

Kelverion Automation

Microsoft 365 Application for Azure Automation

Deployment Guide

Version 1.8

Email: info@kelverion.com

Web: www.kelverion.com

1 Table of Contents

2	Overview.....	3
3	General Configuration Steps	4
3.1	Pre-Installation Information	4
3.1.1	<i>Kelverion Items Required</i>	<i>4</i>
3.1.2	<i>Other Products Required</i>	<i>4</i>
3.2	Installation Steps.....	5
3.3	Persistent Data Store.....	5
3.3.1	<i>Encrypting Data.....</i>	<i>6</i>
3.4	Configure the Automation Portal	6
3.4.1	<i>Portal Queries</i>	<i>6</i>
3.4.2	<i>Portal Offerings.....</i>	<i>6</i>
3.5	Create an Azure system assigned managed identity for starting runbooks.....	6
3.6	Create a Hybrid Worker	6
3.7	Load Integration Modules	6
3.8	Configure your Automation account using the Runbook Studio.....	7
3.8.1	<i>Design Time (Smart Connections).....</i>	<i>7</i>
3.8.2	<i>Azure Variables.....</i>	<i>9</i>
3.8.3	<i>Azure Credentials.....</i>	<i>14</i>
3.8.4	<i>Azure Runtime connections.....</i>	<i>15</i>
3.9	Import Runbooks using the Runbook Studio	17
3.10	Runbook Customisation	19
3.11	Runbook Process Flow	19
3.11.1	<i>Gathering the Data</i>	<i>19</i>
3.11.2	<i>Worker Runbook Input Data.....</i>	<i>20</i>
3.11.3	<i>Returning the Data to your Service Desk.....</i>	<i>20</i>
3.11.4	<i>Calling Multiple Worker Runbooks</i>	<i>21</i>
3.12	Scheduling runbook execution.....	22
3.12.1	<i>Gather Request Logic App.....</i>	<i>22</i>
4	Data Discovery	25
4.1	PDS Discovered Data	25
4.2	PDS Manual Insert Data.....	25
4.3	Portal Static Data.....	25
4.4	Portal Query Data	25
5	Runbook Inputs	26

2 Overview

Businesses would like to give team leaders and managers access to create their own users and allocate licenses for Microsoft 365 via self-service facilities to reduce the workload on the heavily utilised service desk and front-line support teams. Equally with I.T. Security being in the forefront of everyone's minds it is a challenge that requires careful balancing between providing the right facilities to end users, and not compromising the security or integrity of your configuration.

Therefore, companies are increasingly looking for Automation to improve consistency and supportability, along with the self-service facilities whilst maintaining the security controls. To meet this need we have built the Microsoft 365 Application for Azure Automation.

The Microsoft 365 Application for Azure Automation provides an easy to use interface using the Kolverion Automation Portal, users are provided the rights to access portal services via group membership, but these rights are isolated from Office 365, so it's simple to provide portal facilities without providing rights to directly manage users and licenses.

All the actions against the Microsoft 365 system are carried out by your Azure Automation account, so every change is logged and carried out in a consistent way.

All the data that drives the requests in the automation portal is discovered and maintained by the Azure Automation runbooks, so the automation portal is always in sync with the Microsoft 365 management experience.

The Runbooks have been written using the Runbook Studio authoring application and leverage the integration and smart discovery capabilities provided by the Integration Module for SQL Server. These Integration Modules are also available in the PowerShell Gallery.

3 General Configuration Steps

This solution was designed with the Keverion Automation Portal. The following configuration steps are a guideline for setting the solution with this front end.

Important: If you are using a different service desk to drive the runbooks then you will need to adjust the runbooks.

3.1 Pre-Installation Information

The Microsoft 365 Application package contains the following elements:

- Persistent Data Store (PDS) SQL configuration script
- Microsoft 365 Azure Automation Runbooks
- Azure Automation Service Export

3.1.1 Keverion Items Required

The application requires the following Keverion products:

- Keverion Runbook Studio
- Keverion Integration Module for SQL Server
- Keverion Integration Module for Automation Portal
- Keverion Automation Portal

If you do not already have Keverion Integration Modules, Keverion Automation Portal, or the Keverion Runbook Studio they can be downloaded for evaluation from our website.

