

# CHEWSOFT TASK SCHEDULER

## HELP GUIDE



//chewonthis software

## 1. CONTENTS

Help Guide .....	1
1. Contents .....	2
2. Introduction.....	3
3. Installation .....	4
3.1 Pre-Requisites .....	4
3.2 Installation Process .....	4
4. Configuring the Task Scheduler .....	5
4.2 Help!.....	9
5. Assigning Permissions to the Task Scheduler .....	10
6. Creating a Scheduled Task .....	12
6.2 Selecting Target Records.....	12
6.3 Create a Scheduling Pattern.....	13
6.4 Review Scheduled Task .....	13
6.5 Scheduled Task Execution History.....	14

## 2. INTRODUCTION

Welcome to the ChewSoft Task Scheduler for Dynamics 365. This document will guide you through the process of installing and configuring the Task Scheduler for your instance of Dynamics 365.

Before you begin, this guide assumes you have System Administrator experience of Dynamics 365 and an understanding of the process around publishing customizations. If these concepts are new to you we recommend you familiarize yourself with these concepts first before installing the task scheduler.

Alternatively, you can purchase a Premium Support Package from Chewonthis Software Ltd and one of our support team will guide you through the process.

## 3. INSTALLATION

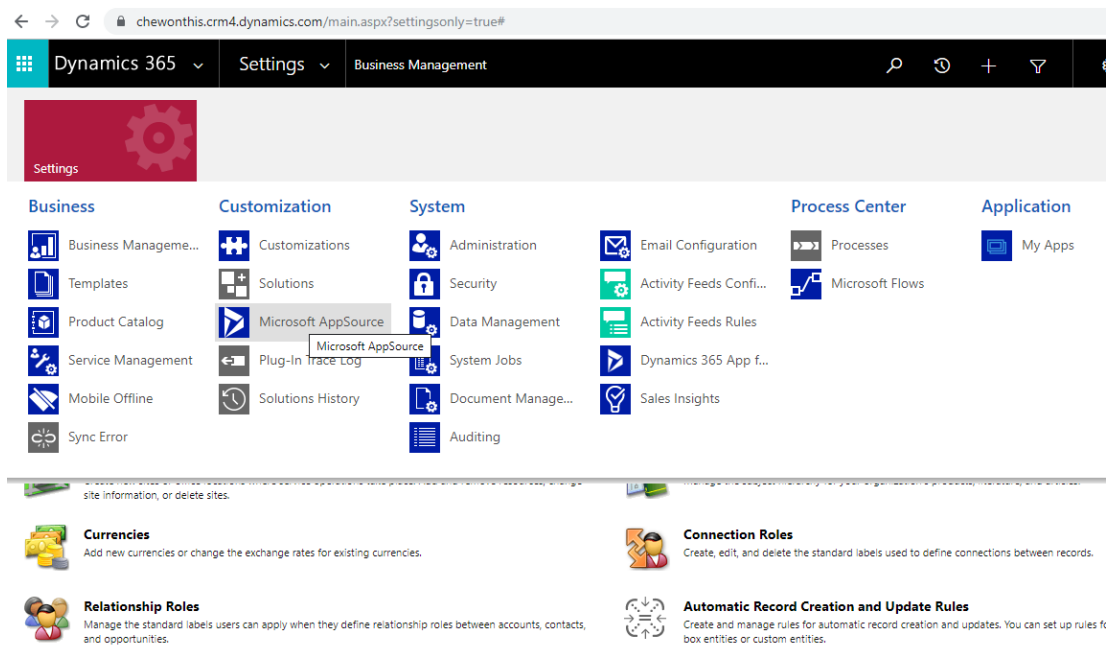
### 3.1 PRE-REQUISITES

Before beginning the installation process, ensure you have the following:

- An instance of Dynamics 365 CE and a user account with System Administrator permissions
- A user account with permissions to register an application within Azure Active Directory. EG. A tenant administrator

