# Introduction

This manual will help you configure and deploy the automatic updates for Cam Content Mover.

The main objective of the wizard is to help you create the configurations in Azure and in Azure Devops so the product “Cam Content Mover” is deployed, and further updates can be automatically delivered to your Azure Resource Group.

# How the automatic Update process Works

The main objective of the wizard is to help you configure your Azure and Azure Devops tenants and:

1. Provision all the needed resources in Azure to host the CAM Content Mover Product.
2. Configure and prepare you Azure and Azure Devops tenants to provide the auto-update functionality of the product when a new release is available.

The complete process is made up 3 phases:

1. Startup
   1. Run the Wizard
2. First Deployment
   1. In Azure Devops start the Arm pipeline
   2. In Azure Devops start the functions pipeline
3. Automatic Updates
   1. Litera will push ARM of functions code updates to your Azure Devops project when they are available, so you can always have the latest features on your product.

Now we will explain what happens on each step of the process.

## Startup

The wizard will help you to configure your Azure Resource Group or will create a new one if needed. This RG will be where all the resources will be deployed.

The wizard will also configure the Azure Resource Group, so your Azure Devops has the permissions needed to deploy the updates of the infrastructure (ARM template) and code when they are available.

The wizard will create the following resources:

In the Azure Tenant, the wizard will create:

1. An Azure AD Application (principal) and will create a secret that will be used later in the Azure Devops configuration.
2. If you want the Wizard will create a new Resource Group in the Selected Subscription or you can select and already existing one.
3. Will set the Resource Group permissions of Owner for the principal created in the step one of this section.

In your Azure Devops Tenant, the wizard will create:

* A Project in Azure Devops
* A Repo with the ARM templates and needed files for the deployments
* A Git repo for the Functions where we will put the most recent code of the product so it can be deployed in the next stage.
* Two service connections, one to deploy the ARM template to Azure and one to report the success or failure of the process to Litera. The service connections are the way Azure Devops gets the approval to deploy to the Azure RG.
* A pipeline for the ARM Template
* A Release for the ARM Template
* A pipeline for the functions
* The releases for the functions

When the wizard successfully finishes, it will send the following information to Litera:

* Azure Devops url of the Project created
* The id of the function pipeline
* The id of the ARM pipeline
* Azure Devops project name and id
* The Id of the repos created in the process.
* The Azure Devops PAT Push Only captured in the Wizard.

## First Deployment

Once the Wizard finish you will have to follow the instructions indicated in this manual to Deploy the Resources using the ARM template and the functions code using the Azure Devops pipelines.

Once finished you will have your Azure Resource group with the CAM Content Mover product installed and ready to be used.

## Automatic Updates

When Litera releases updates of the Content Mover product, the customers subscribe to the Automatic Update feature will be process in the following way.

1. If Infrastructure changes are needed:
   1. We will push to your Azure Devops Repo the new ARM template and we will fire the pipeline that will deploy the new ARM template to your Azure Resource Group.
2. If code updates are needed
   1. We will push to your Azure Devops repo the updated code and we will fire the pipeline that will package the code and will deploy the changes to the Azure Functions.

When this process is finished Azure Devops will report back to us the success of failure of the process.

# Requirements

* A windows 10 computer with PowerShell 5.
* PowerShell modules Az and AzureAd installed in the PowerShell 5 window (please review the next link for more information https://docs.microsoft.com/en-us/powershell/azure/install-az-ps?view=azps-7.2.0 and <https://docs.microsoft.com/en-us/powershell/azure/install-az-ps?view=azps-7.2.0>)

This modules needs to be installed in the PowerShell 5 window. The wizard will not worked if you install the modules in Powershell 6 or 7 and not in Powershell 5.