This guide assumes that you have already installed the Runbook Studio and the Automation Portal. If you have not yet installed those products, then please do so before you continue. Each of the product downloads contains its own documentation to guide you through the initial configuration.

3.1.2 Other Products Required

The two following Microsoft PowerShell modules are required:

- Az.Accounts
- Az.Automation
- ExchangeOnlineManagement
- Microsoft.Graph.Authentication
- Microsoft.Graph.Groups
- Microsoft.Graph.Identity.DirectoryManagement
- Microsoft.Graph.Identity.SignIns
- Microsoft.Graph.Users
- Microsoft.Graph.Users.Actions
- MicrosoftTeams

These modules are available from the PowerShell Gallery.

N.B. This solution has been tested with v2.25.0 of MgGraph modules.

3.2 Installation Steps

As a guide the steps taken are as followed:

1. Configure the PDS database
2. Import and configure the Portal Service (If using the Kolverion Automation Portal)
3. Configure the Service Offerings (If not using the Kolverion Automation Portal)
4. Create the Azure components
 - a. Resource Group
 - b. Automation Account
 - c. Managed Identity
 - d. Create Hybrid Worker
 - e. Load Integration Modules
 - f. Import Runbooks
 - g. Create Smart Connections
 - h. Create Azure Variables
5. Create the Logic Apps

3.3 Persistent Data Store

The Persistent Data Store or PDS is a SQL Server database that is used by these runbooks to allow all the actions that the runbooks take to be carried out in a robust way. The use of the database at each "step" allows us to design the runbooks such that each runbook is simple and can be considered a discrete unit. In programming terms, it allows the runbooks to be modular.

To best exploit the power and flexibility of Azure, the PDS should be deployed to a SQL instance within your Azure subscription.

We will be using a PDS on Azure using Azure's SQL offerings, rather than building a VM and installing SQL. This allows us to deploy the SQL instance and PDS database quickly and with the minimum of maintenance.

1. Create a new Azure SQL Server. Create the SQL Server in a New Resource Group "Automation", ensure that the "Allow azure services to access server" check box is ticked. This means that ALL Azure resources will be allowed to access the SQL Server through the firewall
2. Give your desktop access to the SQL Server through the firewall
3. Create a new Database "AutomationData". It's important to use this name for the PDS, as it is held within the runbooks. The **BASIC** tier is ample performance for testing and evaluation of the application. As it is trivial to scale up or down the databases this should also be the starting point for your deployments unless you know that there is going to be a high volume of alerts right from the outset.
4. Connect to the database using SQL Management Studio
5. Execute the SQL script (*PDS_M365.sql*) from the package to Create the database tables and views.

3.3.1 Encrypting Data

The data stored in the PDS table [dbo].[RequestData] may have data that is sensitive and requires encryption. The SQL Integration Module allows the runbooks to handle encrypted data, so it is best practice to encrypt the following columns:

- RequestData
- RunbookData

3.4 Configure the Automation Portal

Import the service request definition Services_M365.export

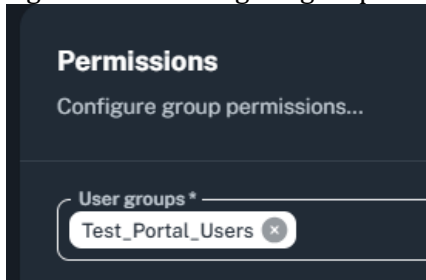
3.4.1 Portal Queries

The following Connection must be updated to point to the customers PDS

- AutomationData

3.4.2 Portal Offerings

Check the User Group matches the correct Group and change accordingly.
e.g. Default offering AD group is Test_Portal_Users.



3.5 Create an Azure system assigned managed identity for starting runbooks

In the automation account, go to Identity. Enable the System assigned managed identity.

Allocate the role of “Automation Operator” for the resource group that the automation account is in.

