



AZURE SELF-HOSTED

POST INSTALLATION GUIDE

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INTRODUCTION

This document describes how to complete your configuration of the self-hosted version of the CloudCheckr software after you have installed the application.

For information on how to install the application, see the document, **Azure Self-Hosted Installation Guide**. If you need help with installation, please contact support@cloudcheckr.com.

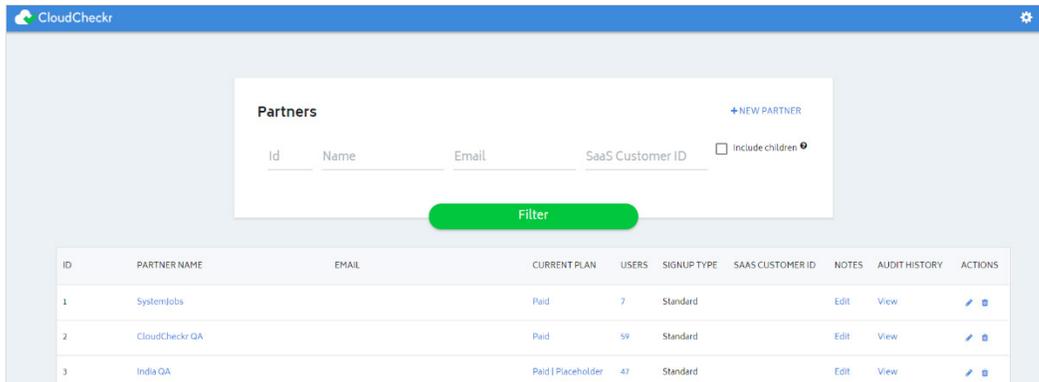
These final configuration steps include setup in CloudCheckr and in Microsoft Azure.

CLOUDCHECKR SETUP

Create Partner

1. Log into the self-hosted version.

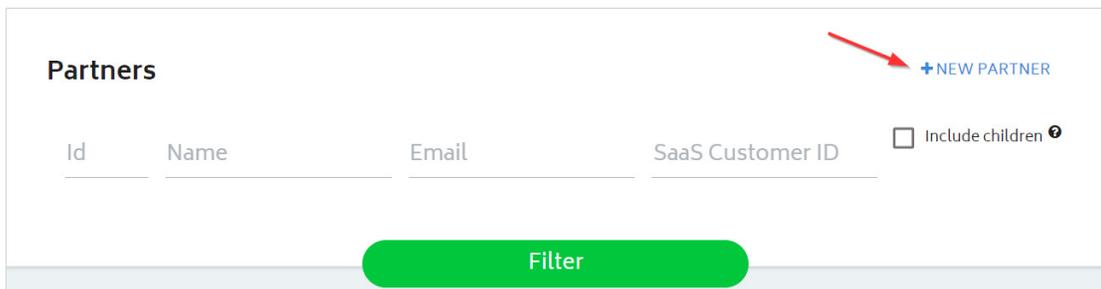
The Partners page displays.



Partners are the top-level container within the application where you can generate and store multiple cloud accounts. In most cases, you only need to create one partner.

Note: Once you have logged in, change the password immediately.

2. Click **+ NEW PARTNER**.



A dialog box opens.

Partner Information

Enter a name for your new partner. An email address is only required if an initial user is added.

Partner Name

Partner Email

Initial User

If you choose to add a user to the partner, you can optionally set a password. If none is provided, the user will be required to set one on activation.

Add an initial user to the partner

Password

Allow user to create partners

Resellers

This partner will be created as your reseller, if selected. To complete the required configuration for this new partner to receive the billing information from your Detailed Billing Report (DBR), go to Settings > Resellers.

This partner is a reseller

Master-Payer Partner Id

CANCEL CREATE

3. In the Partner Name text field, type a **partner name**.
4. In the Partner Email text field, type an **email address**.
5. Click **CREATE**.

A message indicates that the partner was successfully added.

Success

Successfully added partner.

OK

6. Click **OK**.
7. Click **Filter** to refresh the partners list.

The new partner is now displayed in the partners list.