* Access to the CamAzureDeployer.exe, this is a self-extraction exe that contains the wizard that will configure the deployment.
* Azure tenant with Admin Privileges
  + In case you are going to deploy to an already existing RG. The user running the Wizard needs to be owner of the Resource Group
* Azure Deveops Tenant
  + Azure Devops url in the form <https://dev.azure.com/organization>
  + Mail of an azure Devops user that already exists in the Azure Organization to be the owner of the project and deployments
  + In the case of configuring a user to authorize the deployments you will need to the email of this user. It could be the same as the owner
  + Two Pats Created by and user with Azure Devops Tenant with Project Collection Administration permissions.
    - The first will be used by the Wizard so it can create and configure everything that is needed on your Azure Devops organization.
    - The second pat will be sent to us, this pat will be saved encrypted and will be used to push the updates of the CAM product to your Azure Devops Repos.
    - Please refer to the document “Azure Devops Create PAT.docx” for further information about the Azure Devops PATs
* Prosperoware Tenant information:
  + Prosperoware Tenant Id
  + Prosperoware Encrypted Key
  + Prosperoware Secret Key

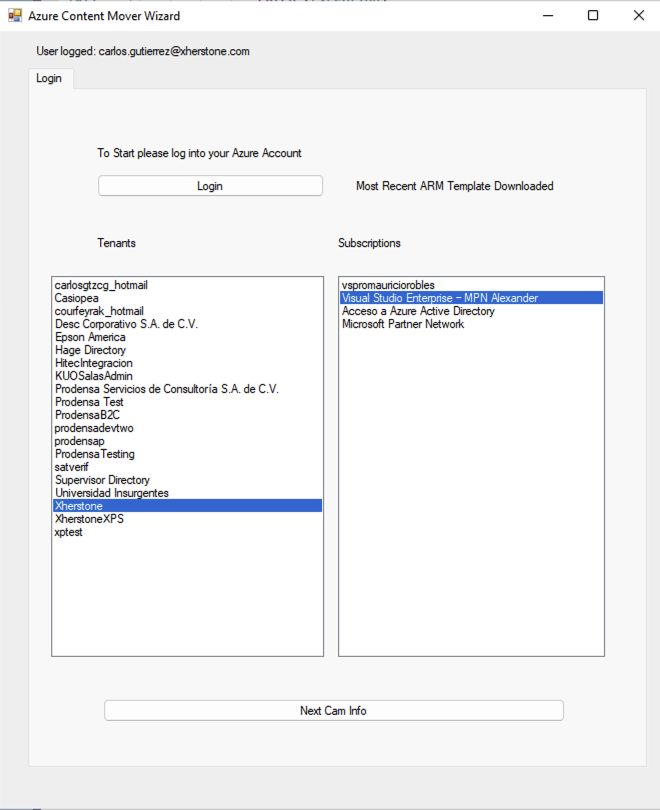
# Deployment and usage of the Wizard

1. Copy the “CamAzureDeployer.exe” in a folder as close as possible to your HD root and then Double click in the “CamAzureDeployer.exe” wizard, this will self-extract the files necessary for the process and will start the Wizard.

Graphical user interface, application

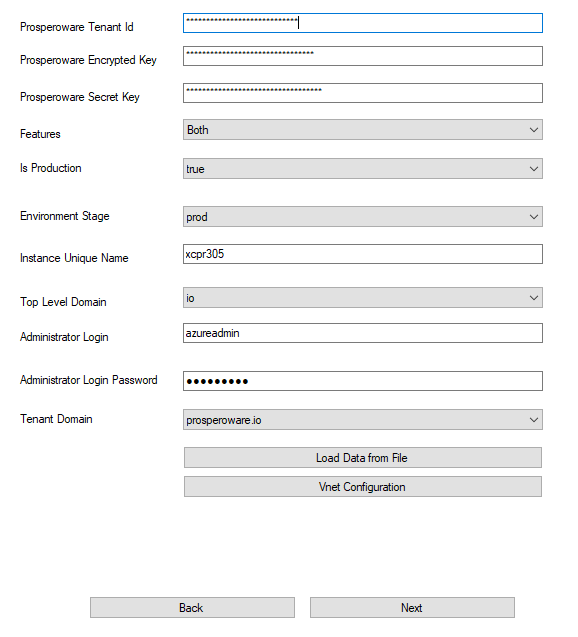
Description automatically generated

1. Select the type of the deployment you want Standard or Premium you can see more information in https://pdocs.atlassian.net/wiki/spaces/CCAM/pages/1058209793/Moving+from+Azure+Standard+to+Premium
2. Log into clicking on the “Login” button. When the Login screen appears be sure to login using an admin account.
3. After login you will see the available Tenants and subscriptions for your account



