....	6
Functional differences between Adxstudio v7 and Dynamic 365 Portals .....	7
Schema changes and new or enhanced features .....	7
<b>Prerequisites</b> .....	<b>9</b>
<b>Determine an upgrade approach</b> .....	<b>9</b>
Option one—reimplement (self-hosted or Microsoft-hosted) .....	10
Option two—upgrade (self-hosted or Microsoft-hosted) .....	10
<b>Sandbox validation</b> .....	<b>11</b>
<b>Option 1: Reimplementation—self-hosted</b> .....	<b>12</b>
Back up a copy .....	12
Reconfigure the Adxstudio Portal website connection .....	12
Prepare to remove the Adxstudio Portal solution .....	12
Remove All Adxstudio Portal solutions .....	13
Import the Dynamics 365 self-hosted Portal solution package .....	13
Install the Dynamics 365 Self-hosted Portal application and publish to desired host .....	13
Manually Create Portal-Related Data .....	13
<b>Option 1: Reimplementation—Microsoft-hosted</b> .....	<b>14</b>
Back up a copy .....	14
Reconfigure the Adxstudio Portal Website Connection .....	14
Prepare for Adxstudio Portal solution removal .....	14
Remove all Adxstudio Portal solutions .....	15
Import the Dynamics 365 self-hosted Portal solution package .....	15
Request Microsoft Portal provisioning via Dynamics 365 Administration Center .....	16
Manually create Portal-related data .....	16

---

**Option 2: Migrate—self-hosted..... 16**

---

Back up a copy .....	16
Prepare for solution import and removal.....	16
Create required upgrade site setting .....	17
Import the Dynamics 365 self-hosted Portal solution package .....	17
Remove all Adxstudio Portal solutions.....	18
Install the Dynamics 365 self-hosted Portal application and publish to desired host .....	18
Leverage Portal data to use new features and functionality .....	18
Validate Portal functionality.....	18

**Option 2: Migrate—Microsoft-hosted ..... 18**

---

Back up a copy .....	19
The backup should not be needed, it is needed only if unforeseen issues arise that require you to restore the original Dynamics 365 instance. ....	19
Prepare for solution import and removal.....	19
Create required upgrade site setting .....	19
Import the Dynamics 365 self-hosted Portal solution package .....	20
Remove all Adxstudio Portal solutions.....	20
Request Microsoft Portal provisioning via Dynamics 365 Administration Center .....	20
Use new Portal data features and functionality .....	21
Validate Portal functionality.....	21
Troubleshooting .....	21

**Resources ..... 23**

---

---

## Definition of common terms

These are common terms used throughout this document. A quick read will help you understand different portal implementations, various keywords, and terms that may be ambiguous in the context of this document.

**Data.** In the context of portals and solutions, this term refers to all portal-specific records in Dynamics 365, such as page/web templates, webpages, entity forms/lists, etc.

**Host.** This term refers to the website (portal) hosting infrastructure. Specifically, this term is usually intended to differentiate between the three separate portal offerings discussed in this document: Adxstudio Portals (self-hosted), Portal Capabilities for Microsoft Dynamics 365, and Portal Capabilities for Dynamics 365 Self Hosted.

**Self-hosted.** The open source portal offering from Microsoft also known as Portal Capabilities for Microsoft Dynamics 365—Self Hosted.

**Portal application** or **Application.** Generally refers to the underlying ASP.NET code of the portal.

**Microsoft Dynamics 365.** Refers to online and on-premises, specifically December 2016 Update for Dynamics 365 (online) and December 2016 Service Pack for Dynamics 365.

**Solution(s).** Software extensions that are packaged, installed, and/or uninstalled from Dynamics 365 related to business functionality; in this case portals.

**Features.** Functionality specific to the portal offered as a part of the portal products; specific feature titles usually correspond with a solution title.

**Schema.** The data model used in Dynamics 365.

## Introduction

This document defines the migration process from Adxstudio Portals version 7.0.0025 or later to Portal Capabilities for Microsoft Dynamics 365. With the vast array of configurations and the ability to customize portals, old and new, this document presents four unique migration scenarios that should be successful for most people.

Adxstudio Portals may be referred to hereafter as "Adx," "Legacy," "Adxstudio," or "v7," and Portal Capabilities for Microsoft Dynamics 365 may be referred to as "Dynamics 365 Portal," "Portal Capabilities," "v8," or "Portal Add-On."

Adxstudio Portals and Portal Capabilities for Dynamics 365 are different in a few areas. This documentation is specific to features that are supported in Dynamics 365 Portals.

**Note:** This document is intended to help you migrate your Portal solutions and configuration data stored in Dynamics 365 and does not address Portal application code changes. If you have made changes to Portal Application code (ASP.NET code), it will need to be reimplemented using the extensibility framework supported by Dynamics 365 Portals.

**Note:** Information provided in this document is to help you migrate the configuration data and is not guaranteed to work for all use cases.