3.6 Create a Hybrid Worker

The runbooks require a Hybrid Worker to use the latest MgGraph integration modules.

3.7 Load Integration Modules

The Integration modules will need to be installed in the following locations

- The Automation Account ("Assets" > "Modules")
- The Hybrid Worker(s)
- The machine where you are running the Runbook Studio.

The modules can easily be installed on the machine from the PowerShell Gallery.

Visit <https://docs.microsoft.com/en-us/azure/automation/automation-update-azure-modules> for more information about loading Integration modules into your Automation Account.

The Integration Modules mention in section 3.1.1. and 3.1.2 are required.

3.8 Configure your Automation account using the Runbook Studio

Connect the Runbook studio to your target Azure subscription. You can find more information on the initial configuration of the runbook studio on pages 5 and 6 of the User's Guide.

3.8.1 Design Time (Smart Connections)

The runbook studio needs to have connections configured for use at design time, these smart connections are used by the discovery process within the Runbook Studio to allow the Runbook Studio to discover information about your target systems. This discovery process accelerates the process of runbook development.

Create the following smart connections within the Runbook Studio.

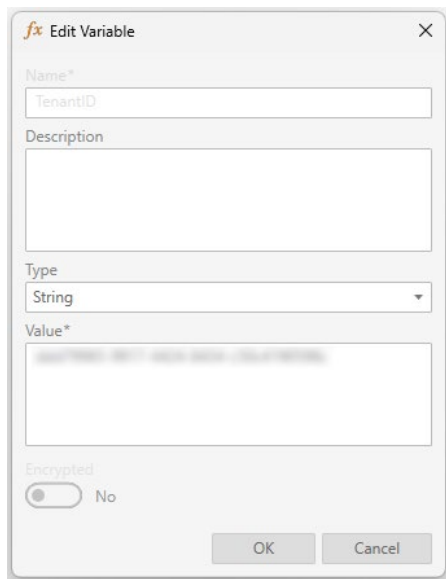
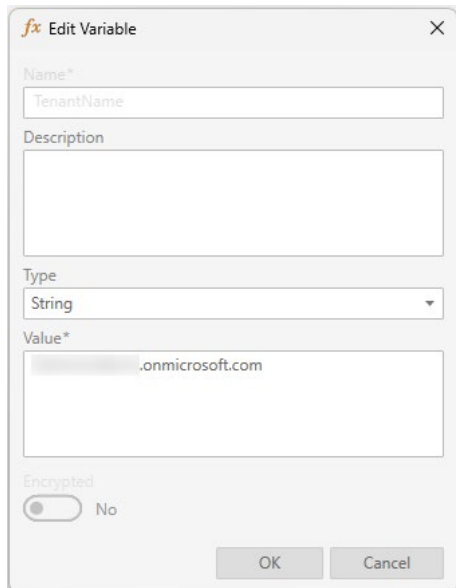
AutomationData	<div><div><div>Update Smart Connection</div><div><div>Name</div><div>AutomationData</div></div><div><div>Connection type</div><div>Kelverion.SqlServer</div></div><div><div>Tenant</div><div>KUK</div></div><div><div>Description</div><div>Smart Connections created via manual consolidation</div></div><div><div>ServerName* ⓘ</div><div>localhost:1433 windows.net</div></div><div><div>UserName ⓘ</div><div>sa</div></div><div><div>Password ⓘ</div><div>*****</div></div><div><div>UseWindowsAuthentication ⓘ</div><div>False</div></div><div><div>ConnectTimeout ⓘ</div><div>60</div></div><div><div>OK</div><div>Cancel</div></div></div></div>
----------------	---