### 3.2 INSTALLATION PROCESS

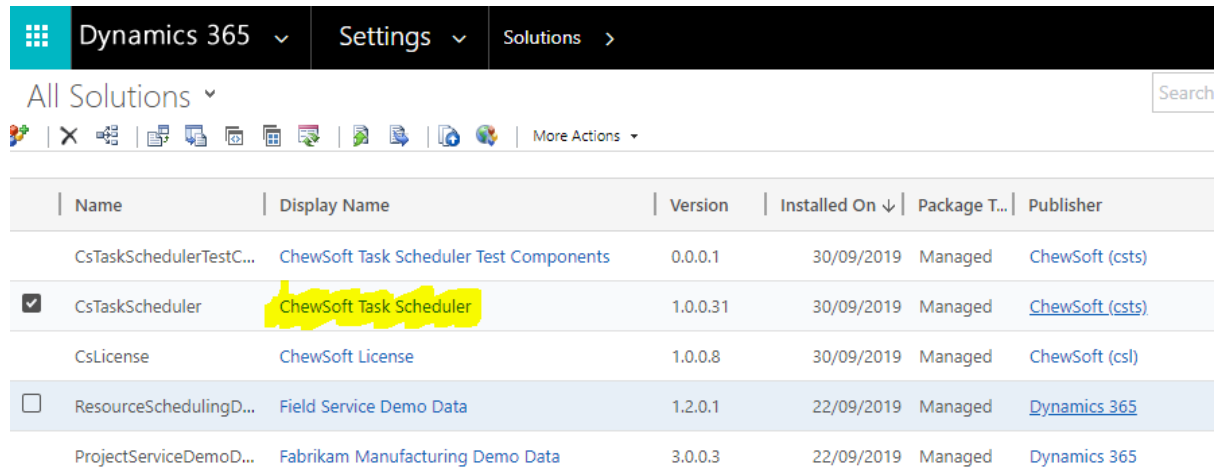
1. Open Dynamics 365 and navigate to Advanced Settings
2. From the menu, select Microsoft AppSource
3. In the App Source window that opens, search for Task Scheduler.
4. On the ChewSoft Task Scheduler select "Free Trial" and follow the installation steps.



## 4. CONFIGURING THE TASK SCHEDULER

Once the installation process has completed, the task scheduler must be configured.

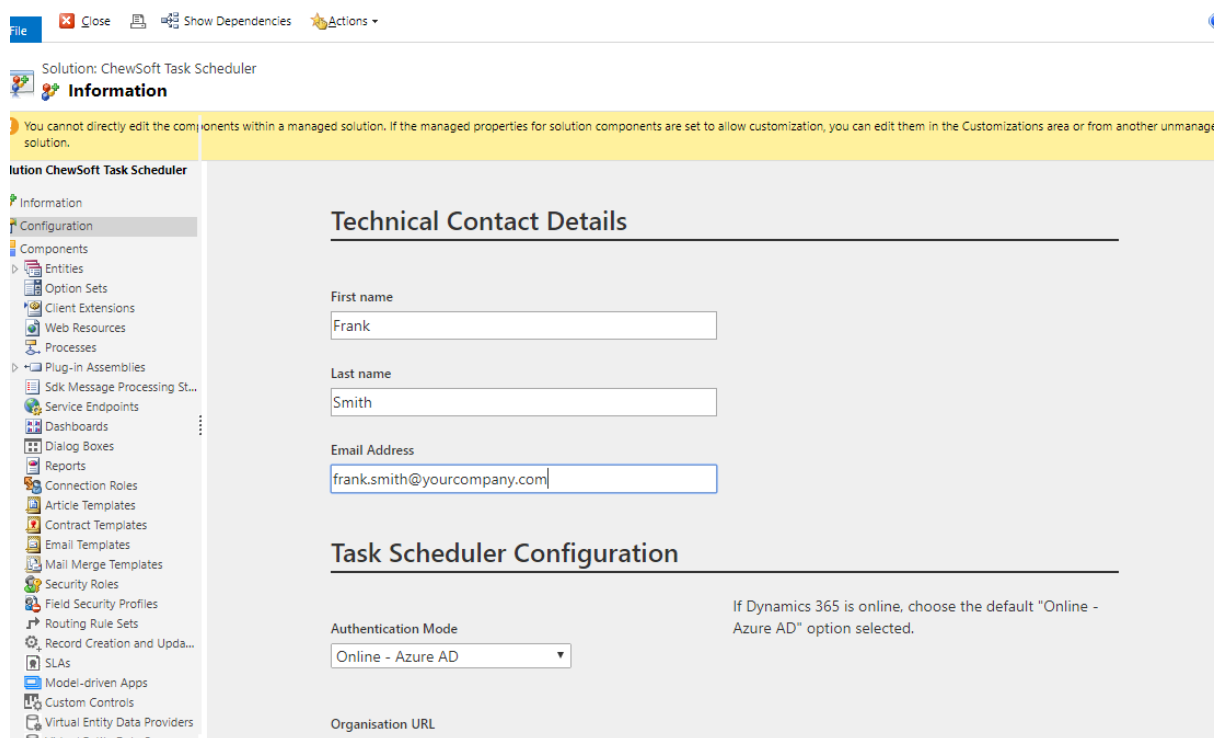
1. In Dynamics 365, Navigate to Advanced Settings
2. From the menu, select Solutions.
3. In the list of solutions, double click the entry for “ChewSoft Task Scheduler”



The screenshot shows the Dynamics 365 interface with the 'Solutions' menu open. A table lists installed solutions. The 'CsTaskScheduler' solution is highlighted in yellow.