Configure Application Settings

Before you can use the self-hosted version, you must configure the application settings to ensure the self-hosted version has the same functionality as the SaaS version. You will complete the following actions on the Configuration page in the self-hosted version.

1. From the menu bar, select **Settings > System > Configuration**. The Application-wide Configuration page opens.

Application-wide Configurations

These configuration settings apply to all workers, web portal, and databases running for this CloudCheckr application.

SMTP Settings

In order for CloudCheckr to send emails, you will need to configure the SMTP server, username, password, and other details that CloudCheckr will use to send the outbound emails.

Email Enabled

SMTP Server

SMTP Port

SMTP User

SMTP Password Is set: ✘

SMTP Enable SSL

SMTP Email Sender

Internal Email Sender

URL For CloudCheckr

CloudCheckr generates URLs that may be delivered in emails or in various sections of the web portal.

In order for these links to work, you will need to set the initial part of the URL to let CloudCheckr know what hostname to use.

Use the URL:

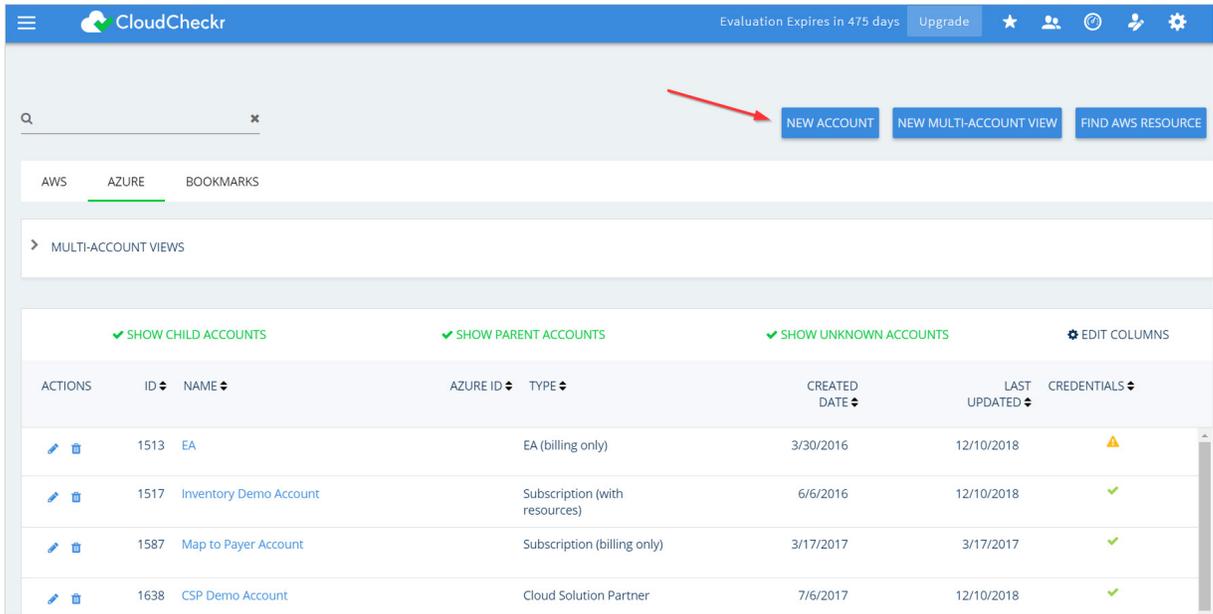
Workers Count

2. Configure the SMTP settings to enable the application to send emails to users. Emails may include activation emails for new users, alerts, and report data.
3. In the URL for CloudCheckr section:
 - a. Type the URL that will be shown on any application-generated emails.
Note: The default **localhost** designation displays the DNS for the EC2 instance that is hosting your version of the application. This URL is external-facing.
 - b. In the Workers Count text field, type the number of workers.
4. In the Proxy section, type the proxy details.

Create Azure Accounts in CloudCheckr

To import your Azure data into CloudCheckr, you need to create Azure accounts in CloudCheckr.

1. From the top right of the Partners page, click the **NEW ACCOUNT** button.



The New Account screen displays.

