

AZURE ACTIVE DIRECTORY INTEGRATION

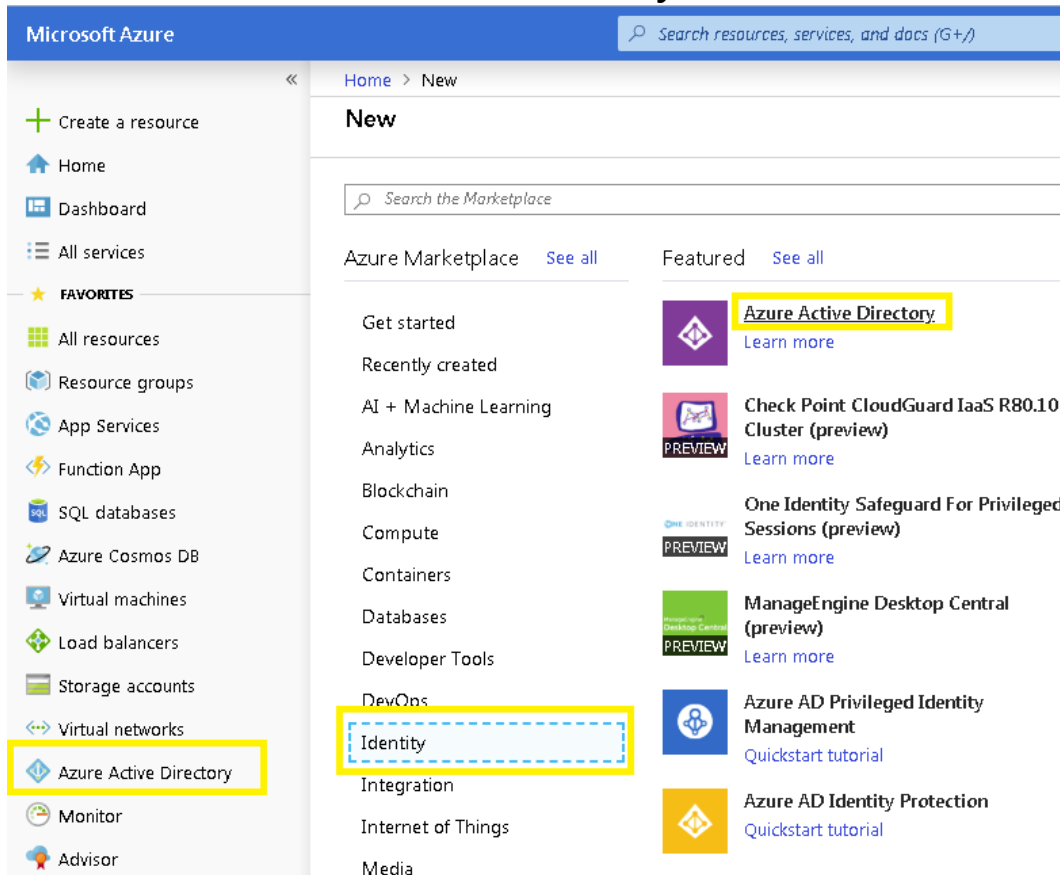
PC-Duo includes support for communicating directly to the Microsoft Azure Active Directory (AAD) tenant service and this guide covers the steps to accomplish this. Until PC-Duo v10, authentication had been limited to Windows Authentication. We have now broken free from that in order to use alternate identity providers and provide multi-factor authentication.

When you are ready to get started, log into your portal at portal.azure.com, which looks like this:

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the 'Microsoft Azure' logo and a search bar. The left sidebar contains a navigation menu with options like 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES'. The main content area displays the 'RyansLastTest - Overview' page for an Azure Active Directory tenant. This page includes a search bar, 'Switch directory' and 'Delete directory' buttons, and a list of management options such as 'Users', 'Groups', and 'Organizational relationships'. A 'Sign-ins' section is present, along with a 'What's new in Azure AD' section listing recent updates.

A. Create a New Directory (Home > New). Already have an AAD? Skip to next step.

a) Click “+ **Create a resource**”, then click **Identity**, then click **Azure Active Directory**.