---

# Supportability and subscription awareness

Before beginning this migration, it is extremely important to understand the supportability of Adxstudio Portals, Portal Capabilities for Dynamics 365, and the required subscription(s) to enable a Portal Add-on with your existing Microsoft Dynamics 365 subscription. During this process, you will be in an unsupported state whenever Adxstudio solutions and Dynamics 365 Portal solutions exist in the same instance. You should make sure that your Dynamics 365 subscription includes a Portal Add-on if the Microsoft-hosted version is desired. Please see the related document on supportability: [Adxstudio and Portal Capabilities Supportability](#)

## Key differences | Solutions compared

### Adxstudio Portals

Adxstudio Portals is the portal product which was offered exclusively by Adxstudio, Inc., until it was acquired by Microsoft in September 2015. This product is often referred to as v7 or legacy portals. Upon acquisition, Microsoft began developing its own version of the product, which was initially released in May 2016. Since then, the two products are distinguished by these version numbers:

**Adxstudio Portals** = Versions 7.x and earlier

**Portal Capabilities for Microsoft Dynamics 365** = Microsoft Dynamics CRM Online 2016 Update 1 or later

It is important to note that the two products are just that—two very separate products. Adxstudio Portals have their own supportability clauses and will eventually be deprecated. It is commonly known that the two products share many features and even some core code. However, there have been many changes to this product since Microsoft acquired it.

Useful links for Adxstudio Portals:

[Adxstudio Portals documentation](#)

[Adxstudio supportability](#)

### Portal Capabilities for Microsoft Dynamics 365

Portal Capabilities for Microsoft Dynamics 365 is the official, fully supported portal offering that is part of the Dynamics 365 suite. This is an SaaS product, meaning Microsoft hosts the portal software as a service integration for Dynamics 365. Customers do not have the ability to modify the portal application code or access the infrastructure where it is hosted, in an Azure Web Application.

Useful links for Portal Capabilities for Microsoft Dynamics 365:

[Portal Capabilities Documentation](#)

[Portal Capabilities Supportability](#)

### Portal Capabilities for Microsoft Dynamics 365—Self-hosted

Portal Capabilities for Microsoft Dynamics 365—Self-hosted is a one-time, open source release from Microsoft to enable the transition from Adxstudio Portals. This release is open source under MIT licensing and is free. However, as this is a one-time-release, it is extremely important to note that this offering is unsupported, does not allow contributions, and does not receive bug fixes or new features.

---

Useful links for open source:

[Source Code Download](#)

## **Functional differences between Adxstudio v7 and Dynamic 365 Portals**

There are important functionality differences between Adxstudio v7 and Dynamics 365 Portals. If you are using the following functionalities of Adxstudio portals, they need to be reimplemented either using out-of-box customization patterns or a third-party solution:

- SharePoint Document Management
- Shopping cart and payment

## **Schema changes and new or enhanced features**

As mentioned above, there are changes in schema and feature offerings between Adxstudio Portals and Portal Capabilities for Microsoft Dynamics 365 that are critical during the transition process. The following information identifies essential changes for the transition from Adxstudio Portals to Portal Capabilities for Microsoft Dynamics 365.

### **Multi-Language Portal (MLP) capabilities**

Dynamics 365 Portals support multiple languages in a single portal website record in a simplified manner. Previously, Adxstudio Portals, managed language by implementing a child website record for each language. MLP capabilities are not compatible between the two versions. The MLP feature, introduced in Portal Capabilities for Microsoft Dynamics version 8.2, consists of a new schema that requires an additional level of data for various entities, per language, to enable a functional portal. Of all the changes between versions, this is the single most important change. Awareness and understanding of the MLP schema/data requirements are critical to a successful transition.

If you are transitioning via reimplementation, explained later in this document, automated data migration is not recommended. If you are transitioning via migration, you need to create specific Site Settings for every website in the Dynamics 365 instance before the Version 8 package is deployed. Failure to create the required Site Settings for every website in the instance will result in data that is incompatible with the new schema, a non-functional portal, and you might need to restore the Dynamics 365 instance from a backup.

### **Portal Comment (adx\_portalcomment)**

Portals offer a variety of ways for Portal users to interact with Dynamics 365 users. Previously, as with Adxstudio Portals, many communications were enabled by the Note (annotation) entity as a default. With the introduction of Dynamics 365 Portals comes a new entity: Portal Comment (adx\_portalcomment). The Portal Comment doesn't replace the former portal functionality that used the Note; however, it enables a more user-friendly interaction. Case Management, for example, is the most commonly used portal feature using this new entity. Just as before, Dynamics 365 and Portal users can add comments to a case and other entities, only now comments are stored in Dynamics 365 and surfaced on the Portal via Portal Comments. When considering a reimplementation or upgrade transition to Dynamics 365 Portals, special consideration must be taken to manipulate existing Notes to conform to the Portal Comment if you use Portal Comments. This is true for any entity where this functionality is enabled.

---

## Feedback

Feedback is a new entity introduced with Portal Capabilities for Microsoft Dynamics 365. Feedback is used by default in various features of the Portal and replaces Idea Votes (`adx_ideavote`), Idea Comments (`adx_ideacomment`), and Blog Post Comments (`adx_blogpostcomments`). When considering a reimplementing or upgrade transition to Dynamics 365 Portals, special consideration must be taken to manipulate existing records of such entities to conform to the Feedback entity.

## Knowledge management

Another enhancement to Portals is Knowledge Management capabilities. Previously, as with Adxstudio Portals, this was achieved by using the now-deprecated Article (`kbarticle`) and/or the Knowledge Base Record (`knowledgebaserecord`) entities. Portal Capabilities for Microsoft Dynamics 365 uses the Knowledge Article (`knowledgearticle`) entity to surface data to portal users in accordance with core [Dynamics 365 Knowledge Management](#) feature enhancements. Articles are not compatible with the portal's enhanced Knowledge Management. When considering a reimplementing or upgrade to Dynamics 365 Portals, special consideration must be taken to manipulate existing knowledge management entities into Knowledge Article entity records.

## Access control rules

A *scope* is now associated with Access Control Rules (ACRs). This scope will be missing on all ACRs after the migration, so they will not function. Update all ACRs to either All content or Exclude direct child web files.

