



VOSS Insights
MS Teams Cloud Collector Build

Release 22.2

Oct 18, 2022

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1. Introduction

The VOSS Insights MS Teams collector in conjunction with the VOSS Insights Dashboard provides an insight into service and quality of MS Teams users' experience. For example, enriched data can be displayed in an easily customizable dashboard format based on the range of your business use cases. This includes advanced and scheduled multi-vendor reporting using calculated data and allows users to populate and analyse their measurement values based on complex multi-dimensional comparison of attributes over time.

The VOSS Insights MS Teams collector is configured in your MS Azure Tenant environment and can then be integrated with VOSS Insights Dashboard.

Document Purpose

The primary objective of this document is to define the process for building and integrating the VOSS Insights MS Teams collector in Microsoft Azure to a VOSS Insights dashboard.

Specifically, the aim is to focus on VOSS Insights and its role as Service Assurance for the solution.

Audience

This document is intended for use by Customer Azure admin and engineers and VOSS staff involved in the implementation and support of the VOSS Insights Solution.

Scope

The scope of this document is to cover Service Assurance design for the solution.

2. Frequently asked questions

Does the global reader account need any licenses?

No the user does not need any licences to be purchased

Does the global reader account need to be built in the same region?

The region in which the global reader user is created has to be the same region that the container has to be built to allow the right permissions for the global reader to access the API.

Can the global reader user account be stored on an Active directory server?

No the global reader needs to be an Azure user. This is because the system can not do the two factor authentication to the login screen of the Active Directory server.

Containers and default public IP address, what happens if the container restarts?

If the container is restarted a new IP address is allocated. This could affect and network policies and rules between the MS Teams collector in Azure and the location of the Dashboard server. Consider making the IP address for the container static.

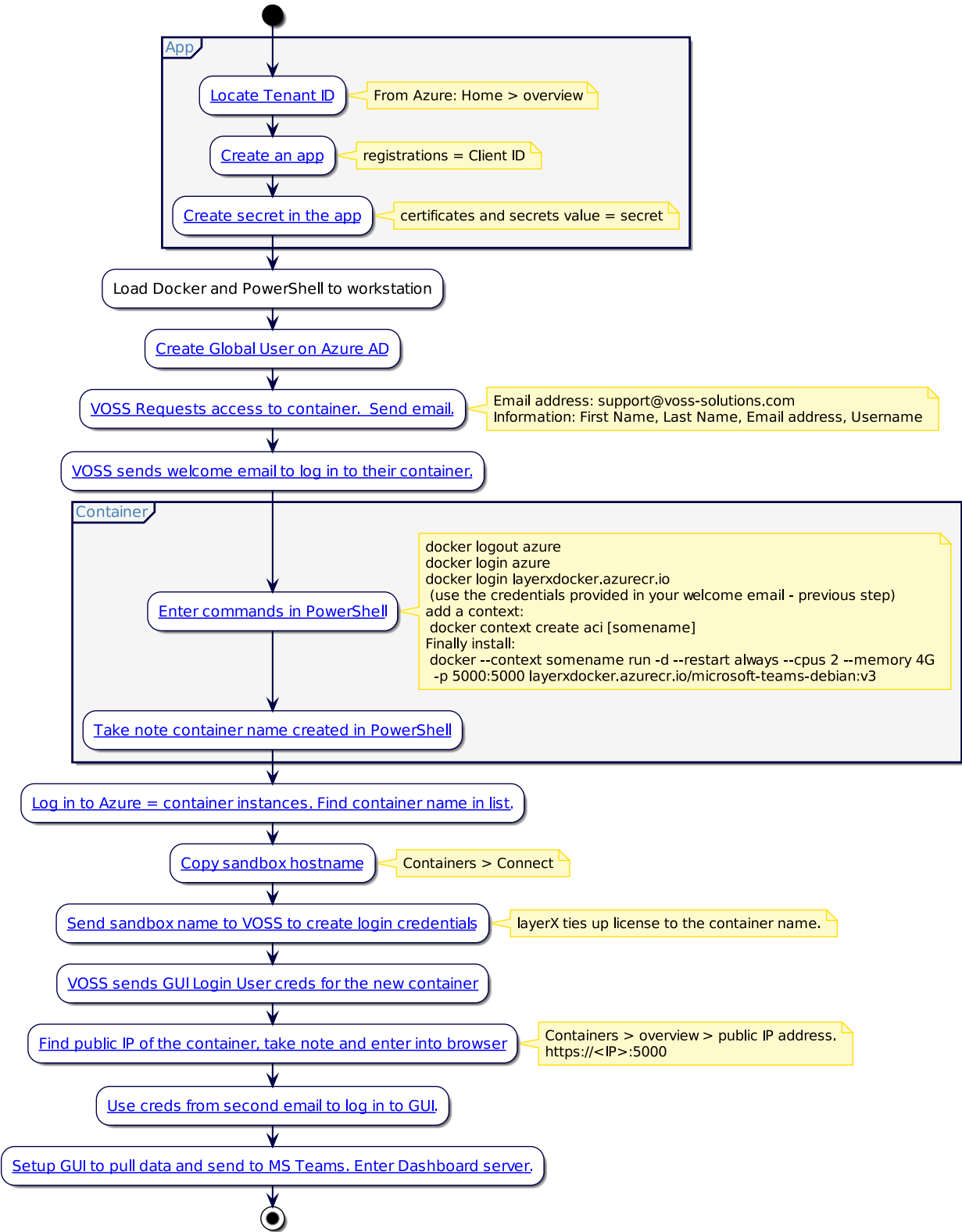
Can the username and password for the container image registry be used on different customer?

No the username and password is specific to the customer and is valid for 6 months.

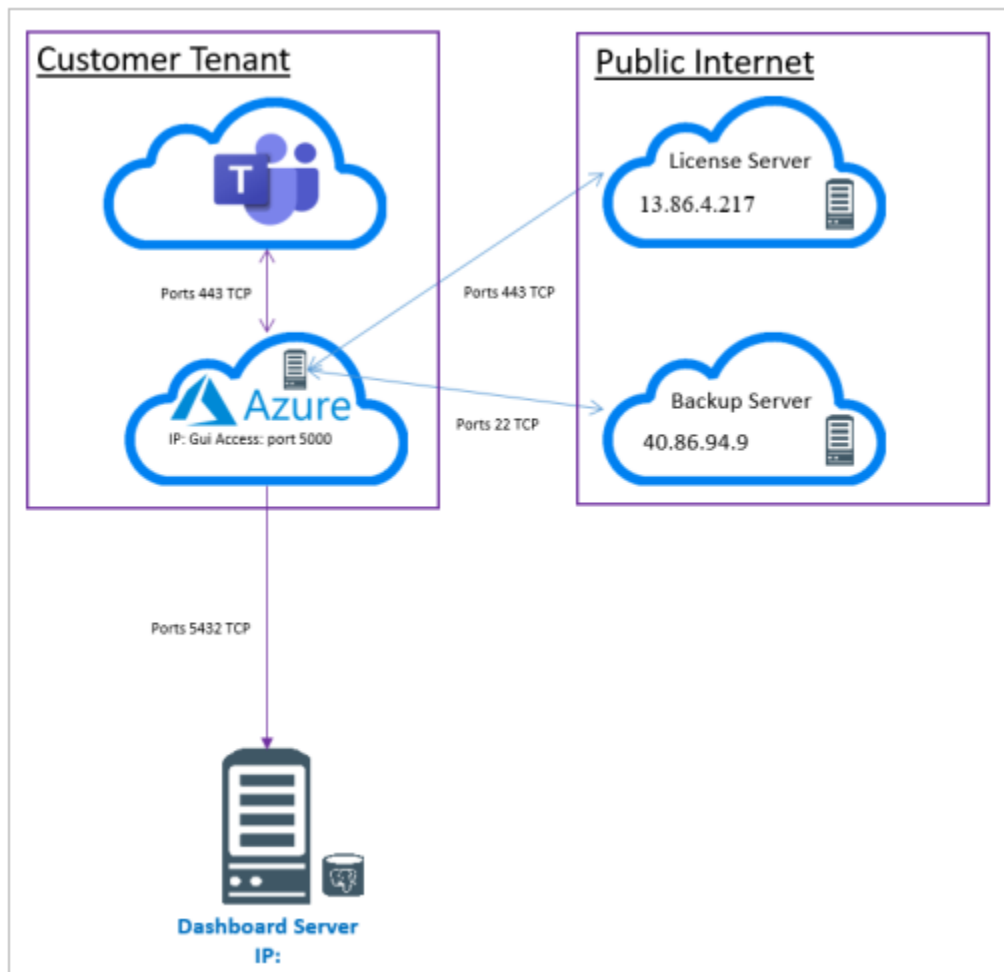
Can VOSS help explain the network setup in the Azure platform?

The customer will need to provide a design and expert who ensures the business security rules and policies are adhered to in the build process. This guide acts as a generic guide to get the collector working but the customer may wish to alter network to change security settings.

3. High Level Build process



4. Architecture Diagram



5. Port Information

Please make sure that the following ports are open on the corresponding firewalls:

Rule	From Device	To Device	Direction	Protocol	Port Number
1	Cloud collector agent (IP: Any) *	Cloud Microsoft APIs (IP: Any)	Uni-directional	TCP	443 (Encrypted)
2	Cloud collector agent (IP: Any) *	VOSS Dashboard Server (IP: Defined by the client)	Uni-directional	TCP	5432 (Encrypted)
3	Cloud collector agent (IP: Any) * / **	VOSS License Server (IP: 13.86.4.217)	Uni-directional	TCP	443 (Encrypted)
4	Cloud collector agent (IP: Any) * / **	VOSS Cloud Backup Server (IP: 40.86.94.9)	Uni-directional	TCP	22 (Encrypted)
5	Administrative portal users of the cloud collector (IP: Any)	Cloud collector agent (IP: Defined by the client) *	Uni-directional	TCP	443 (Encrypted)
6	Administrative portal users of the cloud collector (IP: Any)	Cloud collector agent (IP: Defined by the client) *	Uni-directional	TCP	5000 (Encrypted)

Prerequisites:

- Build dashboard server and have the IP address to hand
- Open up ports between the dashboard server and the Azure cloud collector
- Build Azure AD global reader account
- Build App

Please create a dedicated user account on your Microsoft Admin Portal with “Global Reader” privileges.

[See details in the Microsoft 365 documentation](#)

VOSS agent will be using this account to collect the information it needs to display the historical Microsoft Teams call details. For further support, please contact the VOSS Team.

- Please register your VOSS agent as an app on your Azure portal using details provided by Microsoft.

See details in the [Microsoft Quickstart](#)

VOSS agent will be using this account to collect the information it needs to display Microsoft 365 service health status and incidents. For further support, please contact the VOSS Team.