Select the Tenant and the subscription where you want to deploy and click on “Next Cam Info”

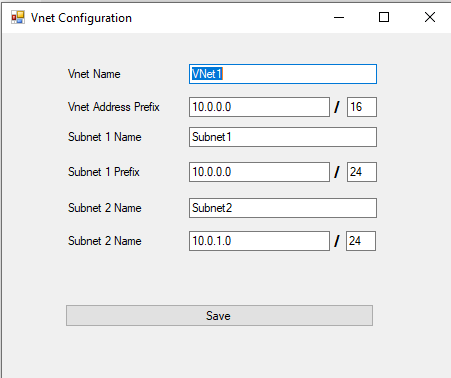
1. Fill all the information in the Cam Data step



And click on next, this will check that the information provided is correct and if so, it will present the Azure Devops form.

1. If you are going to deploy the Premium version, you can customize your VNET settings, for this click on the button “Vnet Configuration”. This will present the vnet configuration options that are already set to a default value.

Modify as needed



You need to be sure that the vnet options set on this are correct and that you select accepted values for subnetting. **If you put a wrong configuration here this could lead a failed deployment.**

Click on Save button and you can go on to the Azure Devops Configuration screen.

1. Fill the information of your azure devops Tenant

Here you can select if you want an automatic deployment every time a new release has been push, or if you want a user to approve.

If you want a user to approve select the “add pre deployment approver” and fill the user email.

You won’t be able to continue unless you provide valid emails and that emails exists on the Azure Devops Tenant indicated.

Une image contenant texte

Description générée automatiquement

When you are ready click on next, this will check that the information you provided is accurate and if so it will present the next step.

1. Select the region where you want the deploy to create the new resource group, or if you already have a resource group created check the “Existing Resource Group” and select the resource group where you want the deployment to take place.

**WARNING. If you select and already existing RG you should be sure that if a current implementation of Content Mover is the same as the one that will be automated. If you have a standard deployed and try to deploy premium the process will fail, the same if you try to deploy standard to a RG where a premium deploy was already deployed. In both cases the current implementation will stop working and will have to be re deploy.**

Graphical user interface, application

Description automatically generated

1. Click on the “Select Cache folder” button, and select an EMPTY folder to be used as a cache. This folder should be as closed as possible to the root of your HD or it may failed.
2. Click on start and fill the login credentials. Be sure to used the same credentials you used in the first step of the wizard.

Graphical user interface, application

Description automatically generated

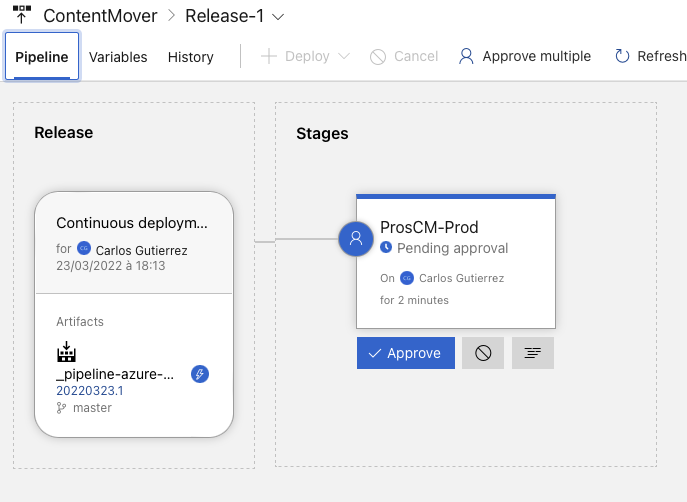
1. Wait until the wizard finish, this could take several minutes, do not allow your screen to be blocked or shutdown. Be aware that the step “Download most recent code” and “Pushing function code” could potentially take several minutes depending on you internet speed.
2. When the wizard finish go to your azure devops tenant and look for the project with the name you select in the step “Azure Devops”
3. In your azure devops tenant go to “Pipelines” and fire the pipeline named “pipeline-azure-contentmover”.
4. If you select the “Add pre deployment approval” in the Azure Devops Section, wait until an email arrives to the user account and accept the Deployment, if you did not, go to the next step