The 'New Account' form has the following fields and options:

- Enter a name for your Account:** A text input field with a character count of 0/256.
- Cloud Provider:** A drop-down menu currently showing 'Amazon Web Services'.
- Navigation Visibility:** A list of checkboxes for sections to be visible to users:
 - Recently Viewed
 - Savings
 - Best Practices
 - Cost
 - Inventory
 - Security
 - Utilization
 - Automation
- Buttons:** 'Create' (green) and 'Cancel' (grey).

- a. Type a name for your account. If needed, you can change the name later.
- b. From the Cloud Provider drop-down menu, select **Microsoft Azure**.
- c. Click **Create**.

The Configure Account page opens.

2. Click the drop-down arrow and select the type of Azure account you want to add.

The configuration steps that display on the page depend on the type of Azure account you selected.

3. Follow the instructions associated with your Azure account to complete the configuration in CloudCheckr.

Configure CSP Account

If you selected **Collect billing data from my Partner Center/CSP Account** from the drop-down menu, the Configure Account page displays the CSP instructions.

Configure Account Show Help

I would like to:

Collect billing data from my Partner Center / CSP Account ▾

CloudCheckr can access your billing / invoice data from your CSP / Partner account.

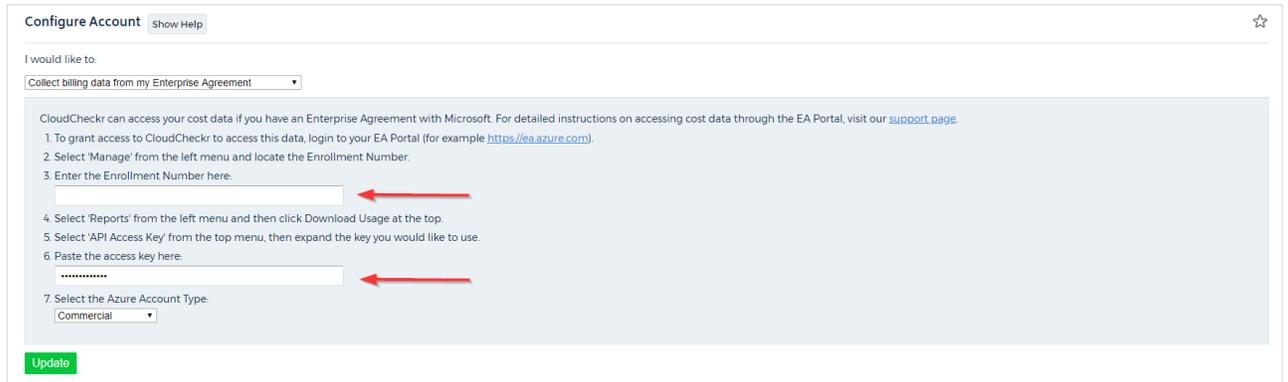
1. Enter the Azure Active Directory domain that is used to manage your Partner Portal users.
3. Create a Partner Portal user that will be used for CloudCheckr access. Ensure that you login once with the user to set the password.
4. In order to read invoice data, this user must have Admin Agent and Billing Admin rights.
5. Enter the user's login id:
6. Enter the user's password:
7. In the Partner Portal App Management area, create a new Native App registration.
8. Enter the Native App's App ID:
9. Select the Azure Account Type:

1. Provide the required information from the Microsoft Partner Center/Cloud Solution Provider (CSP) portal. See [Azure Setup: Configure Partner Center \(CSP\) Cost Data](#) for details.
 - Windows Azure Active Directory ID: the domain of the user's email address
 - User's Login ID: the user's email address
 - User's Password: the password you created in the Microsoft Partner Center/CSP portal
 - Native App ID: the App ID created in the Microsoft Partner Center/CSP portal
2. From the Azure Account Type drop-down menu, select **Commercial** or **Government**.
3. Click **Update**.

Configure EA Account

If you selected **Collect billing data from my Enterprise Agreement** from the drop-down menu, the Configure Account page displays the EA instructions.

1. Paste the enrollment number and access token that you obtained from the EA portal into the appropriate fields. See [Configure Enterprise Agreement \(EA\) Cost Data](#) for details.