## Web templates

Web templates now have a reference to a website record. This might be missing after migration, so none of the custom web templates will work and will cause *not found* errors on the site. To fix this, please make sure all web templates have a reference to a website record after migration.

## Deactivated webpages

As part of the migration, webpages are split into a root page and localized content page. Deactivated pages got a localized content page and this page was active, which caused links to appear and *Page Not Found* errors. After migration, use advanced find to find these pages and deactivate them. You can also remove inactive pages before the upgrade.

## FetchXML in Liquid

Using FetchXML from within Liquid templates needs to have security requirements associated with it. Make sure appropriate entity permissions are given for any entity used in FetchXML.

## Custom CSS

CSS classes have changed within the pages (in grid header rows, for example). Any custom CSS needs to be updated to conform to new classes.

## Image files

Image files need to have proper URL format. Any image file with a space in the partial URL will not display. Partial URLs should be updated to remove spaces.



---

# Prerequisites

- Microsoft Dynamics 365 CRM Online 2016 Update 1 or later.
- Latest Adxstudio Portal Solutions must correspond with v7.0.0025 or later.
- Application code and solution schema must be unmodified; enhancements and schema changes made in the development of Portal Capabilities for Microsoft Dynamics 365 require that there are no legacy Adxstudio Portal customizations.
  - There are key differences, both in code and solution schema, that are not compatible between the two portal offerings.
  - If customizations beyond Dynamics 365 user configuration have been applied to the Adxstudio Portal, a successful, fully functional transition cannot be expected; therefore, functionality beyond the unaltered Adxstudio Portal offering will be unsupported during the transition.
- Failure to bring your Adxstudio Portal to an original state can result in upgrade failure and/or inoperable features/functionality once you move to Portal Capabilities.
- Remove all unsupported features that do not exist or map to v8 portals.
- Complete validation in sandbox environment before proceeding to production instance upgrade.
  - A sandbox validation is necessary to ensure complete functionality and feature parity; validate that the Adxstudio Portal is in an uncustomized state before you transition.
  - Validation will allow you to identify conflicts that may have been overlooked, such as customizations or feature parity, without affecting the production environment.
- A Full backup of Dynamics 365 organization.

To take advantage of the Dynamics 365 Portal offering, Adxstudio customers who have made code modifications to the portal code or solution schema must revert back into compliance as noted above. Microsoft Customer Service and Support may decline standard support if an issue occurs that is determined to be a result of Adxstudio Portal customization(s), an incompatible feature between the two offerings, and/or instances which contain portal solutions from Adxstudio and Microsoft at the same time.

**Note:** Having both Adxstudio Portal and Microsoft Portal solutions at the same time is an unsupported scenario. Successful completion of the transition from Adxstudio is contingent upon deletion of Adxstudio. The open source version Portal Capabilities for Microsoft Dynamics 365 (self-hosted) must be used as a gateway to the online Microsoft-hosted version of portals. Failing to import the self-hosted solution packages before requesting online portal provisioning will result in an unsupported state and possible partial package import requiring the instance to be restored to its pre-upgrade state to avoid data loss.

## Determine an upgrade approach

Portals old and new have their own unique variables in configuration and environmental implementation. Due to the unique scenarios that might be encountered, this document offers two

---

upgrade paths with two deployment types (self-hosted or Microsoft-hosted), which aim to offer an ideal approach whether you use reimplementation or migration.

### **Option one—reimplement (self-hosted or Microsoft-hosted)**

This approach is ideal for organizations that wish to use new features, functionality, and data that might not otherwise be achievable without additional configuration and data migration. This is a very manual process and may not be ideal for organizations with an extensive amount of core portal content records, such as webpages, entity/web forms, or entity lists. This approach consists of deploying a completely out-of-box Dynamics 365 Portal website and manually migrating/creating required data.

#### At a glance—high-level steps to reimplement your portal:

- Backup and copy your existing Dynamics 365 instance to a sandbox.
- Deploy your existing portal to the sandbox instance.
- Remove **All** Adxstudio solutions.
  - This will effectively remove all portal data such as webpages, forms, and templates.
- Depending upon you desired portal product, install self-hosted Dynamics 365 Portal solutions, and deploy self-hosted Dynamics 365 Portal code, or provision the new Portal Add-on for Dynamics 365 via the Dynamics 365 Administration Center.
- Using the sandbox environment as a template/data source, recreate all portal data at the destination (production) environment.
  - This is a manual process; a data export/import or configuration migration tool (SDK) can be successful in some scenarios but is not discussed in this document due to the uniqueness of each portal implementation.

### **Option two—upgrade (self-hosted or Microsoft-hosted)**

This approach is ideal for organizations that do not intend to use new data-related features and/or functionality introduced with Dynamics 365 Portals. This approach is also ideal for organizations that have an extensive amount of core portal content records (data), such as webpages or entity/web forms/entity lists. This approach automates data creation required to conform to the MLP feature offered in Dynamics 365 Portals and (if Microsoft-hosted) will provision and bind to an Azure Web Application maintained by Microsoft. This process will not install new data beyond that required to conform to MLP and normal solution import processes. Depending on your Adxstudio website feature parity to Microsoft Dynamics 365 Portal Capabilities, it is possible to migrate in-place to a Dynamics 365 Portal website. Pay special attention to features used in your existing Adxstudio Portal compared to those offered in Dynamics 365 Portals.

**Note: The specific site settings described in this document are required to upgrade.** Failure to specify the documented site settings for each portal website in the Dynamics 365 instance will result in an unsupported state, and the instance must be restored from a backup.