- You will need your Azure admin portal login details and VOSS provided credentials to install the Azure Container Instance in the relevant ACI context.
- Please contact VOSS support to get your cloud agent access package before any configuration. This package should include:
 - * Access link to your VOSS Cloud Agent Webapp via a WEB portal.
 - * A set of credentials to access your VOSS Cloud Agent Webapp via a WEB portal.
- An encrypted import module file to enable some of the internal features of the agent.

6. Container Sizing

Sizing requirement	Size of container
CPU	2 CPU
Memory	4 Gb Ram

7. Send Email to Get Container Login Details

The repository where the container is located is a private registry and to get access and load the container from the image, a user needs to be created to access the image.

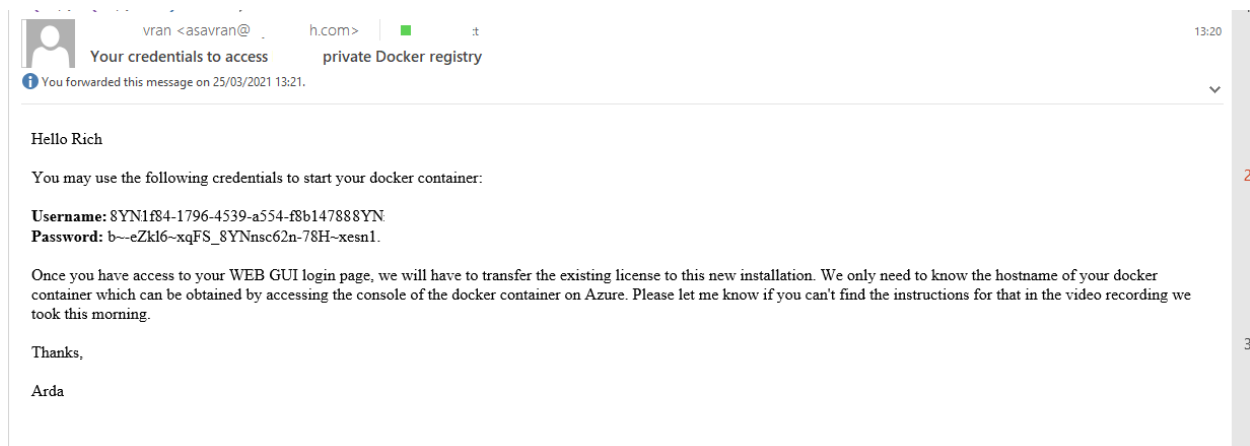
A VOSS engineer will need to send an email to VOSS to have a user created. A user can only be created if the customer has a valid license.

The email information to supply:

- Email address: support:voss-solutions.com
- Subject: User to be created for private docker registry
- Message body:
 - Customer name:
 - First name of customer:
 - Last Name of Customer:
 - Email address of customer:

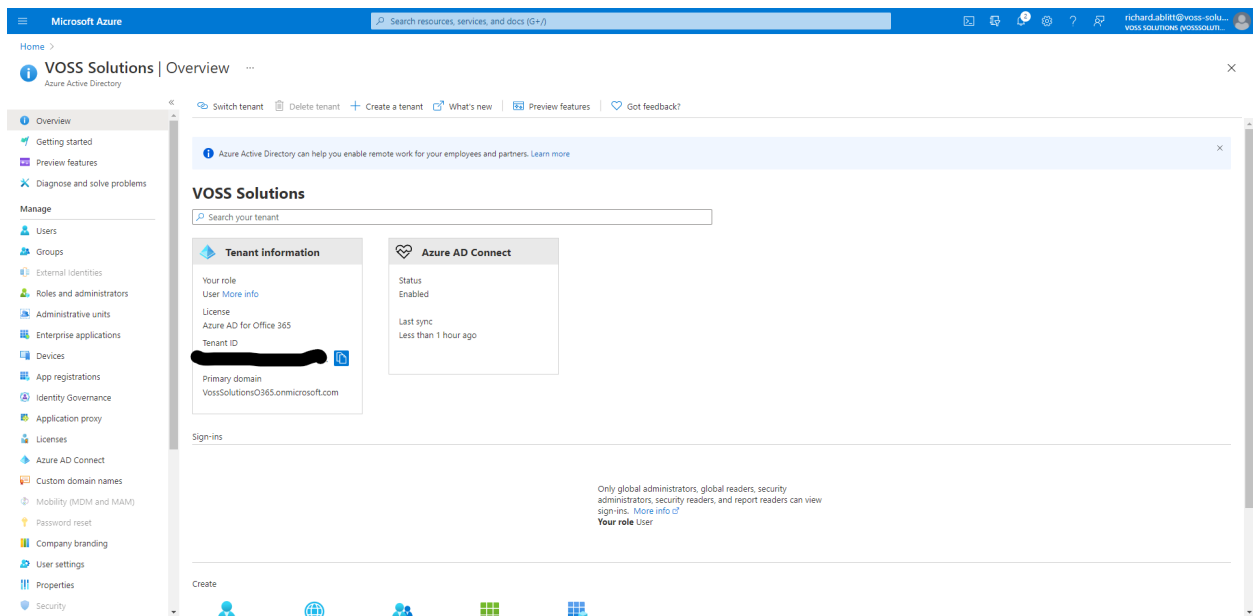
This request will be processed after 14:00 GMT time. Once the request has been processed, the customer will get a copy of the username and password to log in and to get the docker container image.

The following is an example of the email.



8. Take a Note of the Tenant ID

Log in to portal.azure.com and on the **Overview** page, take a note of the **tenant ID** which will be added in to the GUI later.



The screenshot shows the Microsoft Azure portal interface for the 'VOSS Solutions' tenant. The page title is 'VOSS Solutions | Overview'. The left-hand navigation pane includes sections for 'Overview', 'Manage', and 'Security'. The main content area displays 'VOSS Solutions' with a search bar and two summary cards: 'Tenant information' and 'Azure AD Connect'. The 'Tenant information' card lists 'Your role' as 'User', 'License' as 'Azure AD for Office 365', and 'Tenant ID' as a redacted value. The 'Azure AD Connect' card shows 'Status' as 'Enabled' and 'Last sync' as 'Less than 1 hour ago'. A 'Sign-ins' section is visible below, with a note that only global administrators and security administrators can view sign-ins. The 'Your role' is identified as 'User'.

9. Create an app in Azure

1. **Microsoft Azure > App registrations**
2. +New Registration
3. Give it a name
4. Select the access type (Used Single Tenant)
5. Click register

The screenshot shows the 'Register an application' page in the Microsoft Azure portal. The page title is 'Register an application'. Below the title, there is a section for 'Name' with a text input field containing 'VOSS MS Teams Collector'. Below that, there is a section for 'Supported account types' with three radio button options: 'Accounts in this organizational directory only (ablitt only - Single tenant)' (selected), 'Accounts in any organizational directory (Any Azure AD directory - Multitenant)', and 'Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)'. Below the radio buttons, there is a 'Help me choose...' link. At the bottom of the page, there is a 'Redirect URI (optional)' section and a 'Register' button.

Take note of the following details

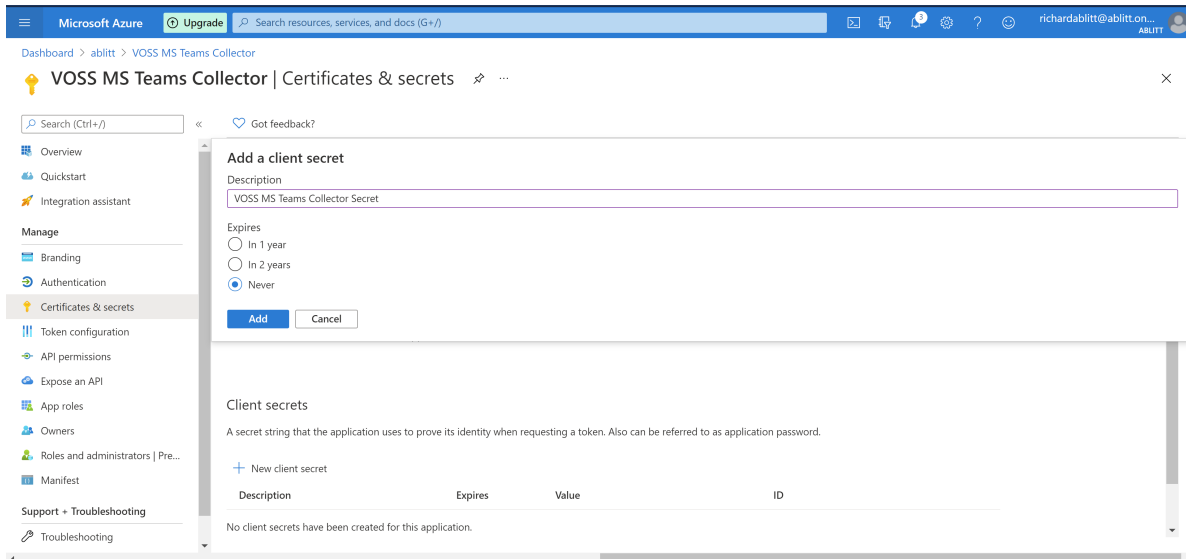
Application (client) ID	a7228bda-ca72-4dbf-b20e-f0ba72ba727f
Directory (tenant) ID	c85a72ba-cf50-48e8-91f1-0c08a721c9dc

6. In the app just created Go to **Certificates and secrets**

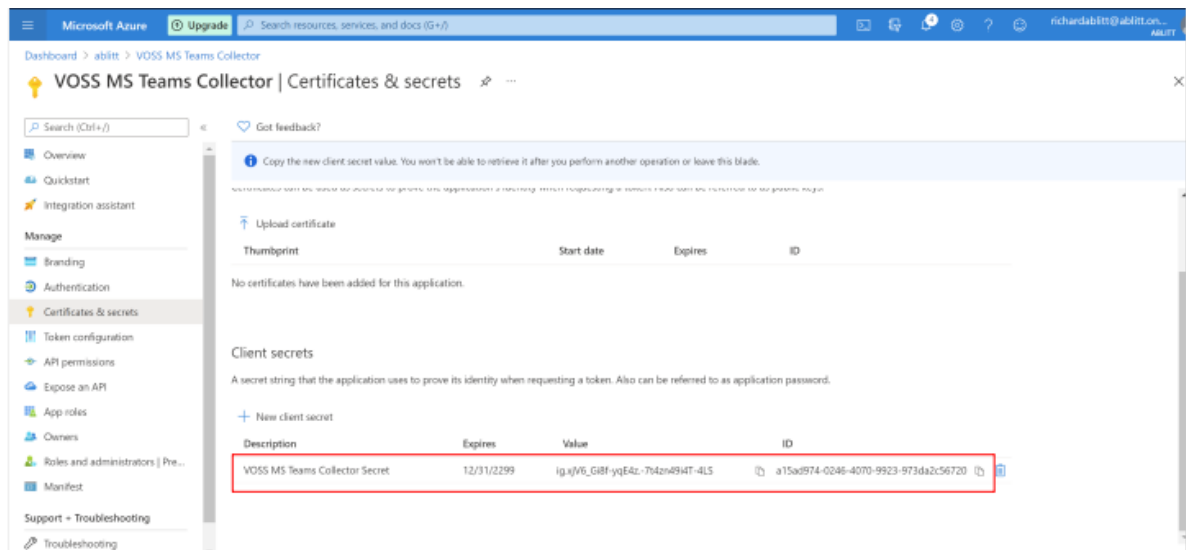
7. In the **Clients secrets** section **+New client secret**

Give the secret a **Description**.

