



Interchange Background Processor Setup Options

What does the background process do?

- Triggering of workflow of Form Submissions (Workflow options - All stages)
- Sends email notifications of Form Submissions (Notification option)
- Creation of Form Submission Data exports and emailing of links to the form submission exports
- Flushes Cache around Form Submission Counts when a new Form Submission exists

SMTP configuration – interchange.settings.config

This is required for Emailing of Form Submission – Notification option, and also sending emails with links to the Form Submission Data Exports.

```
<add key="akumina:SMTPHost" value="" />
<add key="akumina:SMTPUser" value="" />
<add key="akumina:SMTPPassword" value="" />
<add key="akumina:SMTPPort" value="" />
```

Generating Encrypted Password when NOT using KeyVault

Execute

```
Akumina.Interchange.BackgroundProcessor.exe encrypt myplaintextpassword > encryptedpassword.txt
```

Contents of encryptedpassword.txt, the value goes into interchange.settings.config

```
Encrypting value myplaintextpassword
Result =>
AQAAANCMnd8BFdERjHoAwE/Cl+sBAAAAcKrAUacNm0+JoEFgKVhV/AQAAAAC
AAAAAAQZgAAAAEAACAAAADbL5sQ+6GDbLY2WzOER4y3F8wd8AN1K5LTh/7
uS1LcRgAAAAA0gAAAAIAACAAAABQZuHKQDOtF8X3rVYUlfXoe7Zm2pokebIU
MCY9rChIvDAAAAC9rQzD5LGENqLmJjq3vj9GJS/4WHPd5wvHUszn3u2HKbuavw
MB2ycDei1b0xqpVptAAAAAn+rdxCSXmM7fbWC8UNOfABHsAjYB8nYlzVAfHK3Z
0F3liP5ihoGm1XBZD0A/EKNmP5uYfORnqwTuRbdjdcPow==
```

There are 3 ways to configure the background processor

1. Within the local interchange web context
 - a. Does not use Console App
 - b. Configuration Handled within interchange.settings.config only
2. Azure Web Jobs
 - a. Uses Console App
 - b. Configuration Handled within both the App.config and interchange.settings.config
3. Scheduled Task
 - a. Uses Console App
 - b. Configuration Handled within both the App.config and interchange.settings.config

Option 1) Configuring the Background Processor within the local interchange web context using interchange.settings.config

**Note: If Interchange is running as an Azure WEB site, you must use the keyVault password mode, see below for interchange.settings.config key/values*

interchange.settings.config

```
<!-- this is the SHAREPOINT user who initiates the background process calls -->
<add key="akumina:BackgroundUser" value="user@tenant.onmicrosoft.com" />

<!-- set this encrypted password, see documentation on how generate the
encrypted value from your actual password, this key is NOT used if you set
BackgroundPasswordMode to keyvault -->
<add key="akumina:BackgroundPassword" value="password from
backgroundprocessor.exe console app" />
<!-- submission tracker key needs to match whatever you set in the background
processor configuration, if you are using EnableLocalSubmissionsTracker to true,
the SubmissionTrackerKey set once to a RANDOM GUID -->
<add key="akumina:BackgroundProcessorKey" value="GUID INPUT HERE"/>

<!-- This needs to be set to true for Forms functionality if you are not
setting up the background processor from AzureWeb Jobs or a Scheduled Task, the
Interchange website will handle the background process -->
<add key="akumina:EnableLocalSubmissionsTracker" value="true"/>

<!-- possible settings are protecteddata or keyvault - if you are using
keyvault please see documentation on how to set this up, keyvault is required if
you are using Azure WEB instance with an External background processor -
possible values: protecteddata/keyvault -->
<add key="akumina:BackgroundPasswordMode" value="protecteddata"/>
```

Option 2/3) Configuring the Background Processor for Scheduled Task / Azure Web Jobs

*Note: If Interchange is running as an Azure WEB site, you must use the keyVault password mode, see below for interchange.settings.config key/values

App.config

```
<!-- this is the your Interchange URL -->
<add key="akumina:InterchangeUrl" value="https://urltointerchange.com" />

<!-- Request timeout, set to 30 seconds, if the request takes more than 30
seconds then the connection is dropped, this is to prevent overloading the
server -->
<add key="akumina:BackgroundRequestTimeout" value="30000"/>

<!-- BackgroundProcessorKey needs to match whatever you set in your
interchange.settings.config, set once to a RANDOM GUID -->
<add key="akumina:BackgroundProcessorKey" value="RANDOM GUID TO MUST MATCH THE
VALUE IN THE INTCHANGE.SETTINGS.CONFIG"/>

<!-- Number of form submissions to process each time the console app is run -->
<add key="akumina:SubmissionsTrackerBatchSize" value="1"/>
```

Interchange.settings.config

```
<!-- this is the SHAREPOINT user who initiates the background process calls -->
<add key="akumina:BackgroundUser" value="user@tenant.onmicrosoft.com" />

<!-- set this encrypted password, see documentation on how generate the
encrypted value from your actual password, this key is NOT used if you set
BackgroundPasswordMode to keyvault -->
<add key="akumina:BackgroundPassword" value="password from
backgroundprocessor.exe console app, be sure to run on same machine as
interchange" />

<!-- submission tracker key needs to match whatever you set in the background
processor configuration, if you are using EnableLocalSubmissionsTracker to true,
the SubmissionTrackerKey set once to a RANDOM GUID -->
<add key="akumina:BackgroundProcessorKey" value="GUID INPUT HERE"/>

<!-- This needs to be set to true for Forms functionality if you are not
setting up the background processor from AzureWeb Jobs or a Scheduled Task, the
Interchange website will handle the background process -->
<add key="akumina:EnableLocalSubmissionsTracker" value="false"/>

<!-- possible settings are protecteddata or keyvault - if you are using
keyvault please see documentation on how to set this up, keyvault is required if
you are using Azure WEB instance with an External background processor -
possible values: protecteddata/keyvault -->
<add key="akumina:BackgroundPasswordMode" value="protecteddata"/>
```