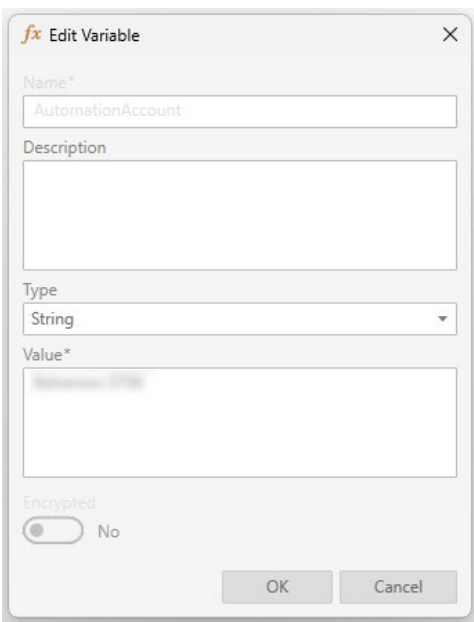
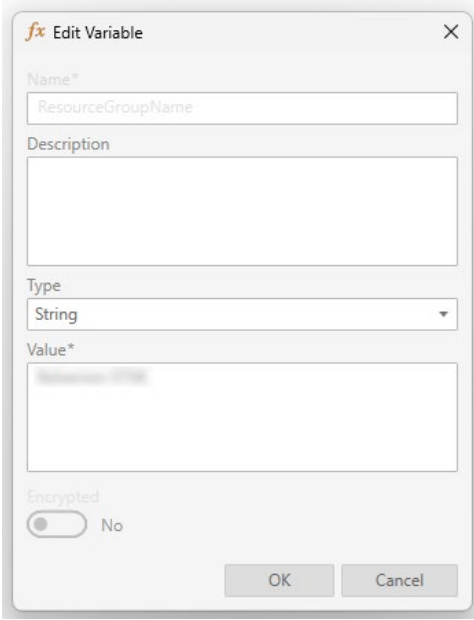
<p>AutomationPortalAPI</p>	<div><div>Update Smart Connection</div><div><div>Name</div><div>AutomationPortalAPI</div></div><div><div>Connection type</div><div>Kelverion.AutomationPortal</div></div><div><div>Tenant</div><div>KUK</div></div><div><div>Description</div><div></div></div><div><div>PortalUrl* ⓘ</div><div>https://www.kelverion.com/Api/v1:8443/</div></div><div><div>TenantId* ⓘ</div><div>e7594b0e-1234-5678-9012-345678901234</div></div><div><div>ClientId* ⓘ</div><div>98cda0fa-1234-5678-9012-345678901234</div></div><div><div>ClientSecret* ⓘ</div><div>.....</div></div><div><div>OK</div><div>Cancel</div></div></div>
----------------------------	--

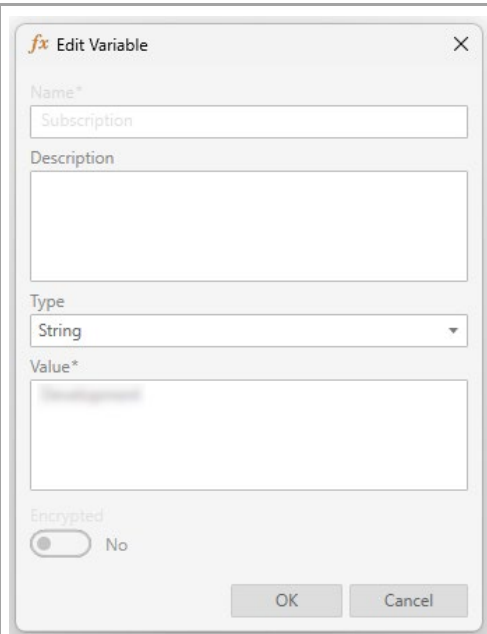
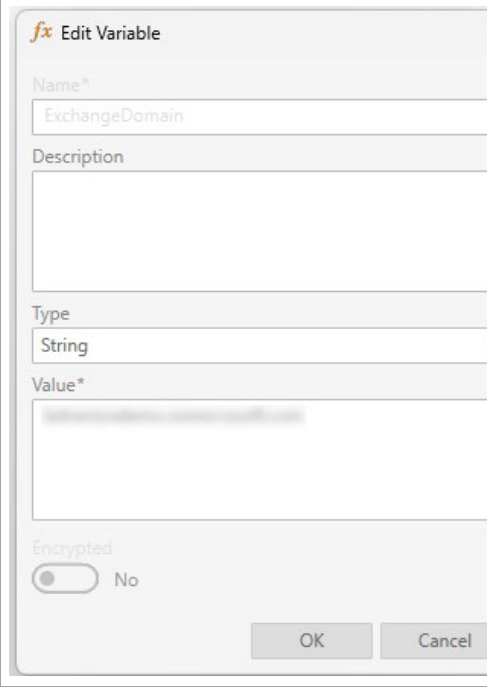
3.8.2 Azure Variables