8. Choose **Expires** (if 1 or 2 years this will need to be added and renewed).

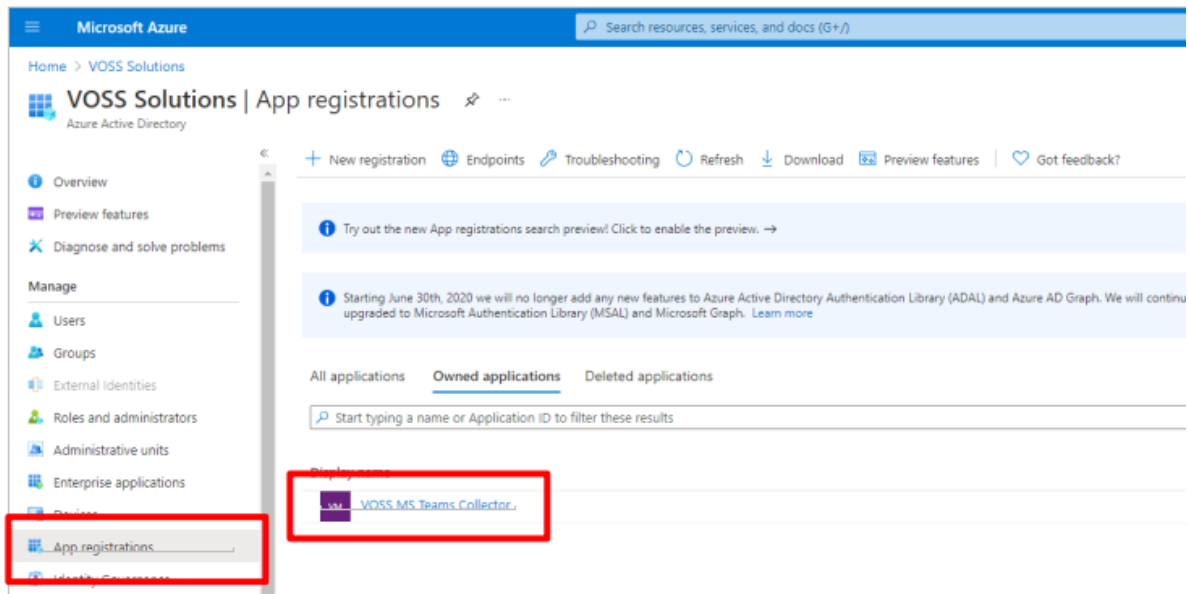


9. Copy the value against the new secret created as this will be added to the cloud collector GUI later.



10. Assign Role to App

1. Go to portal.azure.com > **Azure AD** > **App registrations** > select the app.



2. Go to portal.azure.com > **Azure AD** > **App registrations** > select the app > **API permissions**.

Microsoft Azure

Home > VOSS Solutions > VOSS MS Teams Collector

VOSS MS Teams Collector | API permissions

Search (Ctrl+/) Refresh Got feedback?

Overview
Quickstart
Integration assistant

Manage

- Branding
- Authentication
- Certificates & secrets
- Token configuration
- API permissions**
- Expose an API
- App roles
- Owners
- Roles and administrators | Preview
- Manifest

Configured permissions

Applications are authorized to call APIs when they are granted permissions by users/admins all the permissions the application needs. [Learn more about permissions and consent](#)

+ Add a permission ✓ Grant admin consent for VOSS Solutions

API Permissions Name	Type	Description
Microsoft Graph (4)		
AuditLog.Read.All	Application	Read all audit log data
Reports.Read.All	Application	Read all usage reports
User.Read	Delegated	Sign in and read user profile
User.Read.All	Application	Read all users' full profiles
Office 365 Management APIs (1)		

Click **Add a permission**.

3. Select the **Microsoft Graph** API.

Request API permissions

Select an API

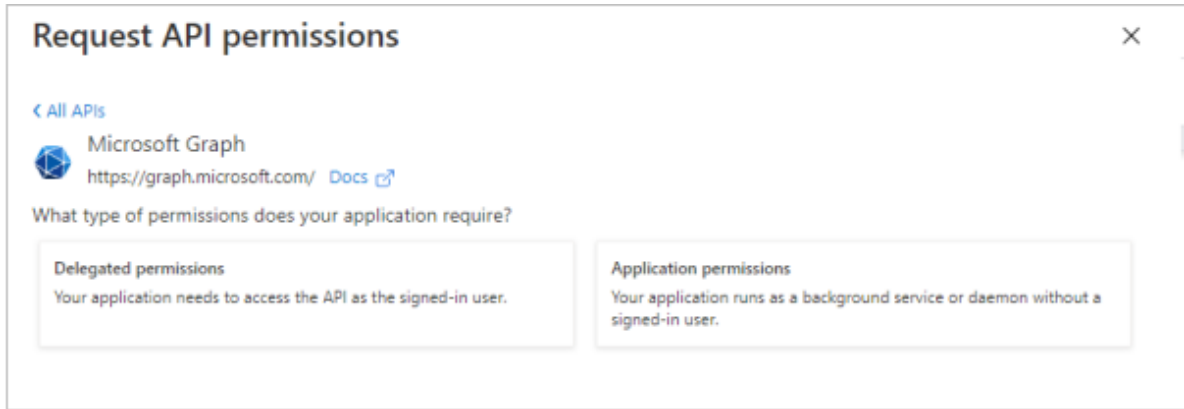
Microsoft APIs APIs my organization uses My APIs

Commonly used Microsoft APIs

Microsoft Graph

Take advantage of the tremendous amount of data in Office 365, Enterprise Mobility + Security, and Windows 10. Access Azure AD, Excel, Intune, Outlook/Exchange, OneDrive, OneNote, SharePoint, Planner, and more through a single endpoint.

4. Select **Application permissions**.



5. Use the search to find the Service health read. Select the role and select **Add permissions**.

Request API permissions

< All APIs

Microsoft Graph
<https://graph.microsoft.com/> Docs

What type of permissions does your application require?

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

Select permissions expand all

Permission Admin consent required

- > DeviceManagementServiceConfig
- ✓ ServiceHealth (1)
 - ServiceHealth.Read.All ⓘ
Read service health Yes
- > ServiceMessage
- > ServicePrincipalEndpoint

An administrator will need to grant consent by logging in and granting admin consent for the customer to make the option active.

11. Create an Azure Service Account User

The following section explains how to create a global reader user that allows the MS Teams collector in Azure to access the MS Teams admin API and gather the data that will be sent to the dashboard server.

1. Log in to portal.azure.com and select the Azure active directory icon
2. Azure Active directory > **Users**
3. **+ New user**
4. Fill out the following:

Microsoft Azure Upgrade Search resources, services, and docs (G+)

Dashboard > ablitt > Users >

New user

ablitt

Got feedback?

Create user

Create a new user in your organization. This user will have a user name like `alice@ablitt.onmicrosoft.com`.
[I want to create users in bulk](#)

Invite user

Invite a new guest user to collaborate with your organization. The user will be emailed an invitation they can accept in order to begin collaborating.
[I want to invite guest users in bulk](#)

[Help me decide](#)

Identity

User name * ⓘ ✓ @ The domain name I need isn't shown here

Name * ⓘ ✓

First name ✓

[Create](#)

-
- Username
 - Name
 - First Name
 - Last Name
 - Let Me create the password > Enter a password
 - Group = Company specific (left blank in lab)
 - Roles = Global Reader

Select **Create**

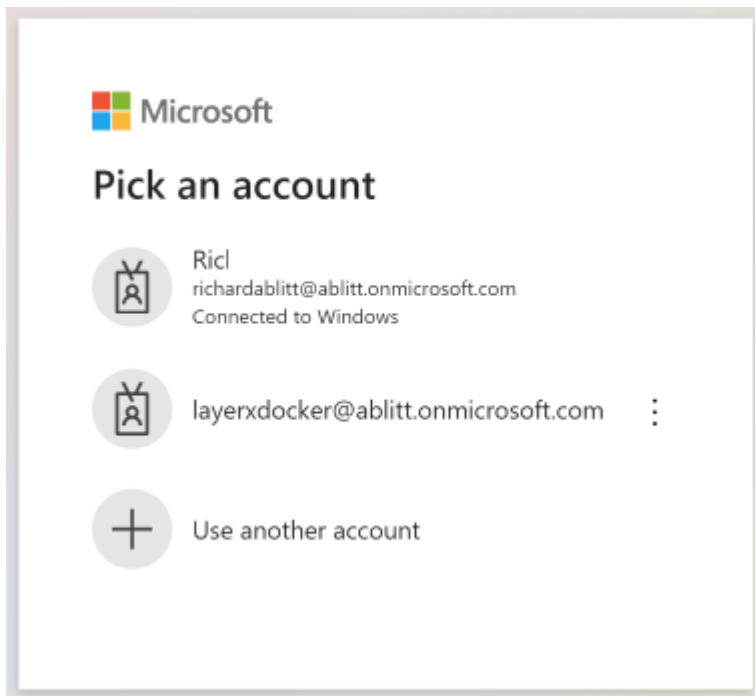
The user needs to log in once to ensure and make sure there are no password issues or authentication issues. This will ensure the following do not stop a successful connection:

- Password is correct
- Password has not expired
- Not forcing user to change password on first login
- No need to verify user password via email
- No need to verify user password via text
- No two factor authentication with passcode generator
- User is not being directed to a on premise active directory
- User can login successfully

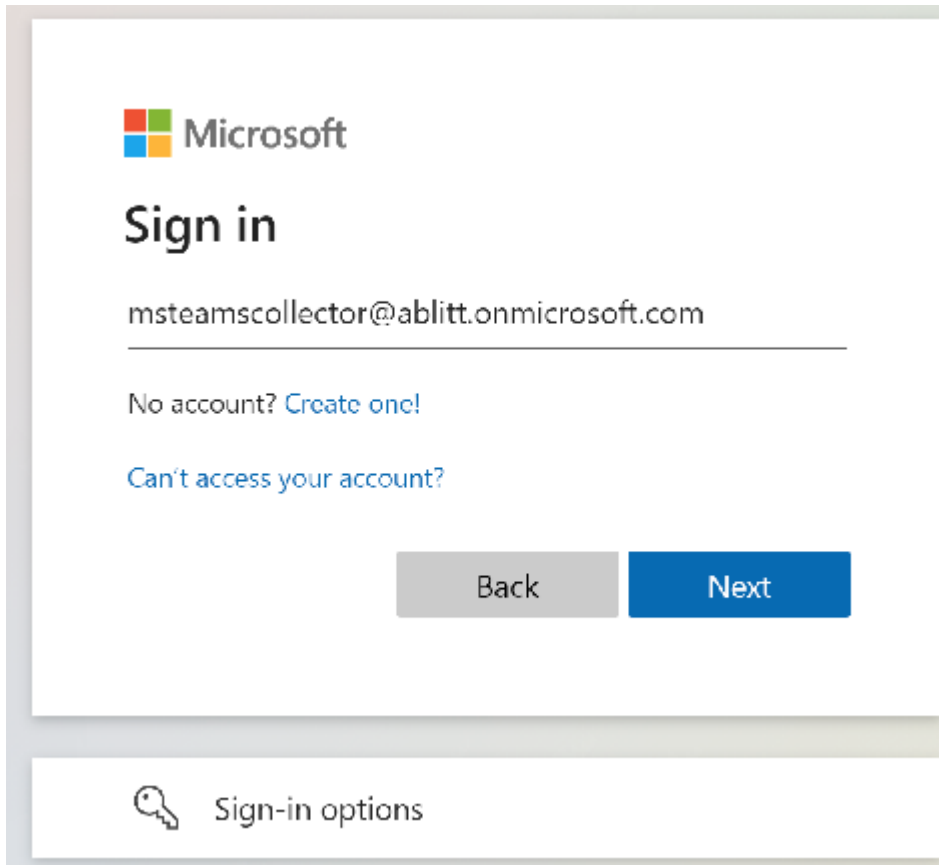
5. The user needs to log in once to change the password for the first time and verify Admin.

