



Fathym Framework Registration

Fathym's low-code framework is designed to give developers the freedom and best practice workflows to rapidly create IoT and data-driven applications that are agnostic to tools, platforms and clouds. The framework drastically cuts down development time by applying and automating a set of best practices. The cloud infrastructure Fathym uses is Microsoft Azure. You can set up an automated, enterprise-grade, Azure-hosted environment with just a few clicks.

The Fathym Framework configures the following for your organization:

- Configures an enterprise-scalable, cost-effective infrastructure on the Azure cloud (free for 30 days)
- Deploys an SSL certificate for a secured application host
- Manages Azure, other clouds, and legacy infrastructure with our enterprise orchestration tools

Additionally, the Fathym Framework does the following for your organization's DevOps:

- Connects with your Azure DevOps instance and assists managing your code, builds, releases, and more
- Sets up Git-based source control for your infrastructure and connect it to builds for auto-deploying to Azure



Setting up the Fathym Framework includes the following topics:

- [Set up your Azure account](#)
- [Configure your organization's details](#)
- [Connect your Azure account to Fathym](#)
- [Configure your organization's host](#)
- [Accept the terms and conditions](#)
- [Review and launch](#)

Prerequisites

Before setting up the Fathym Framework you will need to [set up a Microsoft account](#) for your organization so Fathym can connect with Microsoft Azure.

Important: In order to have access to the necessary permissions and settings required for setup in Azure, your Azure account needs to be at the administrator level.

Why an organization instead of an individual? Using organizational-level credentials allows multiple contributors on your team to access your organization's account.

Set Up Your Azure Account

Setting up your Azure account includes the following tasks:

- Create a new registration
- Set up a contributor role
- Generate an app auth key

Create a New Registration

1. From the [Azure portal](#), select **Azure Active Directory**.
2. From the left menu pane, select **App registrations**, then click **+New Registration**.



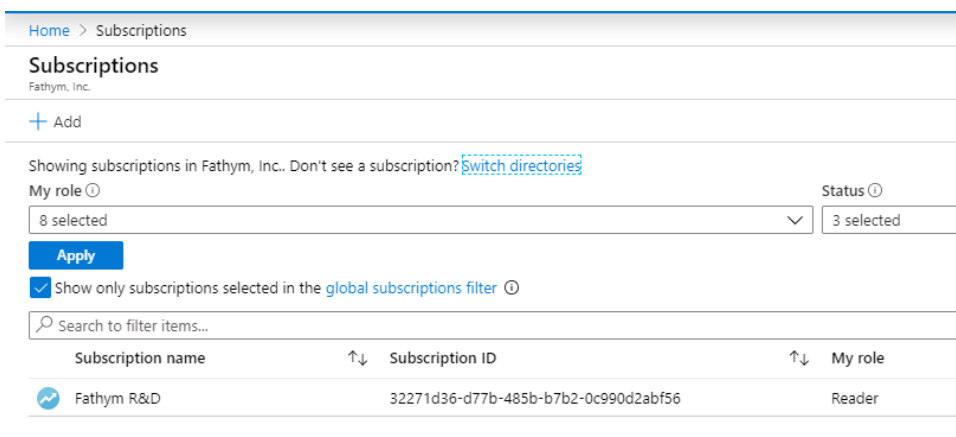
3. On Register an application, complete the following fields:
 - Name
 - This is your Display Name value.
 - Supported Account Types
 - Select the *Accounts in this organizational directory only* option.
 - Redirect URI
 - Enter a web value, for example, <https://www.yourcompany.com>.
4. Click **Register**.

Close this pane using the X in the upper-right corner. Your application should display on the App registrations page under the Owned Applications tab.

Set Up an Azure Contributor Role

You will need to connect your Azure registration with your account.

1. From the Azure portal home page, select **Subscriptions**. Alternatively, you can type *subscriptions* in the search box at the top of the page.
2. On the Subscriptions page, select a valid subscription for your organization.