Interchange running as an Azure WEB site specific settings

Interchange.settings.config

```
<!-- this is the SHAREPOINT user who initiates the background process calls -->
<add key="akumina:BackgroundUser" value="user@tenant.onmicrosoft.com" />

<!-- submission tracker key needs to match whatever you set in the background
processor configuration, if you are using EnableLocalSubmissionsTracker to true,
the SubmissionTrackerKey set once to a RANDOM GUID -->
<add key="akumina:BackgroundProcessorKey" value="GUID INPUT HERE"/>

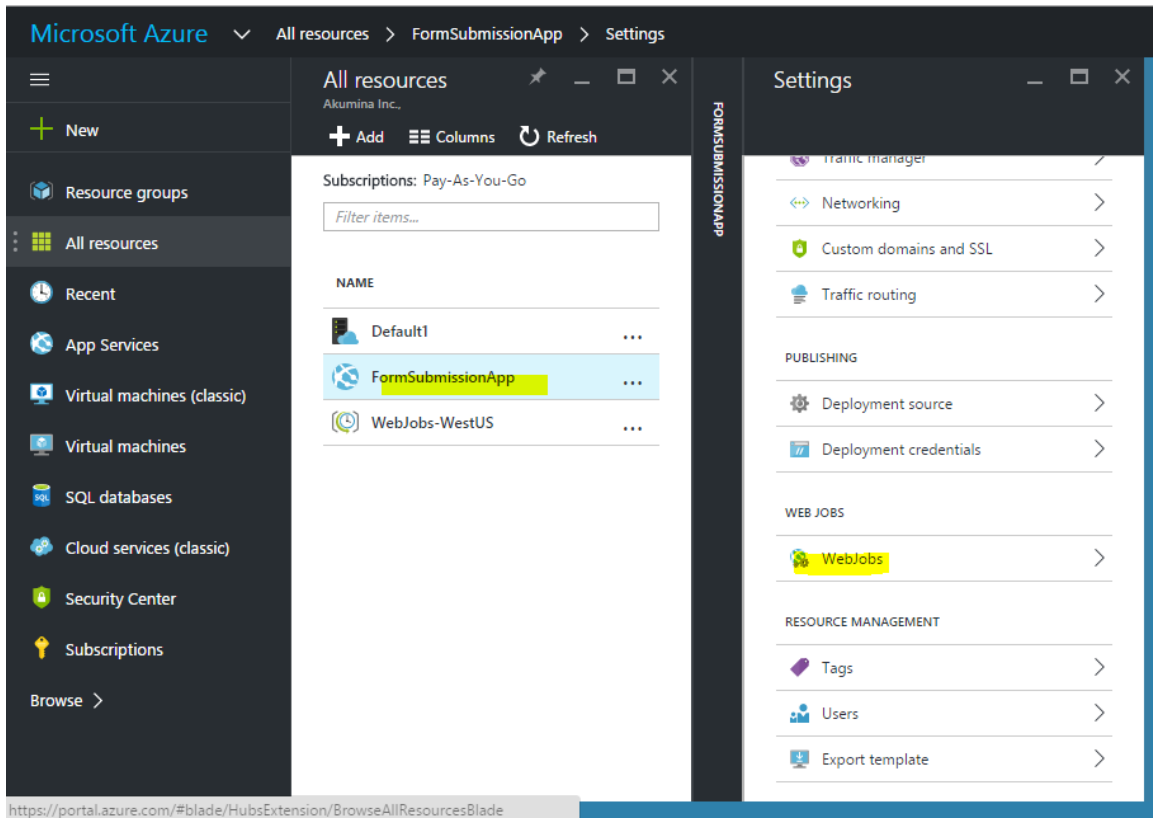
<!-- This needs to be set to true for Forms functionality if you are not
setting up the background processor from AzureWeb Jobs or a Scheduled Task, the
Interchange website will handle the background process -->
<add key="akumina:EnableLocalSubmissionsTracker" value="false"/>

<!-- possible settings are protecteddata or keyvault - if you are using
keyvault please see documentation on how to set this up, keyvault is required if
you are using Azure WEB instance with an External background processor -
possible values: protecteddata/keyvault -->
<add key="akumina:BackgroundPasswordMode" value="keyvault"/>

<!-- See Azure Keyvault Setup Document -->
<add key="akumina:KeyVaultClientId" value="" />
<add key="akumina:KeyVaultClientSecret" value="" />
<add key="akumina:KeyVaultSecretUri" value="" />
```

Configuring Azure Web Jobs – to run every minute (see CRON syntax)

1. Open the BackgroundProcessor.zip
2. Make changes to BackgroundProcessor.config (app.config) detailed above
3. Zip the contents of this directory into a new .zip file
4. Create a Web Application on Azure (App Service on new Azure Portal) – use the one that already exists for hosting Interchange
5. Go to WebJobs and Add a new web job



6. Specify the Web Job name, upload .zip file of the console app debug directory, set type to “triggered” and set the schedule using CRON expression, Click OK. The example below will execute every minute. (0 */1 * * * *)

Add WebJob

formsubmissionapp



* Name ⓘ



File Upload



Type ⓘ





Scheduled jobs will be executed based on the provided CRON expression.

Triggers ⓘ



* CRON Expression ⓘ



Scale ⓘ