Navigate to <http://admin.microsoft.com/>.

Choose **Use another account**.

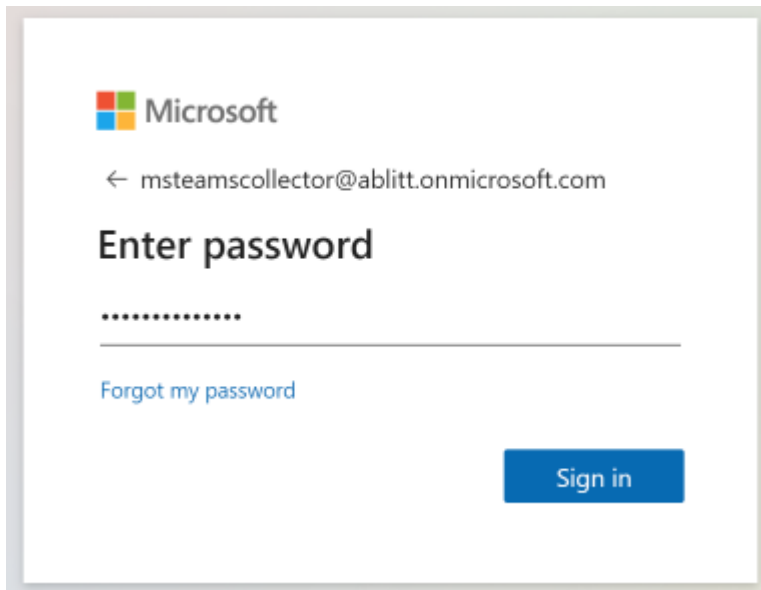


6. Enter global reader account created.



The image shows a Microsoft sign-in page. At the top left is the Microsoft logo. Below it, the text "Sign in" is displayed in a large, bold font. Underneath, the email address "msteamscollector@ablitt.onmicrosoft.com" is entered into a text field. Below the email field, there are two links: "No account? Create one!" and "Can't access your account?". At the bottom of the main content area, there are two buttons: a grey "Back" button and a blue "Next" button. Below the main content area, there is a section with a key icon and the text "Sign-in options".

6. Select **Next** and enter password



The image shows a Microsoft "Enter password" screen. At the top left is the Microsoft logo. Below it, the text "Enter password" is displayed in a large, bold font. Above the password field, there is a back arrow and the email address "msteamscollector@ablitt.onmicrosoft.com". The password field contains a series of dots. Below the password field, there is a link that says "Forgot my password". At the bottom right of the main content area, there is a blue "Sign in" button.

7. Enter password and create a new password



msteamscollector@ablitt.onmicrosoft.com

Update your password

You need to update your password because this is the first time you are signing in, or because your password has expired.

Current password

New password

Confirm password

Sign in



msteamscollector@ablitt.onmicrosoft.com

More information required

Your organization needs more information to keep your account secure

[Use a different account](#)

[Learn more](#)

Next

Don't skip this otherwise you can't use it in the collector.

Keep your account secure

Your organization requires you to set up the following methods of proving who you are.

Phone

You can prove who you are by answering a call on your phone or texting a code to your phone.

What phone number would you like to use?

United States (+1) Enter phone number

Text me a code
 Call me

Message and data rates may apply. Choosing Next means that you agree to the [Terms of service](#) and [Privacy and cookies statement](#).

Next

[I want to set up a different method](#) [Skip setup](#)

8. Once you have received a text with the code enter it into the box

ablitt ?

Keep your account secure

Your organization requires you to set up the following methods of proving who you are.

Phone

We just sent a 6 digit code to +44 7966705371. Enter the code below.

347016

[Resend code](#)

Back **Next**


[I want to set up a different method](#) [Skip setup](#)

Next

Keep your account secure

Your organization requires you to set up the following methods of proving who you are.

Phone

 SMS verified. Your phone was registered successfully.

Next

[Skip setup](#)

Next

Keep your account secure

Your organization requires you to set up the following methods of proving who you are.

Success!

Great job! You have successfully set up your security info. Choose "Done" to continue signing in.

Default sign-in method: Phone - text 7966705371

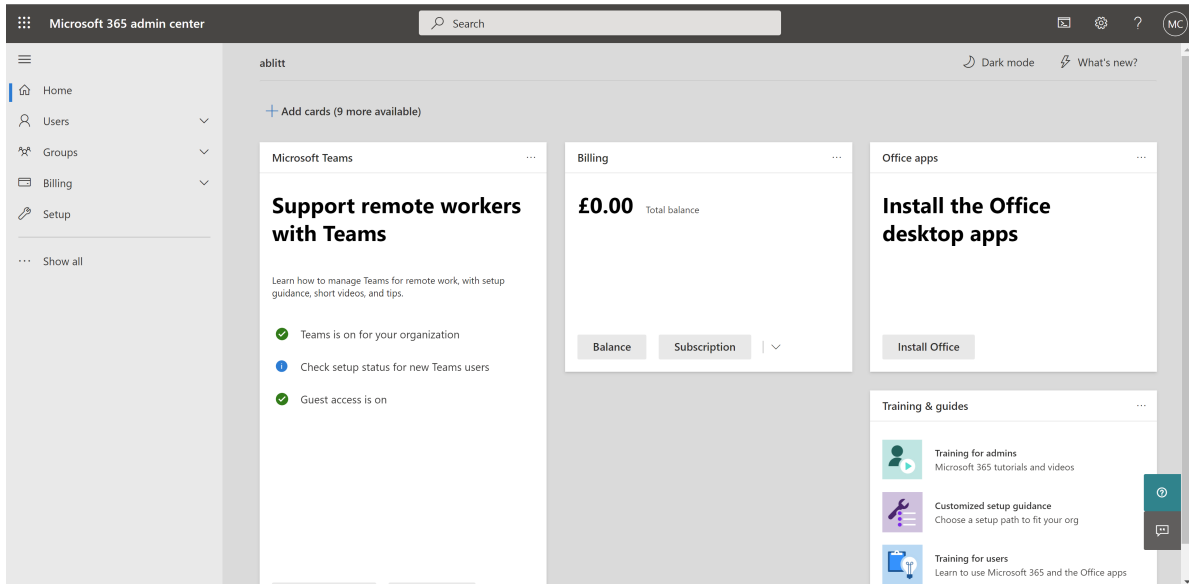


Phone
+44 7966705371

Done

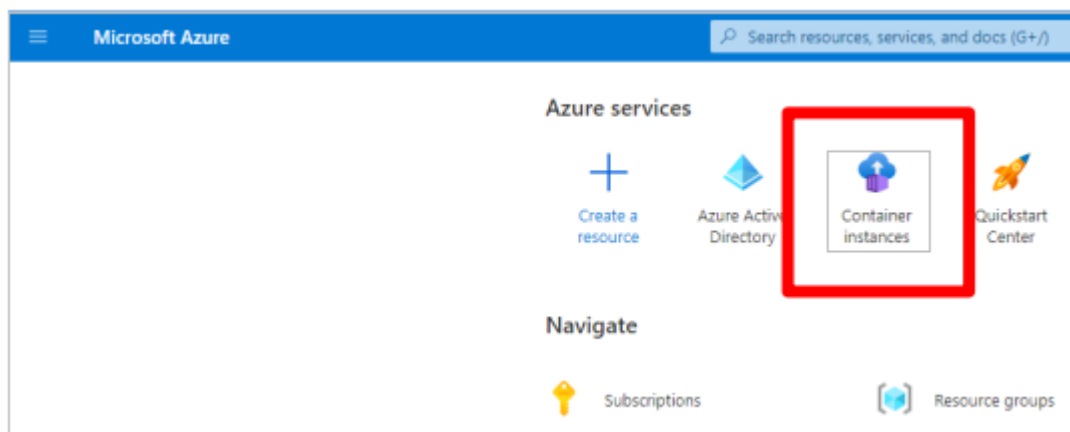
Done

9. Successfully logged in



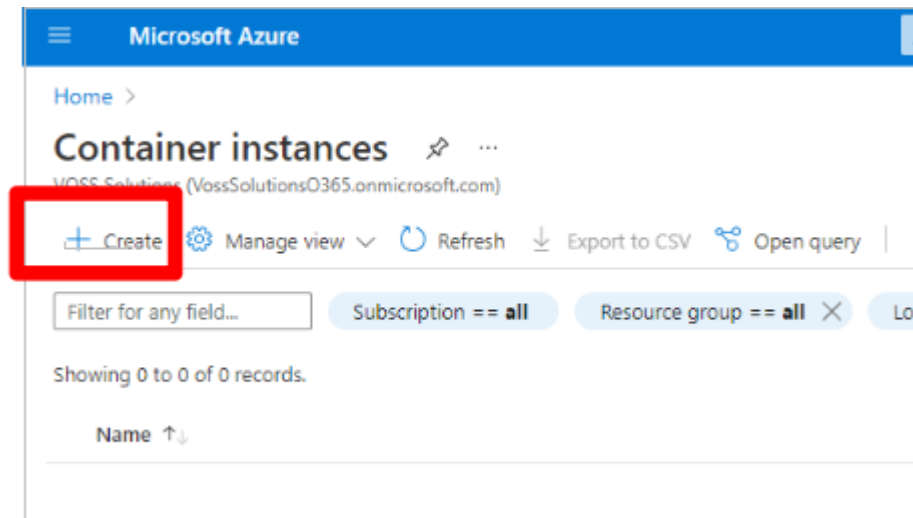
12. Build the Azure Collector using the Azure GUI

1. Log in to portal.azure.com.
2. Click on the icon **Container Instances**.



Note: First time users may have to enter payment details to cover the Azure running costs.