Name	Display Name	Version	Installed On	Package T...	Publisher	
CsTaskSchedulerTestC...	ChewSoft Task Scheduler Test Components	0.0.0.1	30/09/2019	Managed	ChewSoft (csts)	
<input checked="" type="checkbox"/>	CsTaskScheduler	ChewSoft Task Scheduler	1.0.0.31	30/09/2019	Managed	ChewSoft (csts)
	CsLicense	ChewSoft License	1.0.0.8	30/09/2019	Managed	ChewSoft (csl)
<input type="checkbox"/>	ResourceSchedulingD...	Field Service Demo Data	1.2.0.1	22/09/2019	Managed	Dynamics 365
	ProjectServiceDemoD...	Fabrikam Manufacturing Demo Data	3.0.0.3	22/09/2019	Managed	Dynamics 365

4. In the window that opens, enter your organisation’s technical contact details for the Task Scheduler.



The screenshot shows the 'Solution: ChewSoft Task Scheduler' configuration window. The 'Information' tab is active, displaying 'Technical Contact Details' and 'Task Scheduler Configuration'.

**Technical Contact Details**

First name:

Last name:

Email Address:

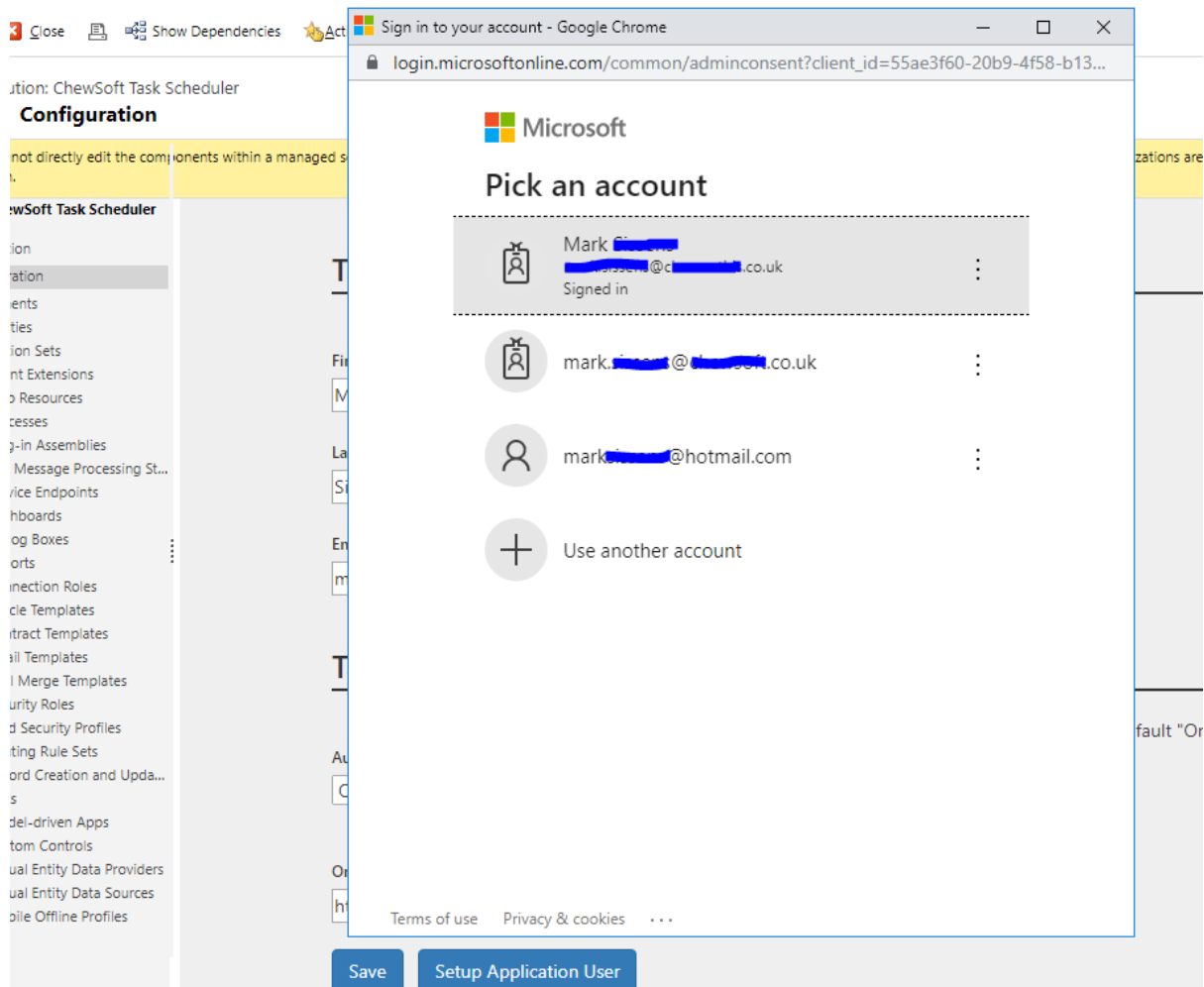
**Task Scheduler Configuration**

Authentication Mode:  (If Dynamics 365 is online, choose the default "Online - Azure AD" option selected.)

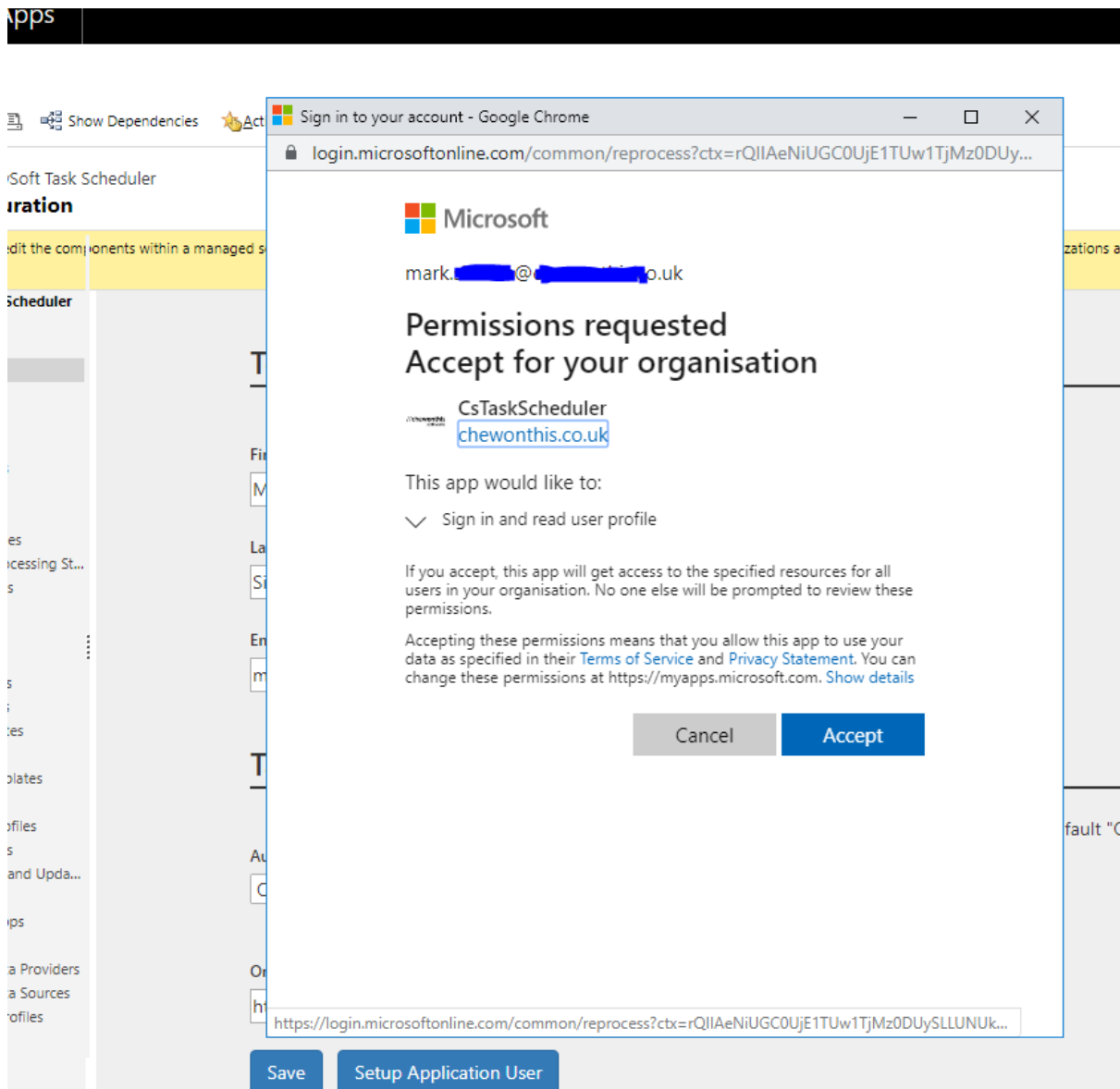
Organisation URL:

5. Leave the Authentication Mode as “Online – Azure AD”
6. Check the Organisation URL is set correctly for the current instance of Dynamics 365.
7. Click Save.

8. A new window will open prompting you to login. Login with a user account that has administrator permissions on the Azure Active Directory Dynamics 365 is linked to.

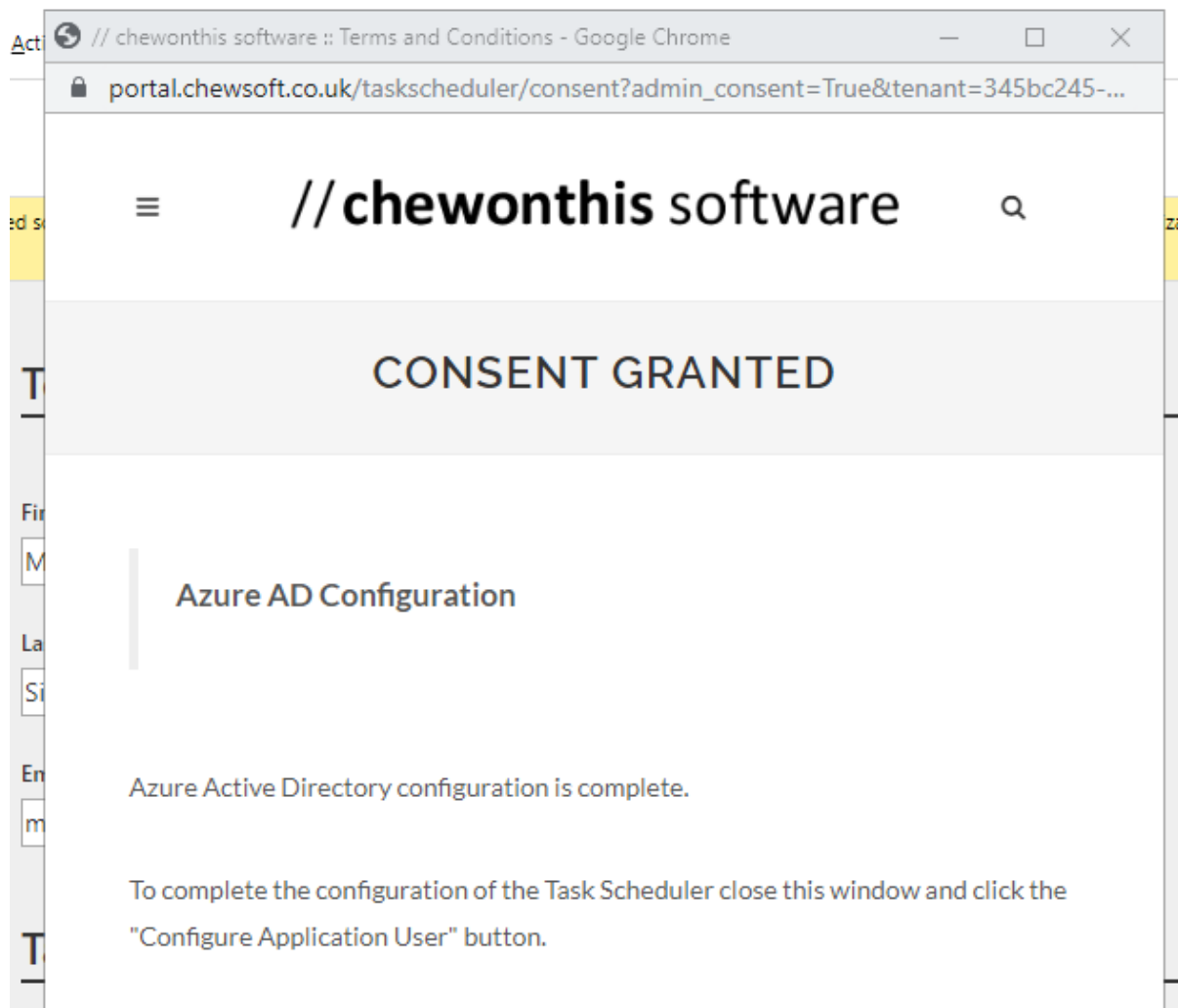


9. You will be prompted to Accept granting permission to the Task Scheduler Service to be registered within your Azure Active Directory. Click Accept.



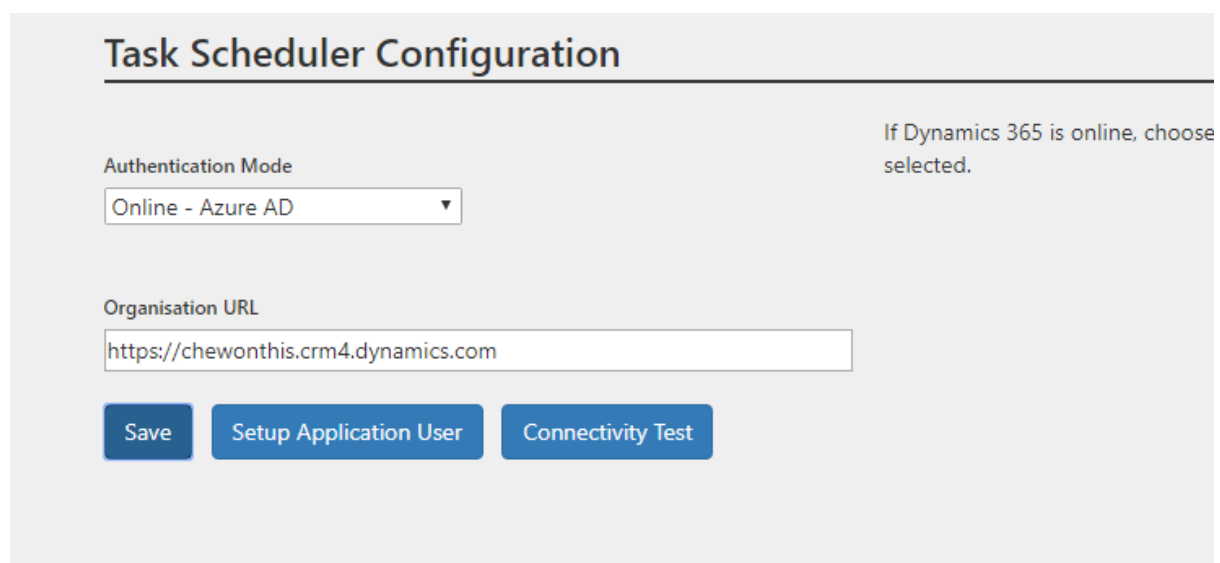
***NB. AT THIS POINT YOU ARE REGISTERING THE TASK SCHEDULER SERVICE ACCOUNT WITHIN YOUR AZURE ACTIVE DIRECTORY. HOWEVER, IT DOES NOT HAVE ANY PERMISSIONS WITHIN DYNAMICS 365 UNTIL YOU GRANT IT THE NECESSARY PERMISSIONS. THIS IS DONE IN THE FOLLOWING STEPS.***

10. Once you have successfully granted permissions a "Consent Granted" message is displayed.



11. Close this window by clicking the x in the top right corner.

12. On the Task Scheduler configuration page, now click the "Setup Application User" button.





**CLICKING THIS BUTTON ASSIGNS THE TASK SCHEDULER SERVICE ACCOUNT PERMISSIONS TO EXECUTE SCHEDULED TASKS. HOWEVER, IT DOES NOT YET HAVE ACCESS TO ANY DATA WITHIN DYNAMICS 365 EXCEPT THE CUSTOM ENTITIES INCLUDED IN THE TASK SCHEDULER SOLUTION. IN ORDER TO ENABLE THE TASK SCHEDULER TO TRIGGER WORKFLOWS ON OTHER ENTITIES IN DYNAMICS 365 YOU MUST ASSIGN A SECURITY ROLE WITH THE PERMISSION TO DO THIS. THIS WILL BE COVERED IN A SUBSEQUENT STEP.**

13. Next Click the “Connectivity Test” button. Check the test is successful. If the test is not successful, review the error message and then repeat the associated steps in this process related to the failure.