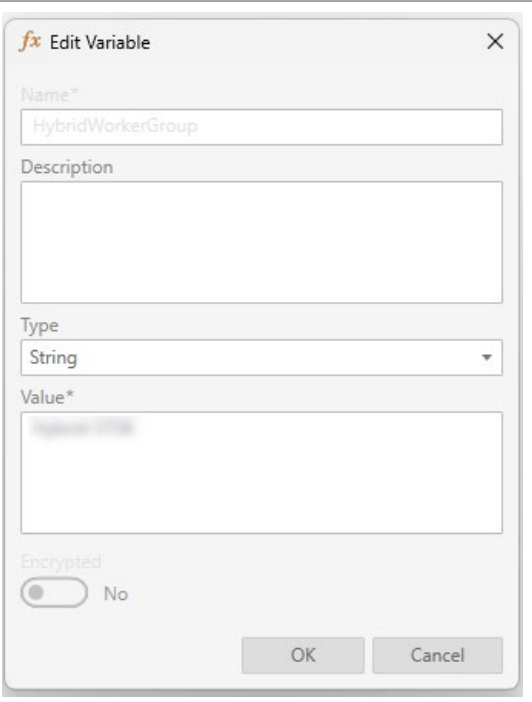
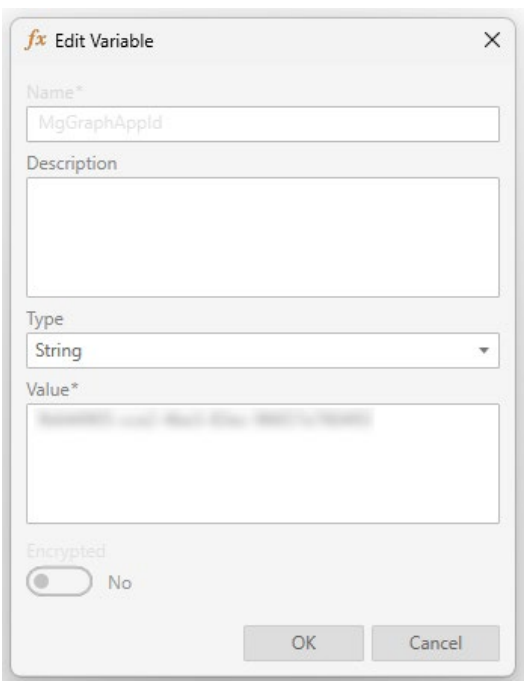
Azure variables allow us to remove static configuration information from the code in our runbooks and store the information in an easy to access place. This helps us to build consistent configuration between all our runbooks. These values are accessed at design time, and at runtime by both the Hybrid workers, and the Azure Worker sandboxes.

Create the following variables in the Automation Account using the Runbook Studio.

TenantId	<p>The Tenant Id of your Azure Subscription.</p> <p>This is where your runbooks are, so that they automation account can connect to run child runbooks.</p>	
TenantName	<p>The M365 Tenant Name.</p> <p>This is used in M365 account creation etc.</p>	

AutomationAccount	The name of the automation account to run the child runbooks	
ResourceGroupName	The name of the resource group that has the runbooks	

Subscription	The name of the Subscription that you are actioning the runbooks in	
ExchangeDomain		