3. Click the **Create** button.



4. Fill out the following details:
 - **Resource group:** customer specific

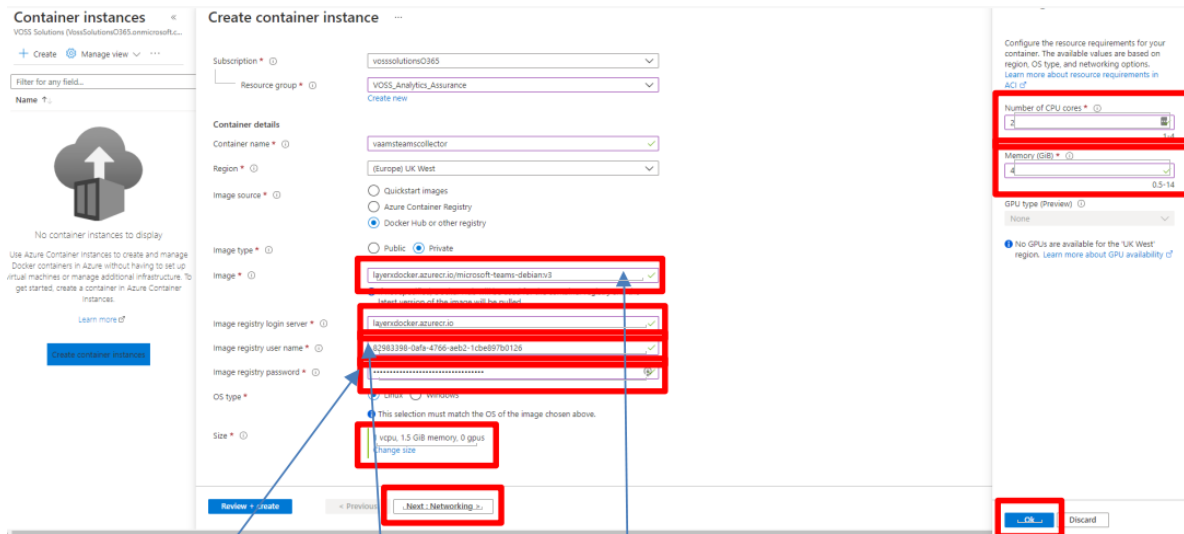
- **Container name:** example msteams collector
- **Region:** needs to match global reader user
- **Image source:** docker hub or other registry

The screenshot shows the 'Create container instance' wizard in the Microsoft Azure portal. The 'Basics' tab is selected, and the following fields are visible:

- Subscription:** vossolutions0365
- Resource group:** VOSS_Analytics_Assurance
- Container name:** vaamsteamscollector
- Region:** (Europe) UK West
- Image source:** Docker Hub or other registry
- Image type:** Private

Other fields include 'Image' (with an example: mydockerregistry/hello-world), 'Image registry login server', and 'Image registry user name'. The 'Review + create' button is at the bottom.

5. The following information comes from the first email that is sent



Hello Richard:

Please note that the following creds give you access to our registry for the next 6 months.

Credentials:

Complete command to pull the docker image: `docker pull layerxdocker.azurecr.io/microsoft-teams-debian:v3`
 Application ID: 82983398-0afa-4766-aeb2-1cbe897b0126
 Password: 14FTaAT6-9n.c1U0k0KY.ch00tmWG.0rvvJ

- **Image:** layerxdocker.azurecr.io/microsoft-teams-debian:v3
- **Image registry login server:** layerxdocker.azurecr.io
- **Image registry user name:** application ID from email
- **Image registry password:** password from email

Change size of container:

- **Number of CPU cores:** 2
- **Memory (GiB):** 4

Click **OK** to change the container size

5. Click **Review + create** to build standard
6. Click **Next : Networking**

Note: It is the customer's responsibility to define their network, business policies and implementation. The following section acts as knowledge sharing.

Create container instance

Basics **Networking** Advanced Tags Review + create

Choose between three networking options for your container instance:

- **Public** will create a public IP address for your container instance.
- **Private** will allow you to choose a new or existing virtual network for your container instance. This is not yet available for Windows containers.
- **None** will not create either a public IP or virtual network. You will still be able to access your container logs using the command line.

Networking type Public Private None

DNS name label .ukwest.azurecontainer.io

Ports

Ports	Ports protocol
80	TCP
443	TCP
5432	TCP
22	TCP
<input type="text" value="5000"/>	<input type="text" value="TCP"/>

[Review + create](#) [< Previous](#) [Next : Advanced >](#)

7. **Advanced:** Customer specific requirement

Microsoft Azure Search resources, services, and docs (G+)

Home > Container instances >


Container instances

VOSS Solutions (VossSolutionsO365.onmicrosoft.c...)

+ Create Manage view

Filter for any field...

Name ↑



No container instances to display

Use Azure Container Instances to create and manage Docker containers in Azure without having to set up virtual machines or manage additional infrastructure. To get started, create a container in Azure Container Instances.

[Learn more](#)

Create container instances

Create container instance

Basics Networking **Advanced** Tags Review + create

Configure additional container properties and variables.

Restart policy

Environment variables

Mark as secure	Key	Value
<input type="text" value="No"/>	<input type="text"/>	<input type="text"/>

Command override Example: ["/bin/bash", "-c", "echo hello; sleep 100000"]


8. **Tags:** Add a tag if you require

Create container instance ...

Basics Networking Advanced **Tags** Review + create

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more about tags](#)

Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

Name ⓘ	Value ⓘ	
VOSS Assurance and Analytics	VOSS Assurance and Analytics	

[Review + create](#)

< Previous

Next : Review + create >

9. Review + create

Microsoft Azure

Home > Container instances >

Container instances

VOSS Solutions (VossSolutions0365.onmicrosoft.c...)

+ Create Manage view

Filter for any field...

Name ↑

No container instances to display

Use Azure Container Instances to create and manage Docker containers in Azure without having to set up virtual machines or manage additional infrastructure. To get started, create a container in Azure Container Instances.

[Learn more >](#)

Create container instances

Create container instance

Validation passed

Basics Networking Advanced Tags Review + create

Basics

Subscription	vossolutions0365
Resource group	VOSS_Analytics_Assurance
Region	UK West
Container name	vaamsteamscollector
Image type	Private
Image	layerxdocker.azurecr.io/microsoft-teams-debianv3
Image registry login server	layerxdocker.azurecr.io
Image registry user name	82983398-0afa-4766-aeb2-1cbe897b0126
OS type	Linux
Memory (GiB)	4
Number of CPU cores	2
GPU type (Preview)	None
GPU count	0

Networking

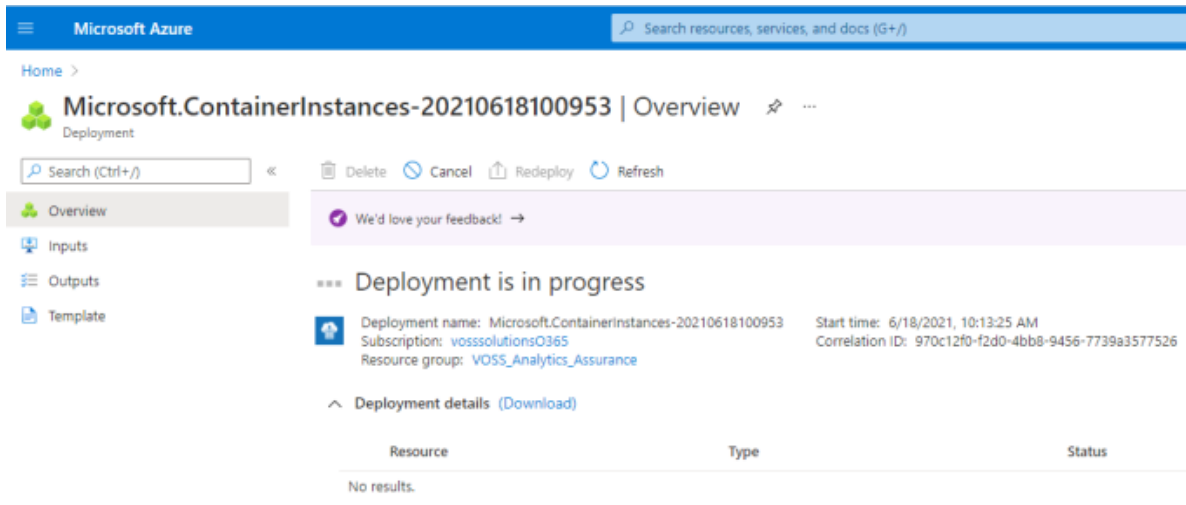
Networking type	Public
Ports	80 (TCP), 443 (TCP), 5432 (TCP), 22 (TCP), 5000 (TCP)
DNS name label	vaamsteamscollector

Advanced

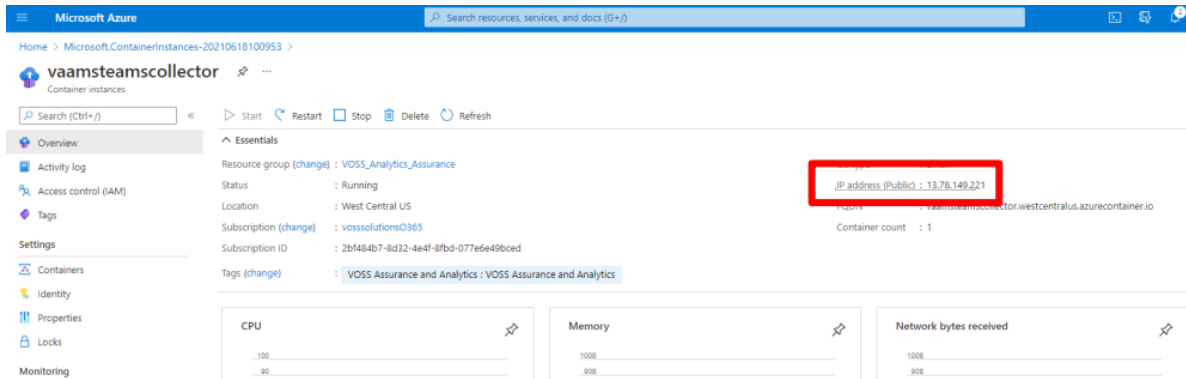
Restart policy	On failure
Command override	[]