14. Configuration of the Scheduler is now complete. Close the Task Scheduler window.

---

## 4.2 HELP!

*If you are unable to successfully complete the installation process, please click the “Support Request” link to raise a ticket. One of our technical support team will contact you directly.*

### Contact Details

---

<input type="text"/>	<b>Quick Links</b>
<input type="text"/>	<a href="#">Help Guide</a>
<input type="text"/>	<a href="#">Support Request</a>
<input type="text"/>	<a href="#">Purchase License</a>
<input type="text"/>	<a href="#">Upgrade Solution</a>
<input type="text" value="ewonthis.co.uk"/>	

## 5. ASSIGNING PERMISSIONS TO THE TASK SCHEDULER

Before you can create your first scheduled task, you must provide the Task Scheduler Service account the permissions it requires in Dynamics 365 to select the target records for the task and execute the target workflow.

This is done by applying a role with the necessary permissions to the service account:

1. In Advanced Settings, navigate to “Security” from the menu.
2. On the page that is displayed, click “Users”

**Users**  
Add new users. Edit information about users and deactivate user records. Manage the teams, roles, and licenses assigned to users.

**Teams**  
Add new teams.

**Security Roles**  
Create new security roles. Manage and delete existing security roles for your organization.

**Business**  
Add new

**Field Security Profiles**

3. Next, double click the “Task Scheduler” user account from the list of Enabled Users.

Enabled Users

<input type="checkbox"/>	Full Name ↑	Site	Business Unit	Title	Position	Main Phone
	[REDACTED]		chewonthis	[REDACTED]		[REDACTED]
	Microsoft Forms Pro		chewonthis			
	PowerApps Checker Application		chewonthis			
	Task Scheduler		chewonthis			

4. From the menu, click “Manage Roles”.

USER Task Scheduler

The information provided in this form is viewable by the entire organization.

Summary

Account Information	
User Name *	CsTaskScheduler@che

User Information	
Full Name *	Task Scheduler
Title	.....

POSTS

Enter post here

**POST**

All posts | Auto posts | User posts

TEAMS
Team Name ↑
chewonthis

5. In the “Manage User Roles” window, select a Role with the permissions required to read and trigger on demand workflows for the types of record you wish to create scheduled tasks for.

## Manage User Roles

What roles would you like to apply to the 1 User you have selected?

Role Name	Business Unit
<input type="checkbox"/> Relationship Insights Admin	chewonthis
<input type="checkbox"/> Resource Manager	chewonthis
<input checked="" type="checkbox"/> Sales Manager	chewonthis
<input type="checkbox"/> Sales, Enterprise app access	chewonthis
<input type="checkbox"/> Salesperson	chewonthis
<input type="checkbox"/> Schedule Manager	chewonthis
<input type="checkbox"/> Scheduled Task Administrator	chewonthis

**NB. DO NOT APPLY THE SYSTEM ADMINISTRATOR OR SYSTEM CUSTOMIZER ROLE TO THE SERVICE ACCOUNT.**

6. Click OK.

## 6. CREATING A SCHEDULED TASK

As a System Administrator or a Scheduled Task Administrator:

1. Navigate to Advanced Settings and click “Scheduled Tasks” from the menu
2. Click “New” to create a new scheduled task.
3. Enter the name of the task. EG. Calculate Monthly Invoice
4. Select a Workflow to execute.
5. Click Save

The screenshot displays the Dynamics 365 user interface for configuring a scheduled task. The top navigation bar shows 'Dynamics 365', 'Settings', and 'Scheduled Tasks > Calculate Monthly In...'. Below the navigation bar is a toolbar with options: NEW, DEACTIVATE, DELETE, ASSIGN, SHARE, EMAIL A LINK, RUN WORKFLOW, START DIALOG, and FLOW. The main content area is titled 'SCHEDULED TASK : INFORMATION' and 'Calculate Monthly Invoice'. It features a 'Status Reason' section with 'Enabled' and a 'General' section. The 'General' section is divided into 'Task Details' and 'Task Summary'. 'Task Details' includes fields for Name (Calculate Monthly Invoice), Workflow (Append Date to Account Website (CsTaskScheduler Test)), Status Reason (Enabled), and Owner (Mark Sissens). 'Task Summary' includes fields for Next Execution and Last Execution. To the right, the 'Target Records' section has fields for Target Type and Estimated Count. Below this is a 'Schedule' section with a search bar and a table header with columns: Name ↑, Frequency, and Next Execution. The table content shows 'No Scheduling Patterns found for this Scheduled Task. Select Add (+).'