**This approach is not ideal for transition to Partner portals.** With the release of Dynamics 365 Portals, the Partner portal offering has undergone an extensive rebuild, much of which is contained within the portal data that is installed under normal provisioning (not an upgrade). Without the newly introduced data, Partner portals will not be fully functional. Extensive configuration and data creation

---

will be required to match Dynamics 365 Partner portal capabilities for either transition scenario and, therefore, is not advisable or outlined in this document.

At a glance—high-level steps to upgrade your portal:

- Backup the Dynamics 365 instance.
- Create required site settings to indicate upgrade for the package deployment process.
- Import the self-hosted Dynamics 365 Portal solutions.
  - Self-hosted solutions must be imported regardless of desired host (self-hosted or Microsoft-hosted).
  - The self-hosted versions of the solutions are the gateway to the Microsoft-Hosted option.
  - If upgrading to the Microsoft-hosted option, solution import becomes a three-step process: import self-hosted solutions, remove *all* Adxstudio solutions, and then an upgrade to the Microsoft-hosted solution via the Dynamics 365 Administration Center.
  - An upgrade directly from Adxstudio Portal solution to the Microsoft-hosted version of Dynamics 365 Portal solutions is not supported; you must import the self-hosted solutions first, uninstall *all* Adxstudio solutions, and then request portal provisioning via the Dynamics 365 Administration Center.
- Remove *all* Adxstudio solutions.
- If self-hosted, install and publish portal code.
- If Microsoft-hosted, request portal provisioning via Dynamics 365 Administration Center.
- Import or manually configure data introduced with Dynamics 365 Portals via provided spreadsheet if desired.

## Sandbox validation

Before attempting a production upgrade, you'll want to practice and validate the upgrade process in a sandbox environment. In the rare chance that data loss or a blocking issue is observed, you'll be able to catch the issue in the sandbox by validating there first and then moving to a production upgrade. If a database restore is required to get the organization back to a pre-migration state, it may cause one or more days' worth of data loss. To mitigate this risk, you should have backups of the Dynamics 365 instances found via the Dynamics 365 Administrator Center. That way, admins can restore immediately in the rare event that data loss occurs.

Performing production upgrade runs will require system/portal downtime—we recommended performing the upgrade during downtime/low-traffic hours to keep user impact to a minimum. The estimated time for migration to production can be estimated from the time spent in the sandbox instance; a Dynamics 365 Portal installation process averages a couple of hours on a fresh CRM instance.

---

## Option 1: Reimplementation—self-hosted

The following sections offer instructions to reimplement an existing Adxstudio Portals website as a Portal Capabilities for Microsoft Dynamics 365 website. This process is for use against one portal website.

**Note:** Before proceeding, please read [Key differences | Solutions compared](#), with special emphasis on *Schema changes and new or enhanced features*. Awareness, understanding, and preparation is critical to a successful transition.

### Back up a copy

Making a full backup and copying it to a sandbox Dynamics 365 instance is at the core of this option. The backup should not be needed, it is needed only if unforeseen issues arise that require you to restore the original Dynamics 365 instance. The sandbox instance created in the following steps will be used throughout the reimplementation as a data reference and gives you the ability to minimize portal down-time.

1. Initiate a backup of your production Dynamics 365 instance. Do not proceed until the backup has succeeded.
2. Copy your production Dynamics 365 instance to a sandbox Dynamics 365 instance.

### Reconfigure the Adxstudio Portal website connection

The information in this section will help you bind your existing portal website to use this newly copied Dynamics 365 Sandbox instance. This step is necessary even if you intend to take your portal offline during this process. When reconfiguring the newly implemented portal, a functioning copy of the Adxstudio Portal is pivotal to success.

- Connect the Adxstudio Portal application to the sandbox instance.
  - First, determine which of two methods was originally used to connect the Adxstudio Portal application to the Dynamics 365 instance by checking for a settings.xml file, which resides in the App\_Data folder, a sub-folder of the application's MasterPortal, at the portal's hosting infrastructure.
  - If a settings.xml file exists, remove it, and restart the website. This will allow you to use the Adxstudio Connection Wizard.
  - If a settings.xml file does not exist, this indicates that a connection string was manually written to the web.config file within the application's MasterPortal folder. This will require manual modification. Examples can be found within the web.config file itself.

### Prepare to remove the Adxstudio Portal solution

The information in this section adheres to standard [Dynamics 365 solution removal](#) practices by helping identify dependencies that may have been created after it was installed, and acknowledges scenarios that may cause unnecessary strain on the instance if not considered.

1. Within the original Dynamics 365 instance, remove all Web Notification URL records.
2. Delete all SDK Message Processing Steps where the Event Handler is equal to `Adxstudio.Xrm.Plugins.WebNotificationPlugin`. The preferred method, defined here, is to use the

---

Adxstudio Web Notification Configuration UI. Annotating the specific entities for which Web Notifications are enabled prior to deletion will be essential to reconfiguration post upgrade.

- a. Within the Adxstudio Web Notification Configuration UI, remove all entities from the **Send Notifications** column. Select **Save & Publish** and then **Disable Notifications**.

**Note:** The processing of these requests can take five minutes or more, depending on the number of entities that have enabled Web Notifications. When the requests are complete, the UI button will become active.

- b. If you experience issues with this UI or are not certain all entities have been removed, please use native Dynamics 365 functionality to confirm; for example, executing an Advanced Find, Customize the System, or the SDK's Plugin Registration Tool.
- c. The solution will not be removed successfully unless all Web Notification SDK Message Processing Steps are removed.