Create < Previous Next > Download a template for automation

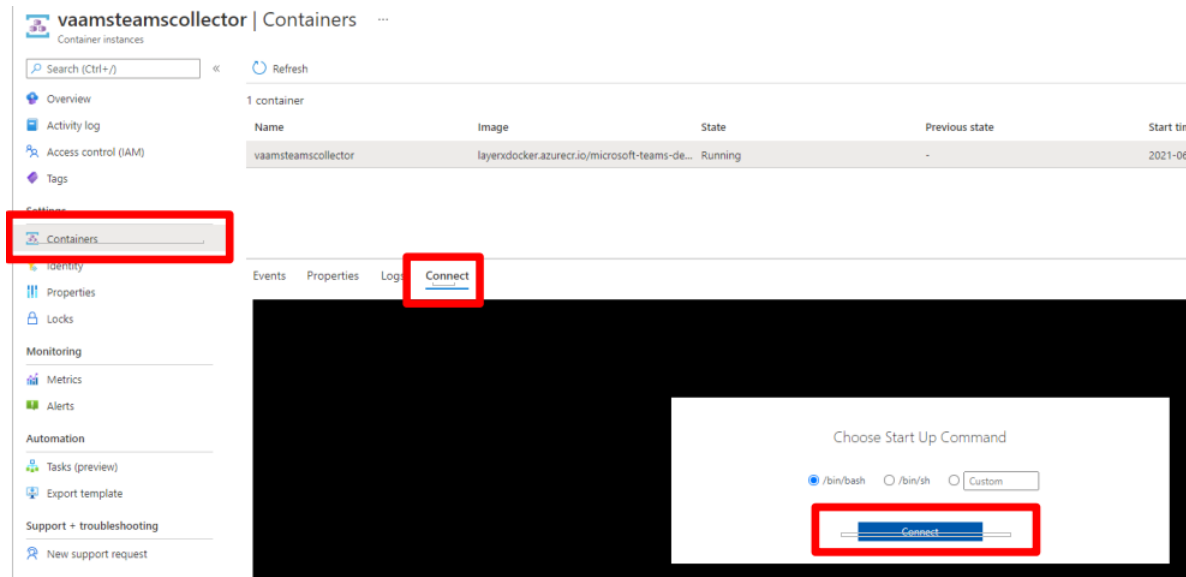
Click **Create**. Make sure the container deploys and causes no errors. It should take 2-3 minutes to deploy.



10. Take a note of the public IP (private if you done this as part of the customer security network setup).



11. In the container instance that has been created, click **Containers** > **Connect** tab > **Connect** button.



This displays the sandbox name which needs to be copied. This name is what the licensing server uses to associate the customer container with the user so they can log in to the GUI.

Microsoft Azure Search resources, services, and docs (G+)

Home > Microsoft.ContainerInstances-20210618100953 > vaamsteamscollector

vaamsteamscollector | Containers

Container instances

Search (Ctrl+/) Refresh

- Overview
- Activity log
- Access control (IAM)
- Tags

Settings

- Containers
- Identity
- Properties
- Locks

Monitoring

- Metrics
- Alerts

1 container

Name	Image	State
vaamsteamscollector	layerxdocker.azurecr.io/microsoft-teams-de...	Running

Events Properties Logs Connect

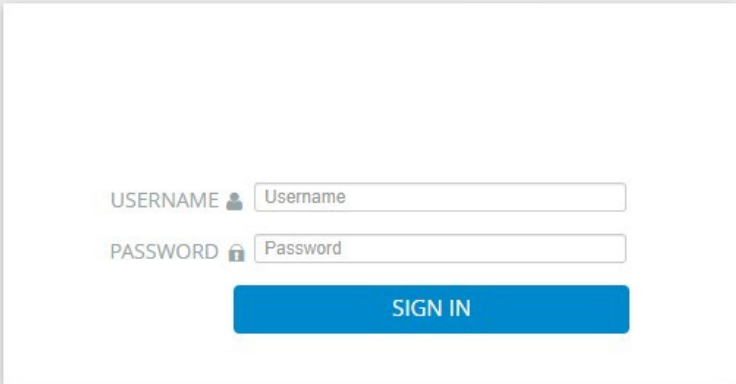
```
root@sek-gaas-5c6e671f55d34df6a149bfd7bb13b608-a12252e095dcaff7712596:/app#
```

13. Check GUI Access

Before sending the email to get the container sandbox name associated with the user, it is best practice to log on to the GUI of the system to make sure there are no networking issues as these will need to be resolved before the setup can be completed.

Open up an internet browser and navigate to `https://<public or private ip>:5000`

Note: If it is a private network you may need to be on the corporate network to access the collector GUI.



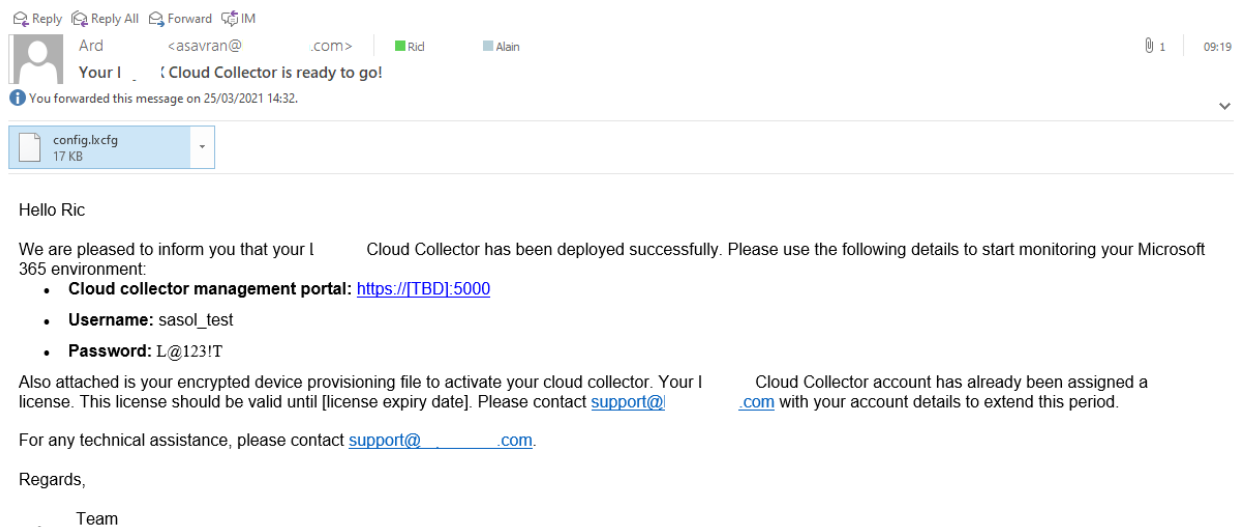
A screenshot of a login interface. It features a white rectangular box centered on a light gray background. Inside the box, there are two input fields. The first is labeled 'USERNAME' with a person icon and contains the text 'Username'. The second is labeled 'PASSWORD' with a lock icon and contains the text 'Password'. Below these fields is a blue button with the text 'SIGN IN' in white capital letters.

14. GUI login user email request

A VOSS engineer will need to send a email to support@voss-solutions.com with the following information

- Email address: support:voss-solutions.com
- Subject: User to be created for private docker registry
- Message body:
 - Customer name:
 - First name of customer:
 - Last Name of Customer:
 - Email address of customer:
 - Sandbox name:
 - Container name:

The following image is an example of information that will be sent back:



15. MS Teams Collector Configuration Steps

1. Use your web browser to go to your VOSS Insights Agent's management portal.
2. Log in with the credentials provided by the VOSS support Team:

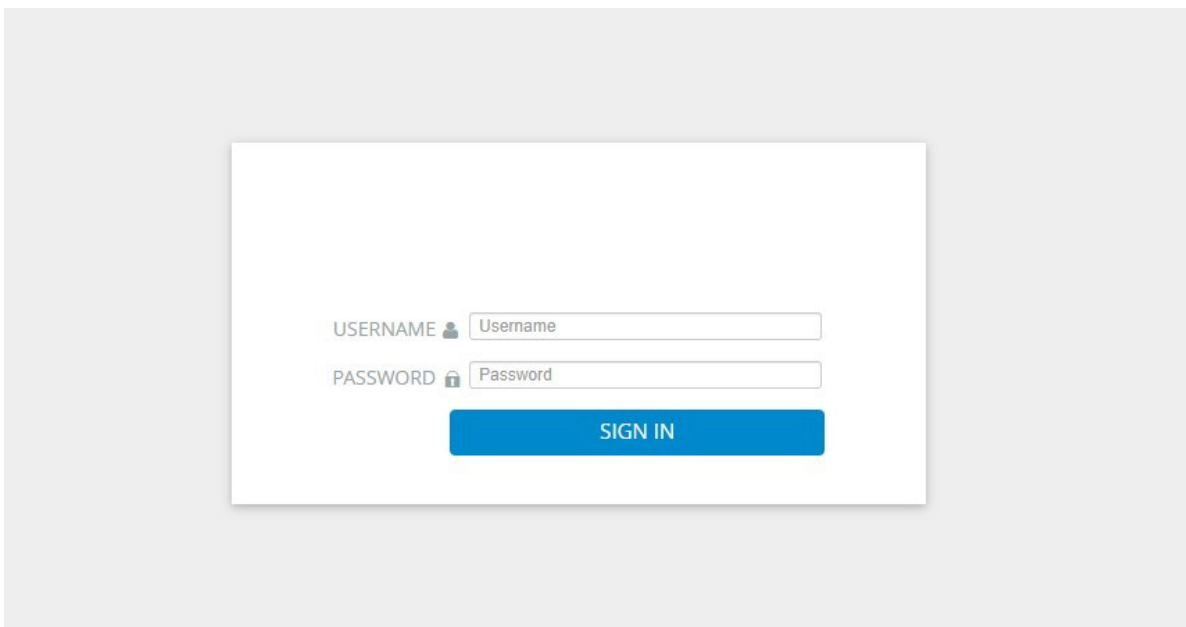


Figure 1 - VOSS Insights Agent login screen

3. Click on the menu button on the top right corner and select **Data Sources**:

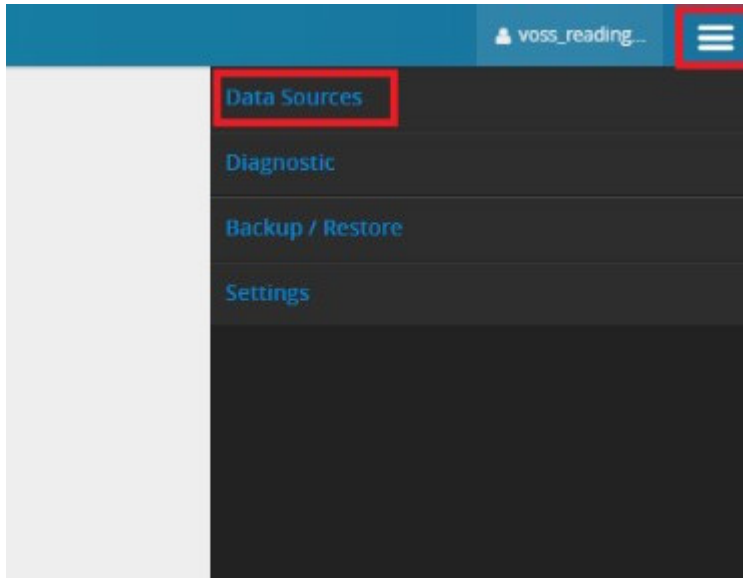


Figure 2 - VOSS Insights Agent data source configuration

This will direct you to the data source configuration page.