The email the user will received will look like this

Une image contenant texte

Description générée automatiquement

Click on “View approval”



Select “Approve”

1. Go to the Release section and look for a Release named “ContentMover” and wait until it finished.

Graphical user interface, text

Description automatically generated with medium confidence

1. Once finished in green Status go to pipelines and start the pipeline “Functions”

Graphical user interface, text, application

Description automatically generated

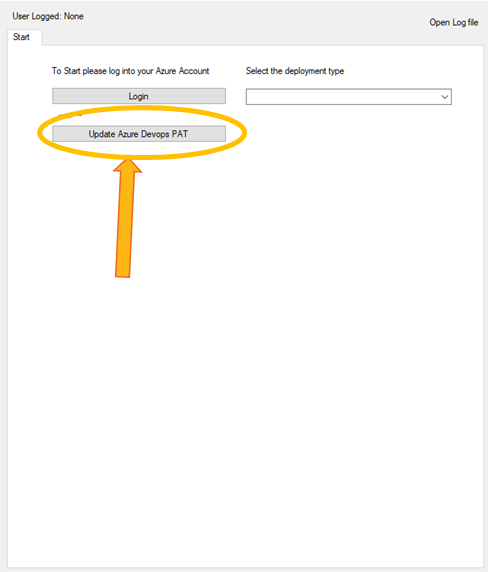
When it finishes go to the releases tab and wait until the functions releases finish.

Graphical user interface, text, application, email

Description automatically generated

# Update Azure Devops PAT in an already deployed Tenant

If you have already deployed your code using this Wizard, and you need to update the PAT token from azure devops because it has expired or you need to invalidate it, or Litera has asked you to add new permissions select the option “Update Azure Devops Pat”



Insert the Tenant Id, Tenant Secret and Region and click on “Validate”

Graphical user interface, text, application, email

Description automatically generated

If the tenant id, secret, and domain are correct and that tenant is subscribed to the Automatic Updates you will be prompt to indicate the new Azure Devops Pat.

Graphical user interface, application

Description automatically generated

After clicking in Update you will get a success message. Your Azure Devops Pat has been updated.

You can close the wizard.

# Possible errors in ARM Template

## Error in arm template . There is a deployment currently in progress

Graphical user interface, text, application, email

Description automatically generated

This error is mostly generated in the premium template.

If you see this error, just redeploy using azure devops

## Error There is a deployment currently in progress. Please try again when it completes.

Graphical user interface, text, application

Description automatically generated

{

    "status": "Failed",

    "error": {

        "code": "BadRequest",

        "message": "There is a deployment currently in progress. Please try again when it completes."

    }

}

When you have this error just retry the deployment job.

# Fire ensure ensureInitialConfig

In the premium deployment if you need to invoke the “ensureInitialConfig” function you will need to open the firewall for your pc’s ip. If you try to invoke it with out the following configuration you will get the next error:

A picture containing text

Description automatically generated

To Fix this follow the next steps:

1. Find out your ip address.
2. Once you have your ip address go to the Azure portal, look for you RG implementation and get into the “etl-config” function configuration, for example:

Graphical user interface, text, application

Description automatically generated with medium confidence

1. Then go to Networking, and Access Restriction

Graphical user interface, application

Description automatically generated

1. One in access restriction hit add rule and add you ip address. After this you will be able to call the “ensureInitialConfig” endpoint. When finish delete your ip if necessary.

# Azure Resource Providers needed

For the deployment of the ARM template to work you will need to have the next resource providers enabled:

* Microsoft.OperationalInsights
* Microsoft.Network
* microsoft.insights
* Microsoft.DocumentDB
* Microsoft.ServiceBus
* Microsoft.DBforMySQL
* Microsoft.Web
* Microsoft.Storage
* Microsoft.ManagedIdentity
* Microsoft.Security
* Microsoft.Authorization
* Microsoft.Consumption