



Aras Enterprise Search 20

SaaS Installation Guide

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1 Introduction

Purpose

The Aras Enterprise Search 20 SaaS Installation Guide provides information for Aras DevOps and Enterprise subscribers to add Aras Enterprise Search to their Aras Innovator instance.

Scope

This document provides instructions for installing Aras Enterprise Search.

Target Audience

This document is intended for Aras DevOps users responsible for installing and configuring the applications and platform components for the Aras Innovator instance utilizing SaaS.

Prerequisites

Aras DevOps administrators or contributors must have an installed Aras Innovator instance prior to following the steps outlined in this document. It is recommended that all administrators read the *Aras DevOps – User Guide*, as it explains how to effectively utilize the Aras DevOps service included as part of the Aras Enterprise subscription to manage Aras Innovator customizations throughout the entire lifecycle of the Aras Innovator implementation.

2 Definitions

This section defines the terms used in this document.

Term	Definition
Code tree	The set of files that make up the application files for Aras Innovator.
Code tree patch	The set of files in an application installation package that should be applied to the code tree to install the code tree component of an application.
Config transformation	The transformation to be sourced into project repository corresponding to changes in configuration files of Aras Innovator code tree.
Import package	The set of XML files and the corresponding import.mf file that represent a package or set of packages that need to be installed to apply the database changes of an application.
Installation package	The set of files utilized to install an application that may include a code tree patch, an import package, and/or converters.
Platform Component	Aras Platform Components are not release specific and can be installed without a direct dependency of the installed Aras Innovator release.

3 Aras Enterprise Search Installation

Aras Enterprise Search is a platform component which is installed after Aras Innovator. Before installing Aras Enterprise Search, it is important to notify users that Aras Innovator will experience downtime. Additionally, it is important to create backups for the Aras Innovator code tree and database. Store these backup files securely, as these files will be necessary for restoring the system to its pre-installation state if installation fails.

Note: Aras Enterprise Search requires additional SaaS infrastructure that is not enabled by default. Before proceeding with the installation steps below, you should first request/confirm that infrastructure supporting Aras Enterprise Search is enabled on your Aras Innovator SaaS environment by contacting Aras Support.

3.1 Confirming the Aras Innovator Installation

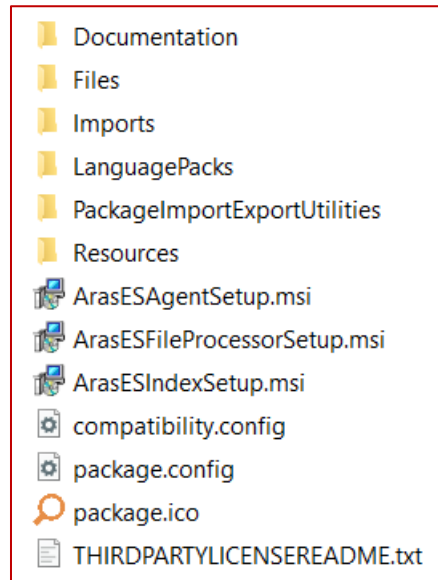
Use the following procedure to check if your Aras Innovator instance meets the minimum requirements to install Aras Enterprise Search

1. Log in to Aras Innovator as an administrator.
2. From the Main Menu select **Help → About**.
3. Confirm that the dialog shows one of the following:
 - a. Release 14
 - b. Release 15
 - c. Release 16
 - d. Release 17
 - e. Release 18
 - f. Release 19
 - g. Release 20
4. Close the dialog.
5. From the TOC, select **Administration\Variables**.
6. Confirm that the following variable is listed:

Version Major	Version Minor	VersionServiceUpdate	VersionLabel
14	0	0	Release 14
15	0	1	Release 15
16	0	2	Release 16
17	0	3	Release 17
18	0	4	Release 18
19	0	5	Release 19
20	0	6	Release 20

3.2 Installing Aras Enterprise Search

1. Download the **Aras Enterprise Search 20 CD Image** from the [Aras FTP](#) site.
2. Unzip the **Aras Enterprise Search 20 CD Image** on the local machine.



3. Go to the **Aras Enterprise Search 20 CD Image/Imports/ES_Core/** folder.
4. Copy the “**com**” folder into the into the `AML-packages` folder of the Work.git repository.

Note: Do not copy the `imports.mf` file, as it will overwrite the existing `imports.mf` file in the Work.git repository.

5. Go to the **Aras Enterprise Search 20 CD Image/Imports/** folder.
6. Copy the “**ES_Settings**” folder into the into the `AML-packages` folder of the Work.git repository.
7. Open the `imports.mf` file in the `AML-packages` folder of the Work.git repository.
8. Paste the following `<package>` elements into the `imports.mf` file of the Work.git repository.

```

<package name="com.aras.innovator.solution.ES_settings.Agent"
path="ES_Settings\Agent\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_settings.Crawler"
path="ES_Settings\Crawler\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.CAD"
path="ES_Settings\CAD\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.Customer"
path="ES_Settings\Customer\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.Document"
path="ES_Settings\Document\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.ECN"
path="ES_Settings\ECN\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.ECR"
path="ES_Settings\ECR\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.Manufacturer"
path="ES_Settings\Manufacturer\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package
name="com.aras.innovator.solution.ES_PLM_settings.Manufacturer_Part"
path="ES_Settings\Manufacturer_Part\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.Part"
path="ES_Settings\Part\Import" >
    <dependson name="com.aras.innovator.es" />
</package>
<package name="com.aras.innovator.solution.ES_PLM_settings.PartDocument"
path="ES_Settings\PartDocument\Import">
    <dependson name="com.aras.innovator.solution.ES_PLM_settings.Part" />
    <dependson name="com.aras.innovator.es" />
</package>