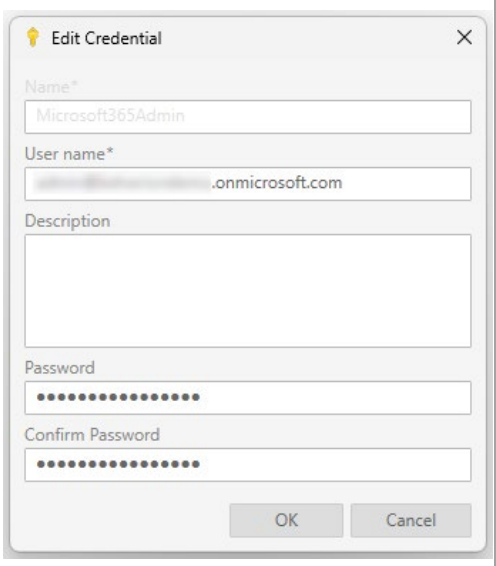
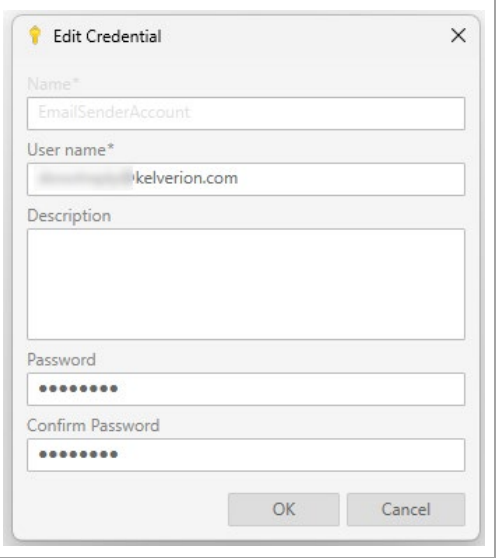
HybridWorkerGroup	The name of the Hybrid Worker Group in the AutomationAccount	
MgGraphAppId	The client ID of the app registration to connect to MgGraph	

<p>MgGraphCertThumbprint</p>	<p>The certificate thumbprint of the certificate that is associated with the App registration</p>	<div><div>fx Edit Variable</div><div><div>Name*</div><div>MgGraphCertThumbprint</div></div><div><div>Description</div><div></div></div><div><div>Type</div><div>String</div></div><div><div>Value*</div><div></div></div><div><div>Encrypted</div><div><input type="radio"/> No</div></div><div><div>OK</div><div>Cancel</div></div></div>
------------------------------	---	--

3.8.3 Azure Credentials

Azure Credential assets allow us to create and manage credential objects that can be utilised throughout our runbooks. These credentials are accessed by our runbooks at runtime.

Create the following Credential Assets using the Runbook Studio.

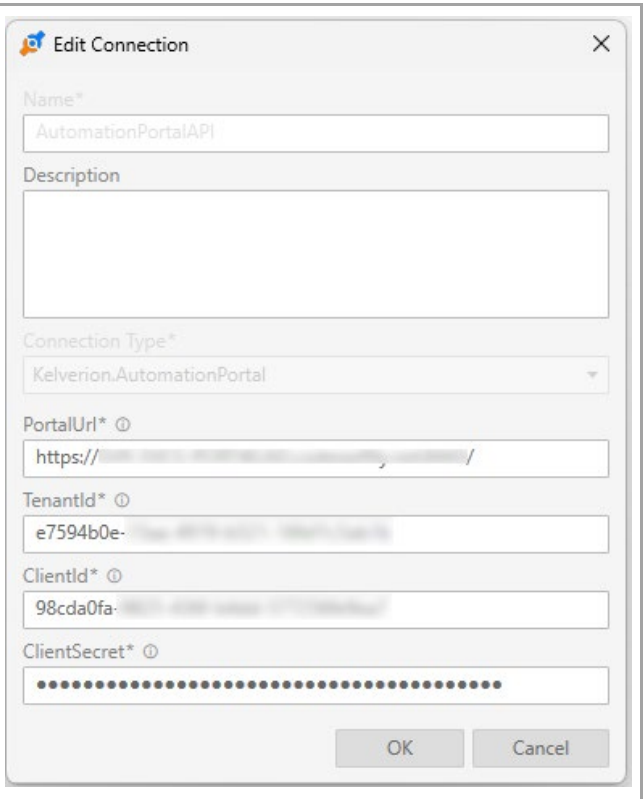
Microsoft365Admin	This credential will be used to configure the Microsoft 365 users \ groups. Will need to be a Microsoft 365 Administrator	
EmailSenderAccount	This credential will be used to email temporary passwords for the “Reset Password” offering.	