- b) Provide an organization name within the “Organizational name” field.
- c) Provide an initial domain name in the “Initial domain name” field.
- d) Click **Create** at the bottom of the panel and within a couple minutes your new directory will be created.
- e) Upon completion, the panel displays message, “Click here to manage your new directory”.

Important: Save the initial domain name (i.e. YourAzureADHere.onmicrosoft.com) to be used later. At this point the Directory is created and ready to be configured. The configuration includes:

- Creating groups and users.
- Registering the application.

B. Create Groups (Home > YourAzureADHere > Groups - All groups > New Group)

Provide information for the following fields to create a group:

- Group type: Security
- Group name: **PC-Duo Administrators**
- Description: PC-Duo Administrators group
- Membership type: Assigned (Leave alone)
- Ignore Members section at this point.

After successful group creation, close the Group panel. The Create button at the bottom will get enabled. Click it to complete group creation.

Repeat once again for the Masters group.

- Group type: Security
- Group name: **PC-Duo Masters**
- Description: PC-Duo Masters group
- Membership type: Assigned (Leave alone)
- Ignore Members section at this point.

After successful group creation, close the Group panel.

The screenshot shows the Microsoft Azure portal interface for creating a new group. The breadcrumb trail at the top reads: Home > RyansLastTest > Groups - All groups > New Group. On the left, there is a navigation pane with options: Create a resource, Home, Dashboard, All services, FAVORITES, All resources, Resource groups, App Services, Function App, SQL databases, Azure Cosmos DB, Virtual machines, Load balancers, Storage accounts, Virtual networks, and Azure Active Directory. The main content area is titled 'New Group' and contains the following fields:

- Group type**: A dropdown menu.
- Group name**: A text input field with a hint 'Enter the name of the group'.
- Group description**: A text input field with a hint 'Enter a description for the group'.
- Membership type**: A dropdown menu.
- Owners**: A section for adding group owners.

C. Create Users (Home > YourAzureADHere > Users - All users > User)

Skip to the next step if you already have user accounts and would like to invite them via their email addresses.

Provide information into the following fields to create a user:

- Name: User full name (John Smith)
- User name: Fully qualified user name (jsmith@YourAzureADHere.onmicrosoft.com)
- Click Profile, a new panel title Profile will open. In the Profile panel provide General information at least:
 - Name: John Smith
 - Username: JSmith@company.com

Click **OK** at the bottom of the Profile panel after first name and last names are filled in. This will save new user profile information and close the Profile panel.

- Important: Check the **Show Password** box and copy the Password from the field above it. Save the user name (JSmith@YourAzureADHere.onmicrosoft.com) and corresponding password to a text file.

This password is the user's one time first password. The user will be asked to change it when they log in. If this step is missed, an admin will have to reset the user's password and perform this step again to provide the user with their first login password.

Caution: Communicate the first-time password to the user via secure channel later.

- Click **Create** to save the user. This will automatically close the User panel.

Microsoft Azure

Search resources, :

Home > YourAzureADHere > Users - All users > User

User

YourAzureADHere

* Name ⓘ

Example: 'Chris Green'

* User name ⓘ

Example: chris@contoso.com

Profile ⓘ

Not configured

Properties ⓘ

Default

Groups ⓘ

0 groups selected

Directory role

User

- Repeat these steps to create another user.

D. App Registration ([Home](#) > [YourAzureADHere - App registrations](#) > Register an application)

- Provide a **Name** for the application.
- For Supported Account Types, use the third radio button for **Accounts in any organizational directory and personal Microsoft accounts**.
- For the **Redirect URI**, enter the address of your web console and add /pim/core/ to the end.
 - It should look like this: `https://support.yourwebsite.com/pim/core/`
- Click **Register**.
- Under **Authentication** hit the checkbox for **ID Tokens** and click **Save**.

E. Certificates & Secrets ([Home](#) > [YourAzureADHere - App registrations](#) > YourAzureADHere - Certificates & secrets)

- From the **Certificates & secrets** page click **New client secret**.
- Provide a descriptive name in the **Description** field.
- Set the expiration to **Never** and click **Add**.
- IMPORTANT:** Copy the value to Notepad or similar as this is needed for the PIM settings later. You cannot retrieve the key after this time so it's critical that this is copied to a safe place now.