```

```

<package
name="com.aras.innovator.solution.ES_PLM_settings.PartPart_Goal"
path="ES_Settings\PartPart_Goal\Import">
  <dependson name="com.aras.innovator.solution.ES_PLM_settings.Part" />
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_PLM_settings.PR"
path="ES_Settings\PR\Import" >
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_PLM_settings.Product"
path="ES_Settings\Product\Import" >
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_PLM_settings.ProductModel"
path="ES_Settings\ProductModel\Import">
  <dependson name="com.aras.innovator.solution.ES_PLM_settings.Product"
/>
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_PLM_settings.Simple_ECO"
path="ES_Settings\Simple_ECO\Import" >
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_PLM_settings.Simple_MCO"
path="ES_Settings\Simple_MCO\Import" >
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_PLM_settings.Vendor"
path="ES_Settings\Vendor\Import" >
  <dependson name="com.aras.innovator.es" />
</package>

<package name="com.aras.innovator.solution.ES_settings.Variable"
path="ES_Settings\Variable\Import" />

```

9. Go to the **Aras Enterprise Search 20 CD Image/Files/** folder.
10. Copy the contents of the **“Innovator”** folder into the `\CodeTree\Innovator\` folder of the Work.git repository.
11. (Optional) If a **method-config.xml** file exists in the `\CodeTree\Innovator\Server\` folder of the Work.git repository, add the following `<name>` property to the `referencedAssemblies` section:

```

<name>$(binpath)/Aras.ES.dll</name>

```

```

4 4 <name>$(binpath)/Aras.Server.Core.dll</name>
5 5 <name>$(binpath)/Aras.TDF.Base.dll</name>
6 6 <name>$(binpath)/Aras.TDF.Base.Extensions.dll</name>
7 7 <name>$(binpath)/Conversion.Base.dll</name>
8 8 <name>$(binpath)/ConversionManager.dll</name>
9 9 <name>$(binpath)/FileExchangeService.dll</name>
10 10 <name>$(binpath)/IOM.dll</name>
11 11 <name>$(binpath)/Newtonsoft.Json.dll</name>
12 12 <name>$(binpath)/SixLabors.ImageSharp.dll</name>
13 13 <name>$(binpath)/Microsoft.Data.SqlClient.dll</name>
14 14 <name>$(binpath)/Aras.DynamicModelViewer.Core.dll</name>
15 15 <name>$(binpath)/Aras.DynamicModelViewer.DataModel.dll</name>
16 16 <name>$(binpath)/Aras.DynamicModelViewer.QueryProcessor.dll</name>
17 17 <name>Microsoft.Extensions.Logging.dll</name>
18 18 <name>Microsoft.Extensions.Logging.Abstractions.dll</name>
19 19 <name>$(binpath)/ConnectorServiceProxy.dll</name>
20 20 <name>System.ServiceModel.Primitives.dll</name>
21 21 <name>System.Private.ServiceModel.dll</name>
22 22 <name>$(binpath)/ServerLicenseValidator.dll</name>
23 23 <name>$(binpath)/Aras.Server.Core.Abstractions.dll</name>
24 24 <name>$(binpath)/Aras.Server.Workflow.Abstractions.dll</name>
25 25 <!-- Added for Minerva DataViewer -->
26 26 <name>$(binpath)/MDVExporter.dll</name>
27 27 <name>$(binpath)/Aras.ES.dll</name>
28 28 </ReferencedAssemblies>
29 29 <Support dialect="VB" template="VBScript" />
30 30 <Support dialect="VBScript" template="VBScript" />
31 31 <Support dialect="C#" template="CSharp" />
32 32 <Support dialect="CSharp" template="CSharp" />
33 33 <!-- This next one is an example, it has not been tested -->
34 34 <Template name="VBScript" line_number_offset="41"><![CDATA[
35 35 Imports Microsoft.VisualBasic
36 36 Imports System
37 37 Imports System.IO
38 38 Imports System.Text
39 39 Imports System.Xml
40 40 Imports System.Collections
41 41 Imports System.Collections.Generic

```

12. Go to the `/AmIDeploymentScripts/1-BeforeAmIPackagesImport/` folder and create a new file named `00{revision_num}_Integrate_ES.xml`

Note: `{revision_num}` should be specified based on the number of scripts that already exist inside the folder (i.e. - If 01 and 02 exist, then file name should be **0003_Integrate_ES.xml**)

```

1 <AML>
2 | <Item type="CommandBarSectionItem" id="F75AE7CD3F9454E9F98944B2C6AD893" action="edit">
3 | | <action>Add</action>
4 | </Item>
5 </AML>

```

13. Paste the following AML into the file:



```
<AML>
  <Item type="CommandBarSectionItem"
id="F75AE7CDA3F9454E9F98944B2C6AD893" action="edit">
  <action>Add</action>
  </Item>
</AML>
```

- Open the `/AML-packages/com/aras/innovator/es/User/ES Admin.xml` file. Set `logon_enabled` to 1.

- Stage and review the changes to ensure that no customizations are overwritten.
- Commit the changes.
- Run the “**continuous-integration**” pipeline.
- Run the “**deploy-innovator**” pipeline to complete the installation.

4 Enterprise Search Configuration

Refer to the Aras Enterprise Search 20 – Administrator Guide for details and instructions on managing Indexed Items and starting the Aras Enterprise Search Crawlers.

5 Troubleshooting

5.1 Accessing Solr

To access Solr from your Aras SaaS environment, use Solr's Basis Authentication Plugin endpoint (admin/authentication): `10.0.3.68:8983/solr/admin/authentication`