Disabling all Adxstudio processes is recommended, but not required. Any customizations with a dependency on Adxstudio entities and/or plugins must be removed for solution removal.

## Remove All Adxstudio Portal solutions

These steps adhere to standard [Dynamics 365 solution removal](#) practices. If a dependency conflict prevents deletion, read the Dynamics 365 SDK, specifically the [RetrieveDependenciesForDelete](#) function to help you identify and relieve dependencies.

- Delete all Adxstudio solutions using First in Last Out (FILO) order. For help identifying the correct order see [Uninstalling Portal Solutions](#)

## Import the Dynamics 365 self-hosted Portal solution package

Choosing the Dynamics 365 Portal type that contains the most feature parity with the Adxstudio Portal is critical to success and must be considered before this step. Portal types and features have changes that may be critical to your specific use case.

**Note:** With the release of Dynamics 365 Portals, the Partner portal has undergone an extensive rebuild, which is contained in portal data that is installed under normal provisioning (not an upgrade). Without the new data, Partner portals will not be fully functional. Extensive configuration and data creation will be required to match Dynamics 365 Partner Portal capabilities in either transition scenario and, therefore, is not advisable or described in this document.

- See the open source [Self-Hosted Installation Guide](#) to install the desired v8 portal package.

## Install the Dynamics 365 Self-hosted Portal application and publish to desired host

- See the open source [Self-Hosted Installation Guide](#) to install and publish the desired v8 portal application.

## Manually Create Portal-Related Data

Portal-related data creation is highly dependent on each unique portal implementation. Due to schema differences between the portal products, importing data may be counterproductive and is not advised. It will be necessary to configure much of the Dynamics 365 Portal in the Web Client itself. The [Portal's content editor](#) will be useful in this scenario; hence, the emphasis on maintaining a functioning copy of

---

the Adxstudio Portal even if you chose to take your portal offline to your Portal Users. We recommend that all features and functionalities of the newly created Dynamics 365 portal are tested after manual data creation, with an emphasis on portal content security implementations if previously used.

## Option 1: Reimplementation—Microsoft-hosted

These sections offer instructions to reimplement an existing Adxstudio Portals website as a Portal Capabilities for Microsoft Dynamics 365 website. This process is defined for use against one portal website.

**Note:** Before proceeding, please read [Key differences | Solutions compared](#), with special emphasis on *Schema changes and new or enhanced features*. Awareness, understanding, and preparation is critical to a successful transition.

### Back up a copy

Making a full backup and copying it to a sandbox Dynamics 365 instance is at the core of this option. The backup should not be needed, it is needed only if unforeseen issues arise that require you to restore the original Dynamics 365 instance. The sandbox instance created in the following steps will be used throughout the reimplementation as a data reference and gives you the ability to minimize portal down-time.

1. Initiate a backup of your production Dynamics 365 instance. Do not proceed until the backup has succeeded.
2. Copy your production Dynamics 365 instance to a sandbox Dynamics 365 instance.

### Reconfigure the Adxstudio Portal Website Connection

This section will help you bind your existing portal website to use the newly copied Dynamics 365 Sandbox instance. This step is relevant and useful even if you intend to take your portal offline during this process. When reconfiguring the newly implemented portal, a functioning copy of the Adxstudio Portal is pivotal to success.

- Connect the Adxstudio Portal application to the sandbox instance.
  - First, determine which of two methods was originally used to connect the Adxstudio Portal application to the Dynamics 365 instance by checking for a settings.xml file, which resides in the App\_Data folder, a sub-folder of the application's MasterPortal, at the portal's hosting infrastructure.
  - If a settings.xml file exists, remove it, and restart the website. This will allow you to use the Adxstudio Connection Wizard.
  - If a settings.xml file does not exist, this indicates that a connection string was manually written to the web.config file within the application's MasterPortal folder. This will require manual modification. Examples can be found within the web.config file itself.

### Prepare for Adxstudio Portal solution removal

The information in this section adheres to standard [Dynamics 365 solution removal](#) practices by helping identify dependencies that may have been created after it was installed, and acknowledges scenarios that may cause unnecessary strain on the instance if not considered.

- 
1. Within the originating Dynamics 365 instance, remove all Web Notification URL records.
  2. Delete all SDK Message Processing Steps where the Event Handler is equal to *Adxstudio.Xrm.Plugins.WebNotificationPlugin*. The preferred method, defined here, is to use the Adxstudio Web Notification Configuration UI. Annotating the specific entities for which Web Notifications are enabled prior to deletion will be essential to reconfiguration post upgrade.
    - a. Within the Adxstudio Web Notification Configuration UI, remove all entities from the **Send Notifications** column. Select **Save & Publish** and then **Disable Notifications**.

**Note:** The processing of these requests can take five minutes or more, depending on the number of entities that have enabled Web Notifications. When the requests are complete, the UI button will become active.
    - b. If you experience issues with this UI or are not certain all entities have been removed, please use native Dynamics 365 functionality to confirm; for example, executing an Advanced Find, Customize the System, or the SDK's Plugin Registration Tool.
    - c. The solution will not be successfully removed unless all Web Notification SDK Message Processing Steps are removed.

Disabling all Adxstudio processes is recommended, but not required. Any customizations with a dependency on Adxstudio entities and/or plugins must be removed for solution removal.

## Remove all Adxstudio Portal solutions

The instructions in this section adhere to standard [Dynamics 365 solution removal](#) practices. If a dependency conflict prevents deletion, read the Dynamics 365 SDK, specifically the [RetrieveDependenciesForDelete](#), function to identify and relieve dependencies.