The screenshot shows the Azure portal 'Subscriptions' page for 'Fathym, Inc.'. It includes a '+ Add' button, a filter section with 'My role' (8 selected) and 'Status' (3 selected) dropdowns, an 'Apply' button, and a checkbox for 'Show only subscriptions selected in the global subscriptions filter'. Below is a table with columns for Subscription name, Subscription ID, and My role.

Subscription name	Subscription ID	My role
Fathym R&D	32271d36-d77b-485b-b7b2-0c990d2abf56	Reader

3. On the left pane menu, select **Access control (IAM)**.
4. On the Access control (IAM) page, select the **Role assignments** tab.
5. Click **+ Add**, then select **Add role assignment**.
6. On the Add role assignment pane on the right, select **Contributor** for the Role field.



7. Select **Azure AD user, group, or service principal** for the Assign access to field.
8. Select the registration you created in the previous section for the Select field.
9. Click **Save**.

You should see a banner popup confirming the role assignment, and the new contributor you added should display on the main section of the screen.

Generate an App Auth Key

To generate the value for the Azure App Auth key:

1. From the left menu pane of your organization's App Registration page in Azure, select **Certificates & secrets**.

A client secret is an alphanumeric string Azure uses to verify its identity when requesting a token.

2. In the Client secrets section, click **+ New client secret**.
3. Enter a useful description, specify the expiration date, then click **Add**.
 - Example description: Fathym Platform Key.

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

[+ New client secret](#)

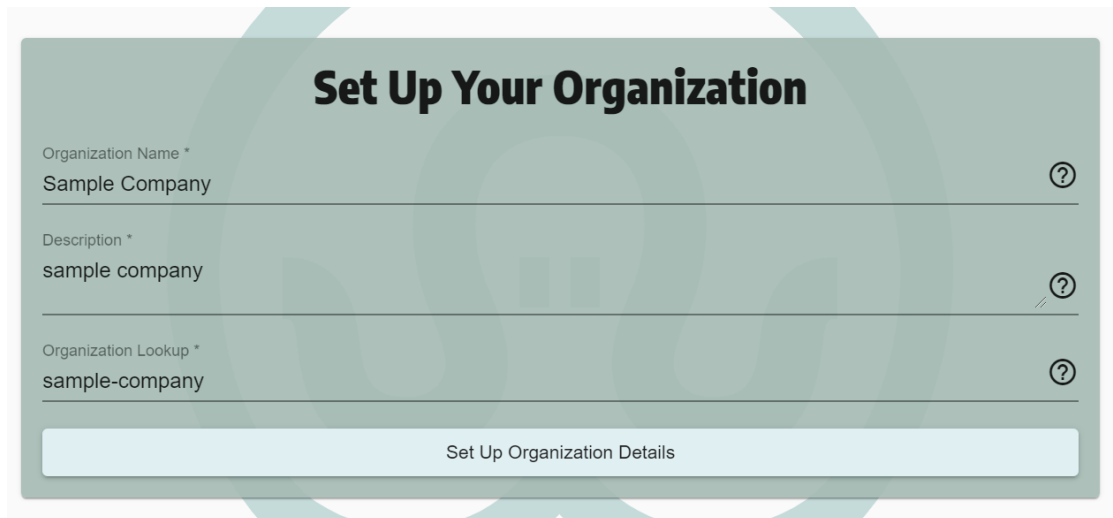
Description	Expires	Value		
sample-secret	1/22/2021	u@EYd7?@G@3qIQ3NLZ0UDgFAI@0@WAXM		
test-secret	1/22/2021	Yeb?v/T@f-0vWkU9OJSNBjYnJR8Eia8:		

Later in this setup process you will be asked to copy this value. However, do not copy it at this point—once you copy the secret's value it is not retrievable again.



Configure Your Organization's Details

1. Navigate to fathym-int.com/setup/ and log in with your Microsoft credentials.
2. On Organization Details, complete the following required fields:
 - Organization Name
 - Enter a unique name. This name should match the value you used in the *Create a New Registration* section for the Display Name field.
 - Description
 - Enter a useful description for your organization.
 - Organization Lookup
 - This value is used throughout your organization's assets that Fathym sets up. Valid characters are lower-case letters and hyphens (-).