The screenshot shows the 'Configure Account' page with a 'Show Help' button. Below the header, there is a section titled 'I would like to:' with a dropdown menu set to 'Collect billing data from my Enterprise Agreement'. The main content area contains instructions for accessing cost data through the EA Portal, including a link to a support page and a list of steps. Two red arrows point to input fields for the Enrollment Number and the Access Key. The 'Azure Account Type' dropdown is set to 'Commercial'. A green 'Update' button is at the bottom left.

Configure Account Show Help

I would like to:
Collect billing data from my Enterprise Agreement

CloudCheckr can access your cost data if you have an Enterprise Agreement with Microsoft. For detailed instructions on accessing cost data through the EA Portal, visit our [support page](#).

1. To grant access to CloudCheckr to access this data, login to your EA Portal (for example <https://ea.azure.com>).
2. Select 'Manage' from the left menu and locate the Enrollment Number.
3. Enter the Enrollment Number here:
4. Select 'Reports' from the left menu and then click Download Usage at the top.
5. Select 'API Access Key' from the top menu, then expand the key you would like to use.
6. Paste the access key here:
7. Select the Azure Account Type:
Commercial

Update

2. From the Azure Account Type drop-down menu, select **Commercial** or **Government**.
3. Click **Update**.

Configure Subscription Account

If you selected **Collect resource information from my Azure subscription** from the drop-down menu, the Configure Account page displays the subscription instructions.

1. Provide the required information from the Azure portal. See [Azure Setup: Configure Your Azure Subscription](#) for details.
 - Directory ID
 - Application ID
 - Subscription ID
 - Secret Key

Configure Account Show Help ☆

I would like to:
Collect resource information from my Azure subscription

CloudCheckr can access your resources if you have an Azure Active Directory set up with Microsoft. For detailed instructions on navigating Active Directory, visit our [support page](#).

1. Sign in to the Azure portal and select Active Directory in the main toolbar, then navigate to the Properties tab.
2. Copy and paste the Directory ID here:
3. Navigate to the App Registrations tab and click Add in the top toolbar.
4. Enter these values:
Name: Cloudcheckr
Application Type: Web app / API
Sign-on URL: https://localhost/logon
5. Save, then select the newly created app named Cloudcheckr in the listing.
6. Copy and paste the Application ID here:
7. In the Settings menu, select Keys. Enter a description for a new key, select a duration, and then save.
8. Copy and paste the newly created key's value here:
9. In the main toolbar, select Subscriptions and navigate to the subscription you aim to use for this account.
10. Copy and paste the Subscription ID here:

2. From the Azure Account Type drop-down menu, select **Commercial** or **Government**.
3. Click **Update**.

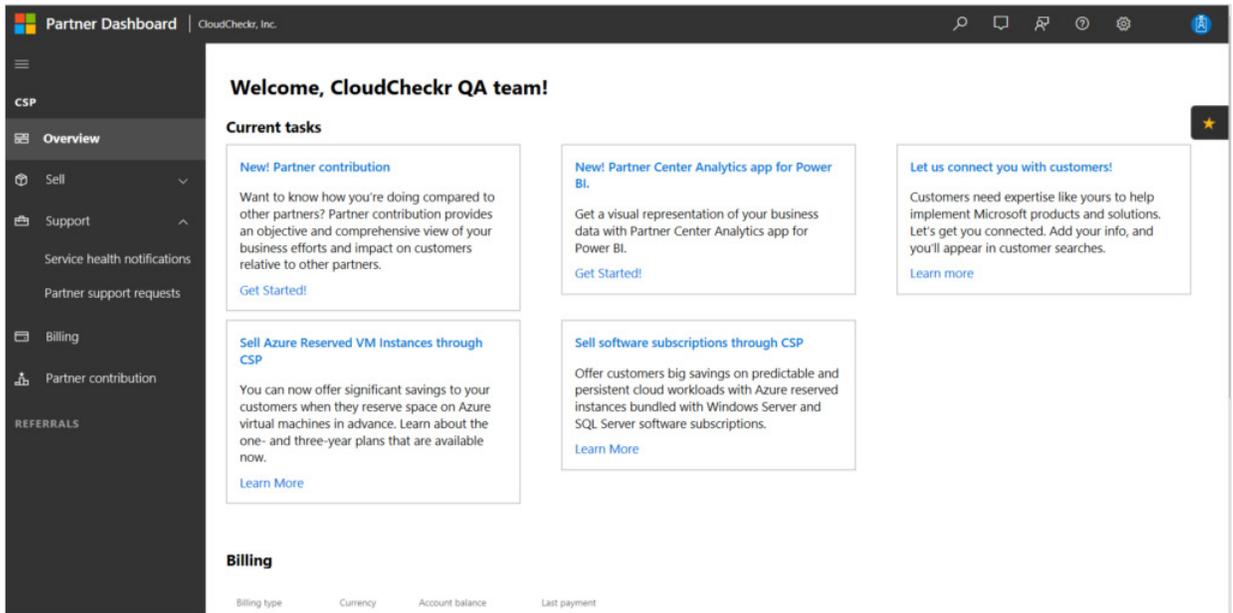
AZURE SETUP

Configure CSP Cost Data

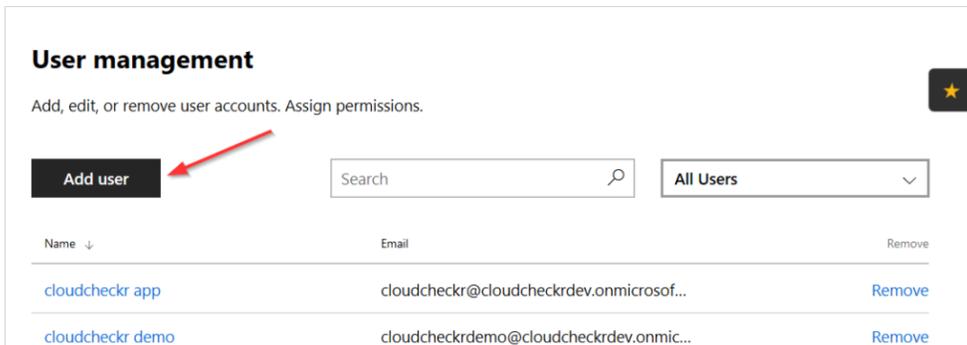
CloudCheckr can import cost data from the Microsoft Partner Center/Cloud Solution Provider (CSP) portal. To import this data, you will need to create a **partner user** and **native application** in the Microsoft Partner Center/Cloud Solution Provider (CSP) portal.

This procedure shows you how to log into the Microsoft Partner Center/CSP portal and create a user.

1. Log into the **Microsoft Partner Center**.
The Cloud Solution Provider page opens.
2. To sign into your Cloud Solution Partner account, go to the menu bar and click **Dashboard**.
Note: You can also click **Sign in** located on the right side of the screen.
3. Select your account, type your password, and click **Sign in**.
The Partner Center page opens.



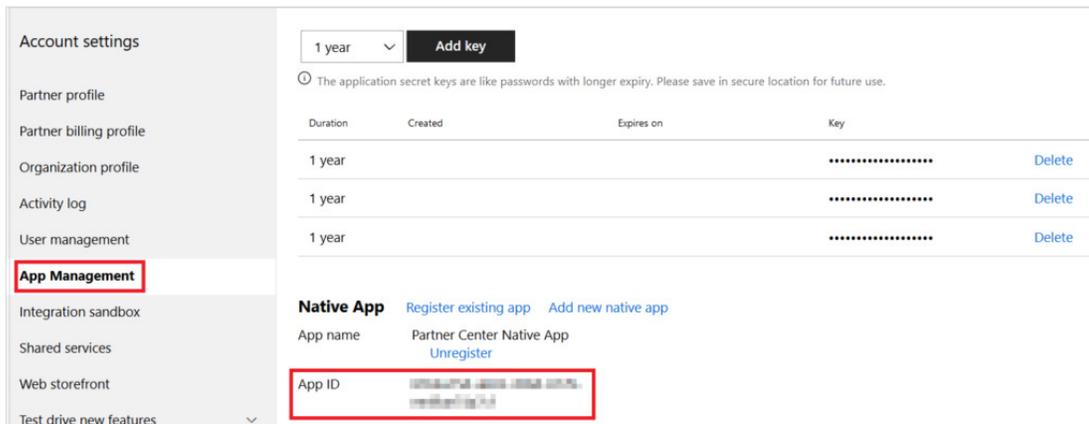
4. From the right side of the screen, select **Settings > User Management**.
The User Management screen displays.
5. Click **Add user**.