- Delete all Adxstudio solutions using First in Last Out (FILO) order. For help identifying the correct order see [Uninstalling Portal Solutions](#)

## Import the Dynamics 365 self-hosted Portal solution package

**Note:** This step must be taken regardless of the desired Microsoft-hosted portal. Do not use the Dynamics 365 Administration Center to install the solution package at this step.

You must use the self-hosted portal solution package as a gateway to Microsoft-hosted portals to ensure compatibility. Choosing the Dynamics 365 Portal type containing the most feature parity with the Adxstudio Portal version is critical to success and must be considered before this step. Portal types and features have changes that may be critical to your specific use case.

**Note:** With the release of Dynamics 365 Portals, the Partner portal offering has undergone an extensive rebuild, much of which is contained within the portal data that is installed under normal provisioning (not an upgrade). Without the newly introduced data, Partner portals will not be fully functional. Extensive configuration and data creation will be required to match Dynamics 365 Partner portal capabilities for either transition scenario and, therefore, is not advisable or outlined in this document.

- Reference the open source [Self-Hosted Installation Guide](#) to install the desired v8 portal package.

---

## Request Microsoft Portal provisioning via Dynamics 365 Administration Center

The provisioning of a Microsoft hosted portal will include portal solution package installation and the deployment of an associated Azure Web Application to host your chosen portal. During the solution package installation, the self-hosted version of the portal solutions will be upgraded to the latest version available at the time of provisioning request.

- Please reference the Portal Administrator's Guide to [provision your portal](#).

### Manually create Portal-related data

Portal-related data creation is highly dependent on each unique portal implementation. Due to schema differences between the portal products, importing data may be counterproductive and is not advised. It will be necessary to configure much of the Dynamics 365 Portal in the Web Client itself. The [Portal's content editor](#) will be useful in this scenario; hence, the emphasis on maintaining a functioning copy of the Adxstudio Portal even if you chose to take your portal offline to your Portal Users. We recommend that all features and functionalities of the newly created Dynamics 365 portal are tested after manual data creation, with an emphasis on portal content security implementations if previously used.

## Option 2: Migrate—self-hosted

These sections offer instructions to upgrade existing Adxstudio Portals websites to Portal Capabilities for Microsoft Dynamics 365. This process is defined for use against one portal website. Creation of upgrade-related Site Settings are required before importing the Dynamics 365 Portal package. Many features and functionalities introduced with the new portal product will require manual data creation; the portal package import process ignores data creation beyond required localized records to enable multi-language support for existing records.

**Note:** Before proceeding, read [Key differences | Solutions compared](#) with special emphasis on *Schema changes and new or enhanced features*. Awareness, understanding, and preparation is critical to a successful transition.

### Back up a copy

The backup should not be needed, it is needed only if unforeseen issues arise that require you to restore the original Dynamics 365 instance.

- Initiate a backup of the existing production Dynamics 365 instance. Do not proceed until the backup has succeeded.

### Prepare for solution import and removal

The information in this section adheres to standard [Dynamics 365 solution removal](#) practices by helping identify dependencies that may have been created after it was installed, and acknowledges scenarios that may cause unnecessary strain on the instance if not considered.

1. Within the originating Dynamics 365 instance, remove all Web Notification URL records.
2. Delete all SDK Message Processing Steps where the Event Handler is equal to `Adxstudio.Xrm.Plugins.WebNotificationPlugin`. The preferred method, defined here, is to use the Adxstudio Web Notification Configuration UI. Annotating the specific entities for which Web Notifications are enabled prior to deletion will be essential to reconfiguration post upgrade.



- 
- a. Within the Adxstudio Web Notification Configuration UI, remove all entities from the **Send Notifications** column. Select **Save & Publish** and then **Disable Notifications**.

**Note:** The processing of these requests can take five minutes or more, depending on the number of entities that have enabled Web Notifications. When the requests are complete, the UI button will become active.

- b. If you experience issues with this UI or are not certain all entities have been removed, please use native Dynamics 365 functionality to confirm; for example, executing an Advanced Find, Customize the System, or the SDK's Plugin Registration Tool.
- c. The solution will not be successfully removed unless all Web Notification SDK Message Processing Steps are removed

Disabling all Adxstudio processes is recommended, but not required. Any customizations with a dependency on Adxstudio entities and/or plugins must be removed for solution removal.

## Create required upgrade site setting

As mentioned before, there have been various schema changes in the portal product. With Portal Capabilities for Microsoft Dynamics 365 came the addition of multi-language support. As a result, various portal entities now have changed to facilitate this. For example, webpages now require a Root Page and a Localized Content Page. Before upgrading, you must specify *all* the portals as requiring an upgrade via Site Settings to enable website data creation as required. If there are other websites in the Dynamics 365 instance or you neglect to create the following Site Settings, their data will not conform to the new schema and the portal will be inoperable. Neglecting this step will require the org to be restored from a backup.

1. Identify the Website for upgrade via Site Setting
  - a. Name = UpgradeWebsiteData
  - b. Value = true
2. Specify the desired language (LCID) by Site Setting. The correlating language must be enabled in the Dynamics 365 instance. Default is English 1033. Example value below.
  - a. Name = WebsiteLCIDforUpgrade
  - b. Value = 1033

**Note:** It is very important to make sure site settings are typed in correctly. Failing to do so can cause migrated data to not conform to new schema, the portal will be inoperable, and the process will have to be started again by restoring data from a backup.

**Note:** Once the upgrade is finished make sure these site settings are removed or else they can cause issues when upgrading to a new version in the future.