4. Click on the blue + sign on the top left corner to create a new data source.
5. On the next screen, please choose the **vendor** and **type** as “Microsoft” and “Microsoft Teams Connector” respectively; give your data source a name, and click on the **Next** button:

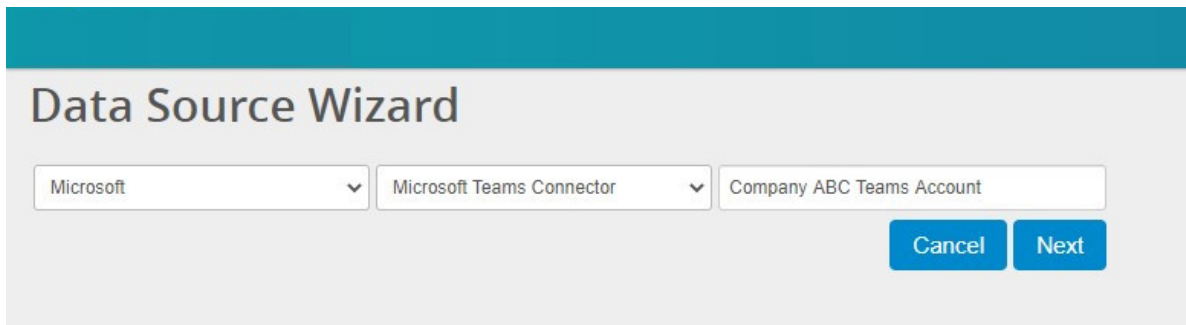


Figure 3 - VOSS Insights Agent data source configuration for Microsoft Teams

6. On the next screen, choose the newly defined data source, and click on **Edit**. This will enable the corresponding database and API configuration menus. Start with the Data API configuration. Enter the following:
 - **Data source name:** This is a description of your data source.
 - **Enable/Disable** checkbox: Make sure that this checkbox is checked for successful data collection.
 - **Username:** Enter the username for the “Global Reader” account that was generated on the Microsoft Admin Portal as part of the prerequisites for this guide.
 - **Password:** Enter the password for the “Global Reader” account that was generated on the Microsoft Admin Portal as part of the prerequisites for this guide.

This information comes from the second email explained in [GUI login user email request](#).

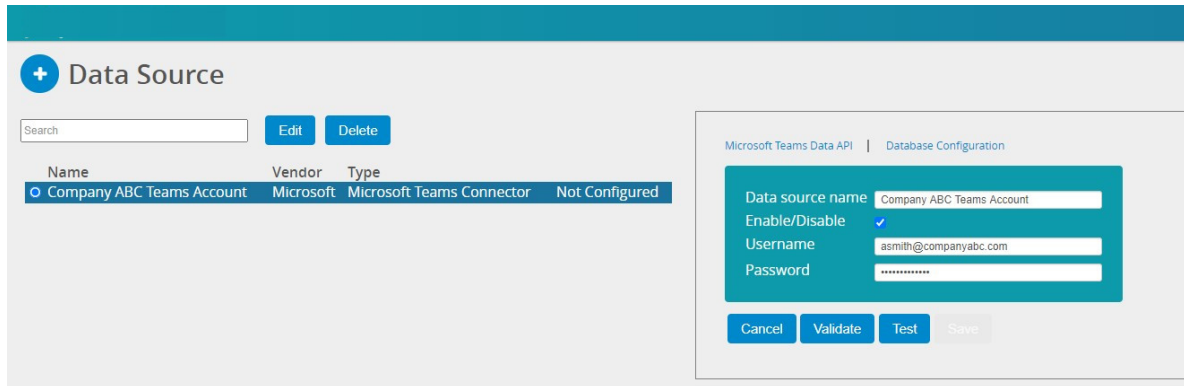


Figure 4 - VOSS Agent Microsoft API configuration for Teams

7. Click on the **Validate** button which validates that all the required values are entered.
8. Click on the **Test** button which checks your Microsoft “Global Reader” account access.
9. Click on the **Save** button to finalize the API configuration.

Note:

- The **Save** button will not be available until you validate your configuration and test it against the Microsoft API.
- Depending on the network connection speed that is available to VOSS Cloud Collector, the “Test” phase may take up to a minute.

10. Click on the **Database Configuration** tab for the same data source profile. This is where you enter the connection details for a VOSS Insights Dashboard Server which will host your collected data.
11. From the drop-down menu, select “Reporter DB”.
12. **Host:** enter the IP address for the VOSS Insights Dashboard Server.
13. **Retry Delay** is used to determine how long to wait before attempting to connect to the Dashboard Server Database after a failed connection. You may leave this attribute as is.

Note: VOSS Collector uses an encrypted channel to upload the processed data to VOSS Insights Dashboard Server. This is a unidirectional connection that is initiated by the VOSS Collector using port TCP/5432. In case, you have a firewall/NAT device between the VOSS Collector and your Dashboard Server, please ensure that you make the necessary changes on your network to allow this incoming traffic through the firewall/NAT device. If the collector is hosted by VOSS, our support team can provide the specific public IP address that the incoming connection attempts will be coming from.

14. Click on the **Validate** button which validates the values entered.
15. Click on the **Test** button which checks the connectivity to VOSS Insights Dashboard Server.
16. Click on the **Save** button to finalize the database configuration.

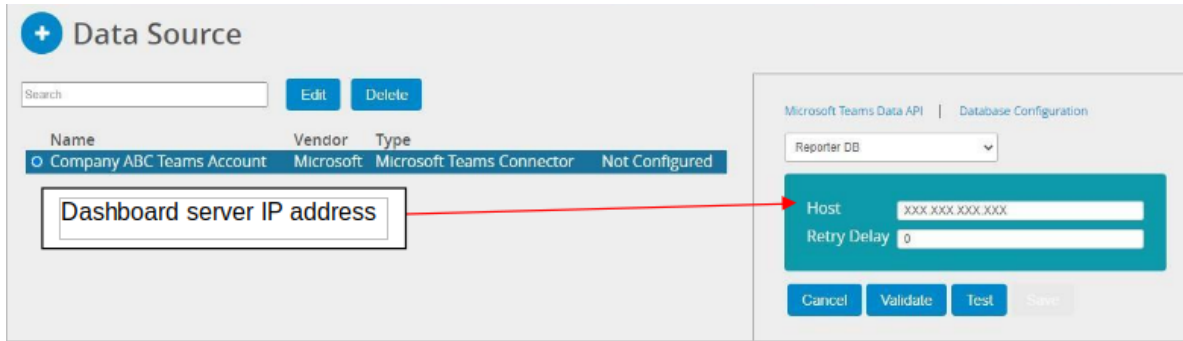


Figure 5 - VOSS Agent database configuration

At this point, we completed the configuration that is needed to collect and process Microsoft Teams data. The next step is to create a data source to collect the service health details.

17. Click on the + sign next to **Data Source** on the top left corner again to create a new data source.
18. On the next screen, please choose the **vendor** and **type** as “Microsoft” and “Microsoft Teams Connector” respectively; give your data source a name, and click on the **Next** button:

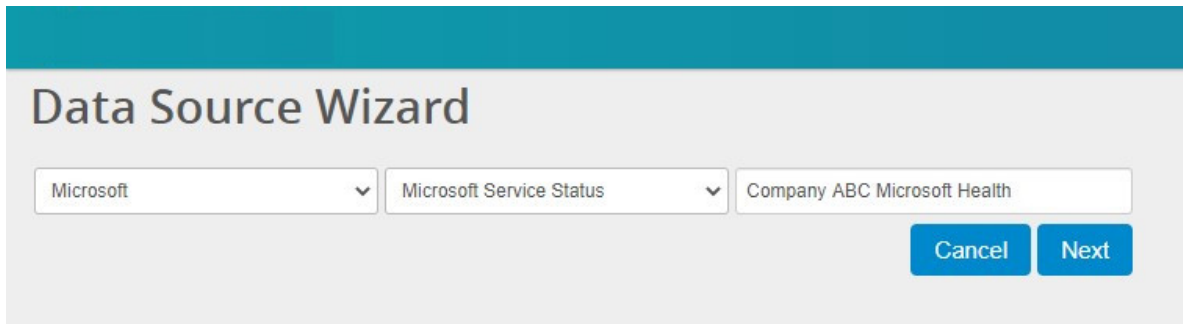


Figure 6 - VOSS Agent data source configuration for Microsoft Health Status

19. On the next screen, choose the newly defined data source, and click on **Edit**. This will enable the corresponding database and API configuration menus. Start with the Status API configuration. Enter the following:
 - **Data source name:** This is a description of your data source.
 - **Enable/Disable** checkbox: Make sure that this checkbox is checked for successful data collection.
 - **Client Id:** The client ID that you created during application registration.
 - **Client Secret:** The client secret that you created during application registration.
 - **Tenant Id:** The tenant ID that is assigned to your Microsoft Azure account.

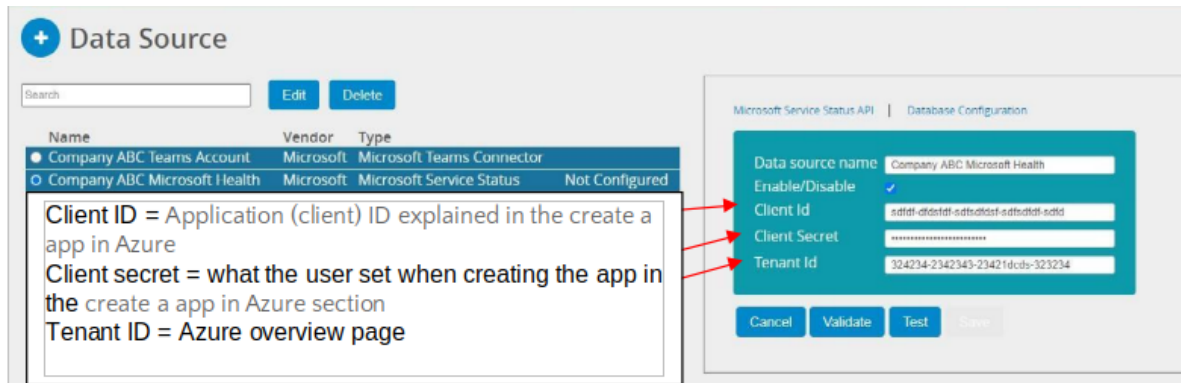


Figure 7 - VOSS Agent Microsoft API configuration for Teams

20. Click on the **Validate** button which validates that all the required values are entered.
21. Click on the **Test** button which checks for successful authentication with the Microsoft API.
22. Click on the **Save** button to finalize the API configuration.