The Add user screen displays.

6. Type the name and email of the new user that you will use with your CloudCheckr account.
7. Under the Roles and permissions section:
 - Make sure that you select the **Manages your organization's account** checkbox and select **Billing admin**.
 - Make sure that you select the **Assists your customers as** checkbox and select **Admin agent**.
8. Click **Add**.
9. After you create a user, log into the Microsoft Partner Center with the temporary password of the new user to create a permanent password.

Note: You cannot use the temporary password to credential the CSP account in CloudCheckr.
10. On the Partner Center page, go to **Account Settings** and click **App Management**.
11. Scroll until you see the Native App section, and click **Add new native app**.



12. Copy the App ID.
13. Save these required items to a safe location:
 - Windows Azure Active Directory ID: the domain of the user's email address
 - User's Login ID: the user's email address
 - User's Password: the password you created in the Microsoft Partner Center/Cloud Solution Provider (CSP) portal
 - Native App ID: the App ID created in the Microsoft Partner Center/Cloud Solution Provider (CSP) portal
14. Go to CloudCheckr Setup: Configure CSP Account.

Configure EA Cost Data

To enable CloudCheckr to report on cost data from your Azure EA account, you need to obtain an enrollment number and access token from Azure. CloudCheckr uses these values to retrieve the billing data, which is required to populate your cost reports.

1. Log Into the Azure Enterprise Portal.
2. From the left side of the Enterprise Portal landing page, click **Manage**.
3. Copy and save the enrollment number.

The screenshot shows the 'Enrollment Detail' page in the Azure Enterprise Portal. The left sidebar has a 'Manage' button highlighted with a red arrow. The main content area shows enrollment details for 'CloudCheckr Inc.' with the 'Enrollment Number' field circled in red. Below this is a table of administrators and a notification contact section.

Email	Auth Type	Notification Frequency	Lifecycle Notific...	Read...
aaron.getting@cloudch...	Microsoft Account	None	No	No
aaron.klein@cloudcheckr...	Microsoft Account	None	No	No
aaron.newman@cloudch...	Microsoft Account	Daily	No	No
accounting@cloudcheck...	Microsoft Account	Weekly	No	No
amanda.nock@cloudche...	Microsoft Account	None	No	No

4. Click the **Reports** menu.

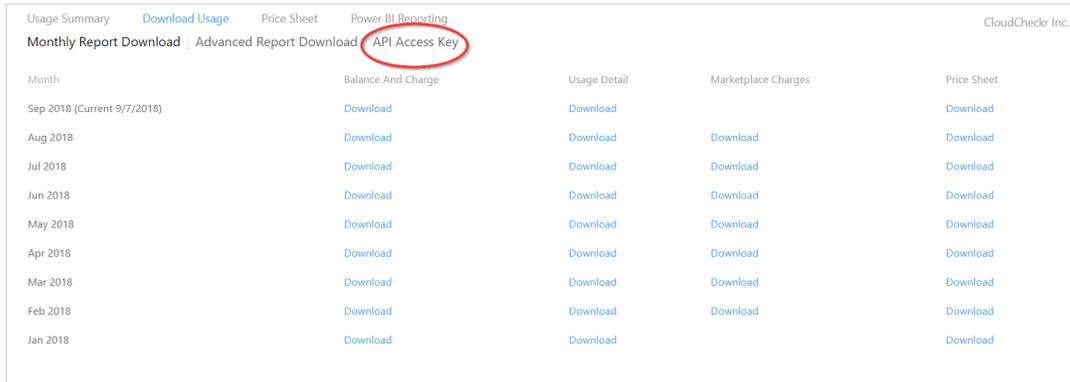
The screenshot shows the 'Usage Summary' page. The left sidebar has a 'Reports' button highlighted with a red arrow. The main content area features a line chart showing usage from Dec 2017 to Nov 2018. To the right of the chart is a summary table with the following data:

Beginning Balance	\$2,209.73	Commitment Usage	\$274.95
New Purchases	\$0.00	Service Overage	\$0.00
Adjustments	\$0.00	Charges Billed Separately	\$0.00
Ending Balance	\$1,934.78	Azure Marketplace	\$0.00

5. Click the **Download Usage** link.

This is a close-up screenshot of the 'Usage Summary' page. The 'Download Usage' link is circled in red. The chart below shows usage data from Dec 2017 to Nov 2018.

6. On the Download Usage page, click the **API Access Key** option.

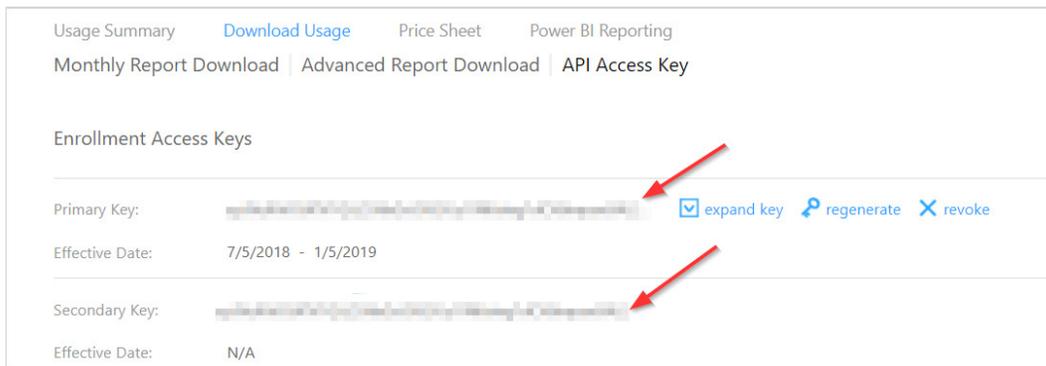


The screenshot shows a navigation menu with 'API Access Key' circled in red. Below the menu is a table with columns for 'Month', 'Balance And Charge', 'Usage Detail', 'Marketplace Charges', and 'Price Sheet'. Each row represents a month from Jan 2018 to Sep 2018, with 'Download' links for each column.

Month	Balance And Charge	Usage Detail	Marketplace Charges	Price Sheet
Sep 2018 (Current 9/7/2018)	Download	Download		Download
Aug 2018	Download	Download	Download	Download
Jul 2018	Download	Download	Download	Download
Jun 2018	Download	Download	Download	Download
May 2018	Download	Download	Download	Download
Apr 2018	Download	Download	Download	Download
Mar 2018	Download	Download	Download	Download
Feb 2018	Download	Download	Download	Download
Jan 2018	Download	Download		Download

Azure generates a primary key and, in some cases, a secondary key.

You can use the primary key or the secondary key as your token in CloudCheckr.



The screenshot shows the 'Enrollment Access Keys' section. It displays a 'Primary Key' with a red arrow pointing to it, an 'Effective Date' of '7/5/2018 - 1/5/2019', and a 'Secondary Key' with a red arrow pointing to it. The 'Secondary Key' has an 'Effective Date' of 'N/A'. There are also buttons for 'expand key', 'regenerate', and 'revoke' next to the primary key.

7. Copy and save the selected key.
8. Go to CloudCheckr Setup: Configure EA Account.

Configure Azure Subscriptions

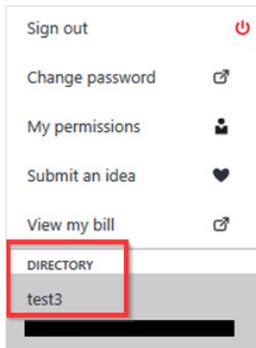
Note: After you create the Directory ID, Application ID, Subscription ID, and secret key, please copy these values to a desired file type, such as CSV, and save the file to a safe location. You will need them to configure your subscription in CloudCheckr.