## Import the Dynamics 365 self-hosted Portal solution package

Choosing the Dynamics 365 Portal type that contains the most feature parity with the Adxstudio Portal is critical to success and must be considered before this step. Portal types and features have changes that may be critical to your specific use case.

**Note:** With the release of Dynamics 365 Portals, the Partner portal offering has undergone an extensive rebuild, much of which is contained within the portal data that is installed under normal provisioning

---

(not an upgrade). Without the newly introduced data, Partner portals will not be fully functional. Extensive configuration and data creation will be required to match Dynamics 365 Partner portal capabilities for either transition scenario and, therefore, is not advisable our outlined in this document.

- Reference the open source [Self-Hosted Installation Guide](#) to install the desired v8 portal package.

## Remove all Adxstudio Portal solutions

The instructions in this section adhere to standard [Dynamics 365 solution removal](#) practices. Should a dependency conflict prevent deletion, read the Dynamics 365 SDK, specifically the [RetrieveDependenciesForDelete](#) function, to help identify and relieve dependencies.

- Delete all Adxstudio solutions using First in Last Out (FILO) order. For help identifying the correct order see [Uninstalling Portal Solutions](#)

## Install the Dynamics 365 self-hosted Portal application and publish to desired host

- Reference the open source [Self-Hosted Installation Guide](#) to install and publish the desired v8 portal application.

## Leverage Portal data to use new features and functionality

Portal-related data creation is highly dependent on each unique portal implementation. Due to schema differences between the portal products, importing data may be counterproductive and is not advised. It will be necessary to configure much of the Dynamics 365 Portal in the Web Client itself. The [Portal's content editor](#) will be useful in this scenario; hence, the emphasis on maintaining a functioning copy of the Adxstudio Portal even if you chose to take your portal offline to your Portal Users. We recommend that all features and functionalities of the newly created Dynamics 365 portal are tested after manual data creation, with an emphasis on portal content security implementations if previously used.

## Validate Portal functionality

It is highly recommended that all features functionalities of the newly created Dynamics 365 portal are tested post-upgrade with an emphasis on portal content security implementations if previously used.

# Option 2: Migrate—Microsoft-hosted

The following sections gives instructions to upgrade an existing Adxstudio Portals website to Portal Capabilities for Microsoft Dynamics 365. This process is defined for use against one portal website. Creation of upgrade-related Site Settings are necessary before importing the Dynamics 365 Portal package. Utilization of many features and functionalities introduced with the new portal product will require manual data creation; the portal package import process ignores data creation beyond required localized records to enable multi-language support for existing records.

**Note:** Before proceeding, please read [Key differences | Solutions compared](#) with special emphasis on *Schema changes and new or enhanced features*. Awareness, understanding, and preparation is critical to a successful transition.

---

## Back up a copy

The backup should not be needed, it is needed only if unforeseen issues arise that require you to restore the original Dynamics 365 instance.

- Initiate a backup of the existing production Dynamics 365 instance. Do not proceed until the backup has succeeded.

## Prepare for solution import and removal

The information in this section adheres to standard [Dynamics 365 solution removal](#) practices by helping identify dependencies that may have been created post-install and acknowledges scenarios that may cause unnecessary strain on the instance if not considered.

1. Within the originating Dynamics 365 instance, remove all Web Notification URL records.
2. Delete all SDK Message Processing Steps where the Event Handler is equal to *Adxstudio.Xrm.Plugins.WebNotificationPlugin*. The preferred method, defined here, is to use the Adxstudio Web Notification Configuration UI. Annotating the specific entities for which Web Notifications are enabled prior to deletion will be essential to reconfiguration post upgrade.
  - a. Within the Adxstudio Web Notification Configuration UI, remove all entities from the **Send Notifications** column. Select **Save & Publish** and then **Disable Notifications**.

**Note:** The processing of these requests can take five minutes or more, depending on the number of entities that have enabled Web Notifications. When the requests are complete, the UI button will become active.
  - b. If you experience issues with this UI or are not certain all entities have been removed, please use native Dynamics 365 functionality to confirm; for example, executing an Advanced Find, Customize the System, or the SDK's Plugin Registration Tool.
  - c. Solution removal will not succeed unless all Web Notification SDK Message Processing Steps are removed.

Disabling all Adxstudio processes is recommended, but not required. Any customizations with a dependency on Adxstudio entities and/or plugins must be removed for solution removal.

## Create required upgrade site setting

As mentioned earlier, there have been various schema changes in the portal product. Portal Capabilities for Microsoft Dynamics 365 introduced multi-language support. As a result, various portal entities now have changed to facilitate this. For example, webpages now require a Root Page and a Localized Content Page. Before upgrading, you must specify *all* the portals as requiring an upgrade via Site Settings to enable website data creation as required. If there are other websites in the Dynamics 365 instance or you neglect to create the following Site Settings, their data will not conform to the new schema and the portal will be inoperable. Neglecting this step will require the org to be restored from a backup.

- 
1. Identify the Website for upgrade via Site Setting
    - a. Name = UpgradeWebsiteData
    - b. Value = true
  2. Specify the desired language (LCID) by Site Setting. The correlating language must be enabled in the Dynamics 365 instance. Default is English 1033. Example value below.
    - a. Name = WebsiteLCIDforUpgrade
    - b. Value = 1033

**Note:** It is very important to make sure site settings are typed in correctly. Failing to do so can cause migrated data to not conform to new schema, the portal will be inoperable, and the process will have to be started again by restoring data from backup.

**Note:** Once the upgrade is finished, make sure these site settings are removed or they can cause issues when upgrading to a new version in the future.