### 6.2 SELECTING TARGET RECORDS

The target records section identifies the records for which the workflow will be executed.

There are two options:

- Single Record
- Fetch XML Query

#### 6.2.1 SINGLE RECORD

If you select the single record option, you will be prompted to:

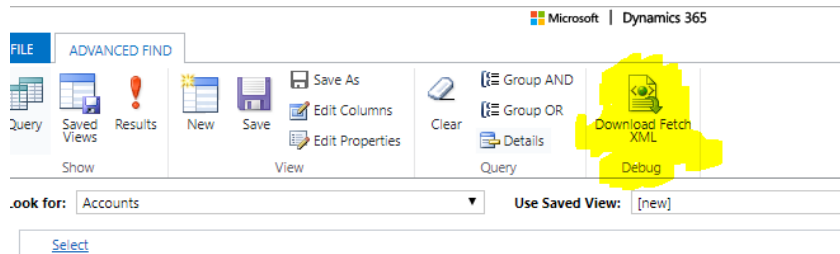
1. Enter the logical name and ID of the record for which the workflow should be executed. EG. account, B56B3F4B-1BE7-E611-8101-E0071B6AF231
2. Click Save

#### 6.2.2 FETCH XML QUERY

If you select the Fetch XML Query option, you will be prompted to enter a Fetch XML Query to identify the target records the workflow is to be triggered for.

The simplest way of creating a Fetch XML Query is to:

1. Open Advanced Find in Dynamics 365 and create the query you require.
2. Click the “Download Fetch XML” button from the menu.



3. Open the downloaded file in notepad and copy the text.
4. Paste the text into “Target Fetch XML Query” field.
5. Click Save

*NB. The Task Scheduler will update the Fetch XML statement to remove any data fields it does not require. This helps protect your data and enhances the performance of the scheduler.*

---

### 6.3 CREATE A SCHEDULING PATTERN

A single task can be executed on any combination of schedules required. For example, you may choose to execute your task on every Wednesday at 11am and also the last Sunday of the month at 2pm. The Task Scheduler allows you to create as many scheduling patterns as you require and to apply these in combination.

To create a new scheduling pattern for your task:

1. Click the + button on the “Schedule” section of the form.
2. Enter the name of the scheduling pattern EG. Working Day schedule
3. In the Frequency drop down, select the frequency with which you would like to trigger this task. EG. Weekly.
4. Change the status reason to “Enabled”
5. Select the start time for the first time this pattern should fire.
6. Click the Weekly tab to enter the weekly specific recurrence values. For example, select the days of the week this schedule should be triggered on. For example, for week days select Monday, Tuesday, Wednesday, Thursday, Friday.
7. Click Save

---

### 6.4 REVIEW SCHEDULED TASK

Open the scheduled task and confirm the task is Enabled and has a “Next Execution” date time specified.

EW DEACTIVATE DELETE ASSIGN SHARE EMAIL A LINK RUN WORKFLOW START DIALOG FLOW ...

SCHEDULED TASK : INFORMATION

Calculate Monthly Invoice

Status Reason: Enabled

Next Execution: 21/10/2019 06:30

General

Task Details		Target Records	
Name *	Calculate Monthly Invoice	Target Type	Fetch XML Query
Workflow *	Append Date to Account Website (CsTaskScheduler Test)	Estimated Count	7,500
Status Reason	Enabled	Target Fetch XML Query *	<fetch version="1.0" output-format="xml-platform" mapping="logical" distinct="false"> <entity name="account"><attribute name="accountid" /><order attribute="name" descending="false" /></entity></fetch>
Owner *	Mark Sissens		

## 6.5 REVIEW TASK EXECUTION HISTORY

Each time your scheduled task is executed, an Execution History record is created to track the status of the scheduled task. You can find these records in the Execution History section of the Scheduled Task form.

2 PM Every Working Day	Daily	17/10/2019 14:00	
Overnight Schedule	Daily	17/10/2019 00:45	

Execution History

Created On ↓	Execution Status	Execution Count	Error Message
17/10/2019 00:45	Succeeded	8,500	
16/10/2019 14:00	Succeeded	9,999	
16/10/2019 00:45	Succeeded	9,999	
15/10/2019 14:00	Succeeded	9,999	