1. Log into your Azure portal.

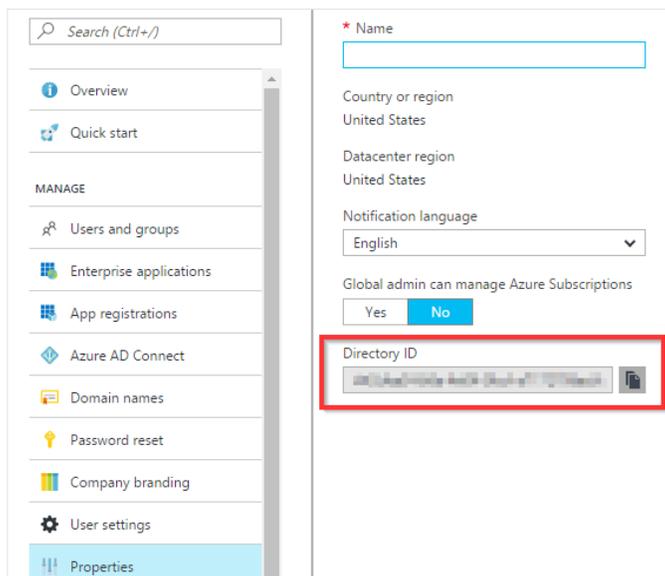
Note: The link you chose depends on your subscription type:

- [commercial subscriptions](#)
- [government subscriptions](#)

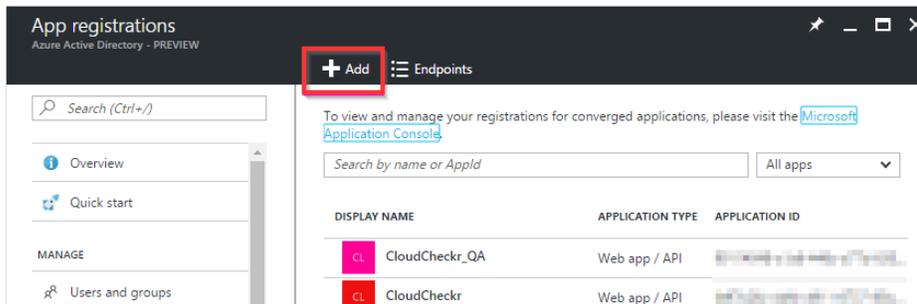
- From the selected Azure portal, select the directory that contains the subscription you want to scan.



- Open the Azure Active Directory management panel.
- Select **Properties**.
- Find the **Directory ID** and save it.



- Select **App Registrations** and click **Add** to create a new app registration.



- Type a name for the application. (For example: **CloudCheckr Service**).
- From the Application Type drop-down menu, select **Web app /API**.

9. In the Sign-on URL text field, type **https://localhost**.

* Name 

Application Type 

* Sign-on URL 

https://localhost

10. Click **Create**. When you are back on the App Registration screen, find the Application ID and save it.
11. Select the new registration and from the menu, select **Keys**.
12. Type a name, select a duration, and click **Save**.

Keys
PREVIEW
Save Discard

DESCRIPTION	EXPIRES	VALUE
No results.		
<input type="text" value="Key description"/>	<input type="text" value="Duration"/>	<input type="text" value="Value will be displayed on save"/>

Azure creates a new key and displays the key value in the third text field.

13. Save the new key immediately since you will not be able to view it again. You will now have three values: Directory ID, Application ID, and the secret key.
14. Open the Subscription management panel.
15. Select the subscription that CloudCheckr will monitor. Find the subscription ID and save it.
16. With the subscription selected from the subscription management panel, select **Access Control (IAM)**.

Search (Ctrl+)

- Overview
- Access control (IAM)**
- Diagnose and solve problems

BILLING

- Payment methods
- Partner information

SETTINGS

- Programmatic deployment
- Resource groups
- Resources

17. Click **Add** to add the new service account.
18. Select the Reader role and then add the new service account as the user. You may need to search for the account if it is not listed.
19. Save the change.
The CloudCheckr service account should now be on the list with reader access.
20. Go to CloudCheckr Setup: Configure Subscription Accounts.



Learn more about the CloudCheckr Cloud Management Platform at www.cloudcheckr.com.