## Import the Dynamics 365 self-hosted Portal solution package

**Note:** This step must be taken regardless of desired Microsoft hosted portal. Do not use the Dynamics 365 Administration Center to install the solution package at this step.

Choosing the Dynamics 365 Portal type that contains the most feature parity with the Adxstudio Portal is critical to success and must be considered before this step. Portal types and features have changes that may be critical to your specific use case.

**Note:** With the release of Dynamics 365 Portals, the Partner portal offering has undergone an extensive rebuild, much of which is contained within the portal data that is installed under normal provisioning (not an upgrade). Without the newly introduced data, Partner portals will not be fully functional. Extensive configuration and data creation will be required to match Dynamics 365 Partner portal capabilities for either transition scenario and, therefore, is not advisable or outlined in this document.

- Reference the open source [Self-Hosted Installation Guide](#) to install the desired v8 portal package.

## Remove all Adxstudio Portal solutions

The instructions in this section adhere to standard [Dynamics 365 solution removal](#) practices. Should a dependency conflict prevent deletion, read the Dynamics 365 SDK, specifically the [RetrieveDependenciesForDelete](#) function, to help identify and relieve dependencies.

- Delete all Adxstudio solutions using First in Last Out (FILO) order. For help identifying the correct order see [Uninstalling Portal Solutions](#)

## Request Microsoft Portal provisioning via Dynamics 365 Administration Center

The provisioning of a Microsoft-hosted portal will include portal solution package installation and the deployment of an associated Azure Web Application to host your chosen portal. During the solution package installation, the self-hosted version of the portal solutions will be upgraded to the latest version available at the time of provisioning request.

- Please reference the Portal Administrator's Guide to [provision your portal](#).

---

## Use new Portal data features and functionality

Portal-related data creation is highly dependent on each unique portal implementation. Due to schema differences between the portal products, importing data may be counterproductive and is not advised. It will be necessary to configure much of the Dynamics 365 Portal in the Web Client itself. The [Portal's content editor](#) will be useful in this scenario; hence, the emphasis on maintaining a functioning copy of the Adxstudio Portal even if you chose to take your portal offline to your Portal Users. We recommend that all features and functionalities of the newly created Dynamics 365 portal are tested after manual data creation, with an emphasis on portal content security implementations if previously used.

## Validate Portal functionality

It is highly recommended that all features functionalities of the newly created Dynamics 365 portal are tested post-upgrade with an emphasis on portal content security implementations if previously used.

## Troubleshooting

- If Portal provisioning is successful, however, upon loading up the Portal URL, you will see a message *Getting Set Up*. This can happen in two cases:
  - Solution installation in your CRM instance didn't succeed or is in progress.
    - To check this, go to Dynamics 365 online admin center.
    - Go to the Instance tab.
    - Select your Dynamics 365 org (for which you are provisioned the portal).
    - Click the Solutions option on the right-hand box to go to the solution management page.
    - In the solution management page, validate if the Portal type you chose during portal provisioning shows as Installing, Install Pending, or Install Failed.
    - If it shows up as Installing or Install Pending, it means the solution installation is in progress and you should wait.
    - If it shows up as Install Failed, it means the solution installation failed.
      - In this case, retry again from the Solution management screen, as this can fail due to transient issues.
      - If you have done multiple retries and still it doesn't work, then please contact support with details about your org and portal type.
  - Solution installation succeeded, but the Portal website record is different then what is expected by Portal code.
    - To check this, go to Dynamics 365 online admin center.
    - Go to the Instance tab.
    - Select your Dynamics 365 org (for which you are provisioned the portal).
    - Click on the Solutions option in the right-hand box to go to the solution management page.

- 
- On the solution management page, validate if the Portal type you chose during portal provisioning shows as installed.
  - If it shows up as Installed, it means solution installation worked, but Portal code is not able to connect with the right website record. To fix this:
    - Go to your Dynamics 365 organization.
    - Navigate to Settings -> Portal -> Settings.
    - Check if there is a record called PackageImportComplete created in your system.
    - If not, then create one manually with the following values:
      - In the Name field, put the value as PackageImportComplete.
      - In the Value field, you need to put the GUID of the website record corresponding to your portal type and language selected during provisioning.
        - To find this GUID, provision a trial portal on a new trial org with same language and type.
        - Once provisioning is finished, navigate to your Dynamics 365 org and take the GUID of the website record created in the org.
          - After creating the PackageImportComplete setting, create a new website binding. To do that:
            - Go to main navigation -> Portals -> Website binding.
            - Create a new record.
            - In the Name field, put any text value.
            - In the Website field, select the appropriate website record.
            - In the Sitename field, fill in the URL of your portal without https://. For example, if your URL is https://contoso.microsoftcrmportals.com, use contoso.microsoftcrmportals.com
          - Once the website binding is created, restart the portal by going to Portal Admin center -> Portal actions -> Restart action.
  - Portal provisioning is successful and new portal loads, however some of the configuration doesn't work as expected.
    - This can be due to two main factors:
      - Change in functionality between v7 and Dynamics 365 portals. Please read [Key differences | Solutions compared](#) section to see some common differences.
      - Custom development done in v7 website. In this case, this specific functionality will have to be reimplemented to conform with the extensibility patterns supported in Dynamics 365 portals.

---

## Resources

[Get started with the Portal content editor](#)

[Experience Dynamics 365 - Additional Resources](#)

[Submit Dynamics 365 Ideas to Microsoft](#)

[Dynamics 365 Roadmap](#)

[Portal Supportability Defined](#)

[How to Determine Your Current Portal Version](#)

[Release Notes - Portal Capabilities for Microsoft Dynamics 365](#)