F. API Permissions ([Home](#) > [YourAzureADHere - App registrations](#) > YourAzureADHere - API permissions)

- From **API permissions**, click **Add a Permission**.
- Click **Azure Active Directory Graph** and click **Application permissions**.
- Expand **Directory** and check the box for **Directory.Read.All (Read Directory Data)**.
- Click the **Grant admin consent for [Your PC-Duo Web Console]** button.

G. Manifest ([Home](#) > [YourAzureADHere - App registrations](#) > YourAzureADHere - Manifest)

- Click the **Manifest** button to edit. Change null to "groupMembershipClaims": null (line # 12). Replace the null with "SecurityGroup", so the line reads "groupMembershipClaims": "SecurityGroup", like in the below screen snippet:

```
"oauth2AllowUrlPathMatching": false,  
"createdDateTime": "2019-05-30T15:08:24Z",  
"groupMembershipClaims": "SecurityGroup",  
"identifierUris": [],
```

b. Click **Save** on the top and close the Edit Manifest panel.

H. Enterprise applications (Home > YourAzureADHere > Enterprise applications - All applications)

- a) Click your application name.
- b) Click **Permissions**.
- c) Click **Grant admin consent for MyDirectory**.
- d) A window appears to ask you to accept permissions on behalf of users of your organization. The two items listed underneath "This app would like to:" should be:
 - Read Directory Data.
 - Sign in and read user profile.
- e) Click **Accept**

I. Updating PC-Duo Identity Manager (PIM) Settings

- a. Visit your PC-Duo Identity Manager which can be accessed in either manner:
- b. Visit the URL directly which would look like this: <https://support.yourwebsite.com/pim/>
- c. Visit the PIM through the PC-Duo Web Console -> Gateway tab -> Network sub-tab; scroll to the bottom to find the hyperlink to the PC-Duo Identity Manager.
- d. Within the PC-Duo Identity Manager, edit the following:
 - Allow Azure AD login: Set to True.
 - Azure Domain: Domain name (example: MyDirectory.onmicrosoft.com).
 - Azure Application ID (Client ID): Shown on the Overview page.
 - Azure Client Secret: Supply the key from the Certificates & secret step.

Below are the Azure AD values that must be plugged into the PIM. Click **Apply** and **OK** to save the changes.

Allow Azure AD login	Set to TRUE to allow Azure AD login; Azure settings must be filled in	True	Edit
Azure Domain	This is the domain name of the directory containing the user accounts	ryanslasttest.onmicrosoft.com	Edit
Azure Application ID (aka Client ID)	This is the Application ID found in the Azure management portal, under Application Registrations	9eb6[REDACTED]6bfa3	Edit
Azure Client Secret (aka Application Key)	This is the application password found in the Azure management portal, under the Application Registration, Certificates and Secrets, Client Secrets	w1P+[REDACTED]ka2c4/	Edit

J. Importing Azure AD Groups to the PC-Duo Web Console's "Accounts" tab

- a. Log into the PC-Duo Web Console as an Administrative user and visit the Accounts tab.
- b. Click the + button to add the first new group created in step 3.

- c. Select the Group radio button, input the Administrative group name, click OK and Save.
- d. Click the + button to add the second new group created in step 3.
- e. Select the Group radio button and provide the Master group name in the field.
- f. Select which Managed Hosts groups the Master may access, click OK and Save.

K. Adding Users to Groups ([Home](#) > [YourAzureADHere](#) > [Groups - All groups](#) > [MyGroup - Members](#))

- a. Click the Group name, click **Members**, click **Add members**.
- b. Select existing user(s) from the list or enter a user's email address.
- c. Click **Select** to confirm.
- d. Users must accept the invitation sent to their inbox before they can log in for the first time.

L. Inviting a User ([Home](#) > [YourAzureADHere](#) > [Users - All users](#) > [User](#))

- a. To invite an external user, click **New guest user** and the "Invite a Guest" panel opens.
- b. Provide the email address of the person you would like to invite, optionally with a message.
- c. Click **Invite** to send the invitation.
- d. Users must accept the invitation sent to their inbox before they can log in for the first time.

HAVE QUESTIONS OR NEED HELP? GIVE US A CALL 1-800-330-5035 FOR SUPPORT!