The screenshot shows a web form titled "Set Up Your Organization". It contains three input fields, each with a question mark icon to its right. The first field is labeled "Organization Name *" and contains the text "Sample Company". The second field is labeled "Description *" and contains the text "sample company". The third field is labeled "Organization Lookup *" and contains the text "sample-company". Below these fields is a light blue button with the text "Set Up Organization Details".

3. Click **Set Up Organization Details**.


Connect Your Azure Account to Fathym

1. From the [Azure portal](#), select **Azure Active Directory**.
2. From the left menu pane, select **App registrations**.
3. Under Display Name, select your organization.
4. Hover over each value to invoke the copy function.



5. Paste the value of each ID to its corresponding field on Fathym's Microsoft Azure Subscription Setup form:

Display name : sample-company

Application (client) ID : f40323c3-83ea-4fcd-86c7-38392f999279 

Directory (tenant) ID : 6dcbebd0-f8d0-4a9d-89e5-5873e8146b0a


Object ID : 2eabfbb3-b51c-4839-ab6d-5090eb30feaa

Copy to clipboard

Azure App ID

Azure Tenant (Directory) ID

Azure Subscription ID



Microsoft Azure Subscription Setup

Azure Tenant (Directory) ID *

Guid Value

Azure Subscription ID *

Guid Value

Azure App ID *

Guid Value

Azure App Auth key *

Set Up Organization Details

Rename Organization

6. To retrieve the Azure App Auth key value from Azure, go to the left menu pane of your organization's App Registration page, then select **Certificates & secrets**.
7. Locate your client secret and hover over the alphanumeric value to invoke the copy function.

Once you copy the secret's value it is not retrievable again.

8. Paste the new value in the Azure App Auth key field in Fathym.
9. Click **Set Up Organization Details**.

This process can take up to 15 minutes.

Configure Your Organization's Host

To establish a shared host for your organization's site:

1. Complete the following required fields:
 - Root Domain
 - Select an available root domain from the drop-down arrow.
 - Host Address
 - Choose a URL for your web application.
2. Click **Configure Organization Hosting**.

Accept the Terms and Conditions

From the Fathym Terms & Privacy tab in the left menu, review and accept the following agreements:

- [Enterprise Agreement](#)
- [Terms and Conditions](#)



Review and Launch

1. From the Adding [your organization] to the Ecosystem page, click **Get Connected with Azure DevOps**.
2. On the Low Code Unit page, review the listed permissions and click **Accept**.



3. Under Comprehensive DevOps, click **Get Connected & Launch Your Organization**.



Comprehensive DevOps



Fathym does the following for your DevOps:

- Connects with your Azure DevOps instance and assists in managing your code, builds, releases, and more
- Sets up Git-based source control for your infrastructure and connects it to builds for auto-deploying to Azure

Get Connected & Launch Your Organization

This process may take several minutes.

4. Click **Finalize and Deploy Your Organization**.



Application Hosting

The Dynamic Application Framework provides a basis for delivering javascript-based front ends in a secure and scalable manner. Fathym simplifies the developer experience so you can focus on your customers.

Fathym manages security, SSL hosting, and application serving as long as you want, then we will help upgrade your infrastructure to the services and scale you need.

Authorization

Fathym offers an easy-to-consume-and-use OAuth/Identity as a service backed by the Auth/Auth provider you choose.

Finalize and Deploy your Organization

This process may take several minutes.