Note:

- The **Save** button will not be available until you validate your configuration and test it against the Microsoft API.
- Depending on the network connection speed that is available to VOSS Cloud Collector, the “Test” phase may take up to a minute.

23. Click on the **Database Configuration** tab for the same data source profile. This is where you enter the connection details for a VOSS Dashboard Server which will host your collected data.
24. From the drop-down menu, select **Reporter DB**.
25. **Host**: enter the IP address for the VOSS Dashboard Server.
26. **Retry Delay**: is used to determine how long to wait before attempting to connect to the Dashboard Server Database after a failed connection. You may leave this attribute as is.

At this point, we completed the configuration that is needed to collect and process Microsoft 365 Health and Incident data. Your VOSS Cloud collector is already collecting data.

There is only one more step remaining before you can start seeing some data on your dashboards. The module file that configures all the services and features internally for your needs to be imported to your cloud collector.

15.1. Import the module file

The final step is to import the module file that enables the internal features needed to start the collection.

1. Click on your username on the top right corner and choose the **Configuration** menu:

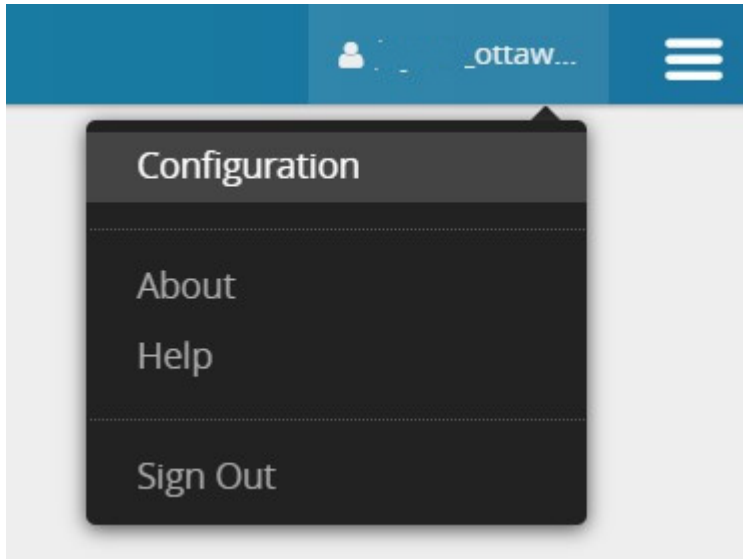


Figure 6 - VOSS Insights Agent import module

2. Click on the **Choose File** button and locate the import file that you received from VOSS.
3. Click on the **Upload and Check** button.

Note: The import process will not work unless the API and database configurations are complete.

4. Click on the **Deploy** button to complete the import:

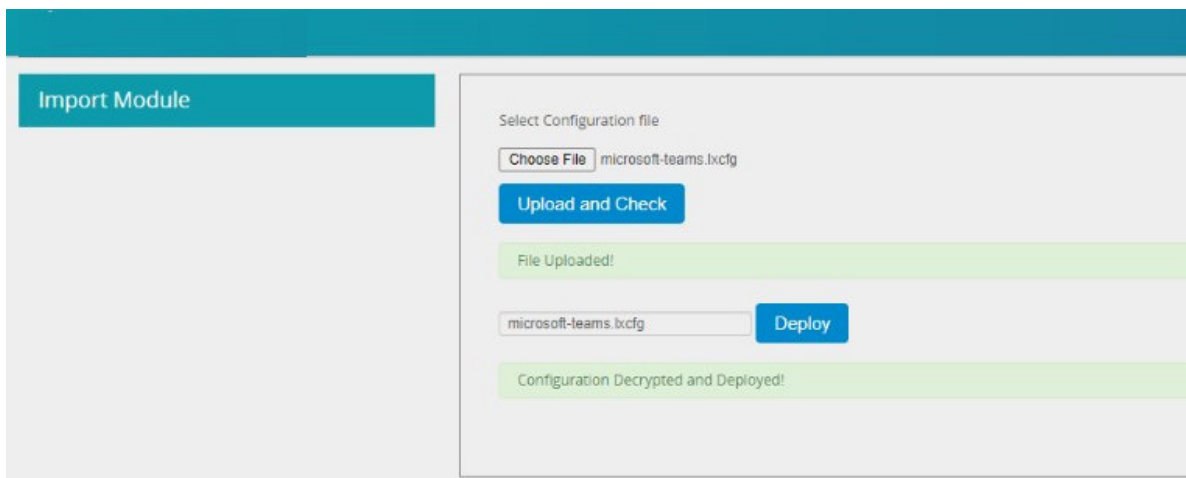


Figure 7 - VOSS Insights Agent module deployment

5. The configuration of the agent is now complete. Please proceed to your Dashboard server and locate your corresponding Microsoft Teams dashboards.

16. Solutions to Basic Installation Challenges

In this section, a few basic issues and solutions for them will be covered. If the offered solutions do not work, please contact VOSS Support Team.

Note: When you contact VOSS Support, always include the following details in your request:

- Your username to login to your cloud collector.
 - Screenshots of the issue.
 - Diagnostic log files available on web GUI.
-

16.1. Issue #1: You cannot log in to your cloud collector's web GUI with your credentials.

Solutions:

- Please check your credentials. Try to enter them manually instead of copying and pasting them from somewhere.
- Contact VOSS support and have your credentials validated for a potential typo or license expiry.

16.2. Issue #2: You cannot connect a data source profile to the Dashboard Server.

Solutions:

- Please confirm that TCP port 5432 is open between your cloud collector and Dashboard Server.
- Please confirm that your Dashboard server is on SP63 or later. If that is not the case, it should be patched by the VOSS Support Team to support Microsoft 365 dashboards.

16.3. Issue #3: You cannot connect to your cloud collector's login page at all.

Solutions:

- Contact VOSS support to verify any unexpected service issues.

16.4. Issue #4: You created your “Microsoft Health” successfully but you are not able to see any data on your “Service Health Status” dashboards.

Solutions:

- Please confirm that you have the correct permissions assigned to the application you created on the Azure portal for the cloud collector. To collect service health status, the “ServiceHealth.Read.All” permission has to be assigned to the application.

17. Appendix

17.1. Issues

If the container is restarted, a new IP address is allocated. This could affect and network policies and rules between the MS Teams collector in Azure and the location of the Dashboard server. Consider making the IP address for the container static.

When creating the global reader account, it sets the expiry of the password to 2 years, so this will need to be updated on the MS Teams collector, otherwise the data collection will cease.

17.2. Prerequisites

- Build dashboard server and have the IP address available
- Open up ports between the dashboard server and the Azure cloud collector
- Build Azure AD global reader account
- Build App:

Please create a dedicated user account on your Microsoft Admin Portal with “Global Reader” privileges.

[See details in Microsoft Admin.](#)

- VOSS Insights agent will be using this account to collect the information it needs to display the historical Microsoft Teams call details. For further support, please contact the VOSS Team.

Please register your VOSS Insights agent as an app on your Azure portal using details provided by Microsoft.

[See details in the Microsoft Quickstart](#)

VOSS agent will be using this account to collect the information it needs to display Microsoft 365 service health status and incidents. For further support, please contact the VOSS Team.

- You will need your Azure admin portal login details and VOSS provided credentials to install the Azure Container Instance in the relevant ACI context.

Please contact VOSS support to get your cloud agent access package before any configuration. This package should include:

- Access link to your VOSS Cloud Agent Webapp via a web portal.
- A set of credentials to access your VOSS Cloud Agent Webapp via a web portal.
- An encrypted import module file to enable some of the internal features of the agent.

17.3. Azure Container Instance Specification

Following are the minimum technical specifications for a VOSS Cloud Collector in Azure ACI:

2xCPU and 4Gig RAM with *no* persistent storage.

The email that was sent earlier in the process and the welcome email with log in details will be used to log in to the docker container registry to download the docker image.

On the users PC:

- Load Docker
- Load PowerShell

17.4. Build the Azure ACI using Docker

- Reference the Docker Docs for further information.
- If you have docker installed on your Mac or PC or just installed docker, follow the steps below:
 1. **docker logout azure**
 2. **docker login azure** (Follow the on screen instructions and use your admin creds)
 3. **docker login layerxdocker.azurecr.io** (use the creds provided in your welcome email)
 4. Optional step if your don't have a Azure context built or as instructed by your Azure Sysadmin.
 - To add a context. **docker context create aci [somename]**
 - Follow on screen instructions
 - Finally install and run your CI by typing the syntax below – no quotes

```
docker --context somename run -d --restart always --cpus 2 --memory 4G -p
↪5000:5000 layerxdocker.azurecr.io/microsoft-teams-debian:v3
```

Log in into your admin portal using the web browser and confirm ACI is present and running.

Navigate to Azure: **Container Instances**.

Find container name created in PowerShell and select it.

Take note of the public IP:

Microsoft Azure Upgrade Search resources, services, and docs (G+)

Dashboard >

infallible-cannon Container instances

Search (Ctrl+/) << Start Restart Stop Delete Refresh

Overview

- Activity log
- Access control (IAM)
- Tags

Settings

- Containers
- Identity

Essentials

Resource group (change) : a27bccf7-9350-df92-86a3-45869143a1c2 OS type : Linux

Status : Running IP address (Public) : 20.75.158.109

Location : East US FQDN : ---

Subscription (change) : Free Trial Container count : 1

Subscription ID : a0ef1d1d-4223-49a4-becf-8d69b0824aeb

Tags (change) : docker-single-container : docker-single-container

Container name > **Containers**.

Microsoft Azure Upgrade Search resources, services, and docs (G+)

Dashboard > infallible-cannon

infallible-cannon | Containers Container instances

Search (Ctrl+/) << Refresh

1 container

Name	Image	State	Previous state
infallible-cannon	layerxdocker.azurecr.io/microsof...	Running	-

Events Properties Logs Connect

Choose Start Up Command

/bin/bash /bin/sh

Connect

Click **Connect**.

Microsoft Azure Upgrade Search resources, services, and docs (G+)

Dashboard > infallible-cannon

infallible-cannon Containers ...
Container instances

Search (Ctrl+/) Refresh

1 container

Name	Image	State
infallible-cannon	layerxdocker.azurecr.io/microsof...	Running

Events Properties Logs **Connect**

```
root@SandboxHost-637522793222771134:/app#
```

Take the sandbox name and email to VOSS to get a user created and associated for logging into the cloud collector GUI.

Open a New tab: <https://<container public IP>:5000>

Await the email for user details.

Log in to the GUI.

Not secure | 2075.158.109:5000

Apps Bookmarks Links Lab NAS

USERNAME

PASSWORD

SIGN IN

17.5. Notes

- PowerShell requires a Windows PC. MAC users can load docker and use the MAC command line
- PowerShell seems to store credentials for first docker build - need to clear for multi customers, or could be the list context names to see what could be used. Default is the default one but customers might have their own = docker context list