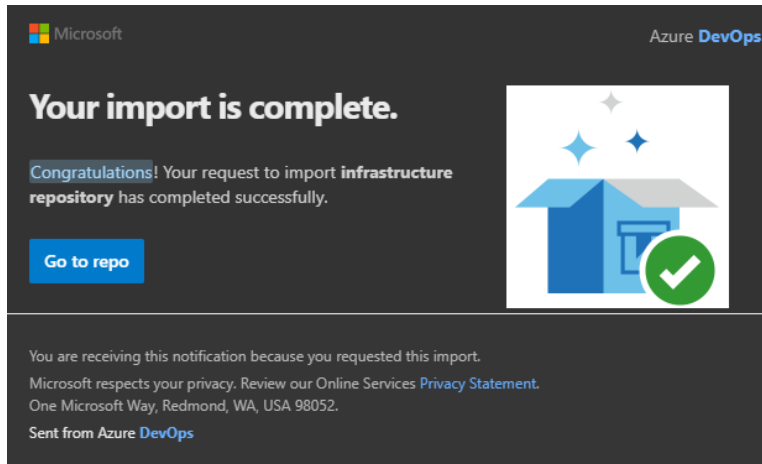


Fathym has configured the following resources for your organization:

- Continuous integration
- Build/release pipeline
- Complex, enterprise-scale infrastructure
- SSL certificate
- Git-based source control connected to builds for auto-deploying

Fathym configures all these resources in 15 minutes – a task that would take a developer days or weeks to set up.

You should receive an email from Azure DevOps indicating your import is complete. The email is sent to the email address associated with your Azure account.



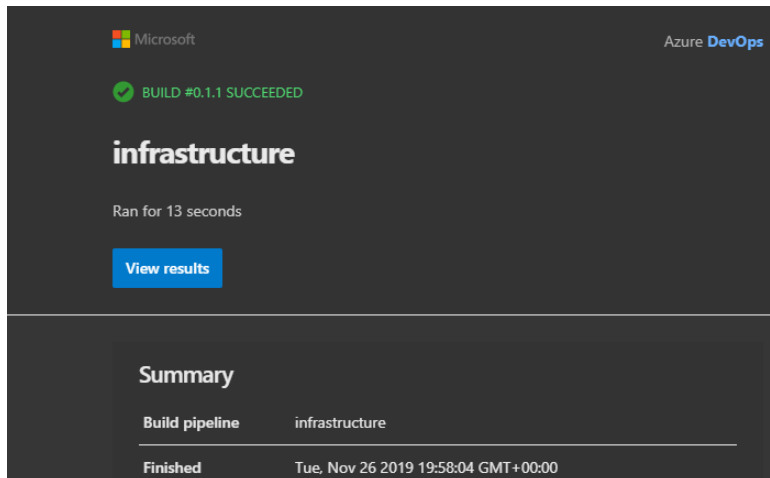
5. Click **Go to repo** to access your new Azure repository:

The image shows the 'Contents' tab of an Azure DevOps repository. It lists various files and folders with their last change dates and commit hashes. The 'environments/jill-demo-1-1-...' folder is highlighted. The table has columns for Name, Last change, and Commits. The commit message for the highlighted folder is 'Updating infrastructure from template fathym\daf-iot-setup jill.grant@fathym.com'.

Name ↑	Last change	Commits
.vscode	8/2/2019	728af9a1 Adjusted mcgear
environments/jill-demo-1-1-icu-prd	8/2/2019	728af9a1 Adjusted mcgear
environments/jill-demo-1-1-...	an hour ago	c5da6c32 Updating infrastructure from template fathym\daf-iot-setup jill.grant@fathym.com
lowcodeunits/fathym	9/30/2019	7645bd09 Oops, don't sync that mcgear
modules	11/6/2019	8dcb132c Uping the capacity to 2 mcgear
old	10/22/2019	226e2703 Capture old mcgear
overrides/fathym/azure-dev-ops	9/30/2019	7645bd09 Oops, don't sync that mcgear
templates	11/6/2019	5901f15d Adjusted for only net new with IoT mcgear
LICENSE	7/16/2019	c4bfa81c Update LICENSE Todd German

You will receive additional emails from Azure DevOps regarding your builds:





6. From your Fathym setup page, click **Open Enterprise IDE** to view your organization's finalized platform on the URL you specified.

Congratulations! You are ready to go.