3.8.4 Azure Runtime connections

Azure connection assets are used at runtime to define a reusable connection configuration. The connection types available are dependent upon module that have been loaded into your Automation Account. If you cannot see the connection types listed below when you attempt to create the connection assets, then this indicates an issue with the modules that are loaded into your automation account. Please verify that all the required modules are loaded.

Create the following Connection in Azure using the Runbook Studio.

The "AutomationData" connection asset in Azure defines the connection that will be used at runtime for the runbooks to connect to the PDS database.

AutomationPortalAPI	The "AutomationPortal" connection asset in Azure defines the connection that will be used at runtime for the runbooks to connect to the Kolverion Automation Portal Database.	
---------------------	---	---

3.9 Import Runbooks using the Runbook Studio

Connect to the Automation Account using the Runbook Studio.

Check that you have the correct Automation Account set as the default target (if there is more than one Automation Account associated with the subscription)

Open each of the following runbooks, then "publish draft" and then "publish" the runbooks.

Runbook Name	Brief Description
Kelverion_M365_10-1_Worker-Restore-User	This will restore a user account. The account must have been deleted to be able to be restored.
Kelverion_M365_10-2_Worker-Enable-User	This runbook enables an account and allows it to login
Kelverion_M365_10-3_Worker-Delete-User	This runbook deletes the selected account
Kelverion_M365_10-4_Worker-Disable-User	This will disable an account and prevent it from
Kelverion_M365_10-5_Worker-Assign-License	This runbook will assign a license to a user account
Kelverion_M365_10-6_Worker-Unassign-License	This runbook will remove a license from a user account
Kelverion_M365_10-7_Worker-SetLocation	This sets the Microsoft 365 region for an account
Kelverion_M365_10-8_Worker-Modify-User-Service-Availability	This runbook applies which services are available for a user account
Kelverion_M365_10-9_Create-Group	This runbook will create a group
Kelverion_M365_10-10_Add-Group-Members	This runbook will add one or more users to a selected group
Kelverion_M365_10-11_Remove-Group-Members	This runbook will remove one or more users from a selected group
Kelverion_M365_10-12_Add-User-ToGroups	This runbook will add a single user to multiple groups
Kelverion_M365_10-13_Remove-User-FromGroups	This runbook will remove a single user from multiple groups

Kelverion_M365_10-14_Enable-Litigation	This enables email litigation on a user account
Kelverion_M365_10-15_Disable-Litigation	This removes email litigation on a user account
Kelverion_M365_10-16_Create-User	This will create a new user
Kelverion_M365_10-17_Reset-Password	This will reset a user password
Kelverion_M365_10-18_Create-Distribution-Group	This will create an Exchange Online Distribution List. Offering options: Name \ Description \ Owner(s) \ Member(s) \ Moderators(s) (optional)
Kelverion_M365_10-19_Create-Shared-Mailbox	This will create an Exchange Online Shared Mailbox. Offering options: Name \ Full Access \ SendAs. Hardcoded in the runbook code: Quota sizes
Kelverion_M365_30-0_PDSDData-Master	This runbook runs all PDS data gathering runbooks
Kelverion_M365_30-1_PDSDData-Groups	Gathers data for Groups and populates the Groups table in the PDS
Kelverion_M365_30-2_PDSDData-Users	Gathers data for Users and populates the Users table in the PDS
Kelverion_M365_30-3_PDSDData-SKUs	Gathers data for SKU and populates the SKU table in the PDS
Kelverion_M365_30-4_PDSDData-GroupMembers	Gathers data for Group Members and populates the Group Membership table in the PDS
Kelverion_M365_30-5_PDSDData-UserLicense	Gathers data for MSOLUsers and populates the MSOLUsers table in the PDS
Kelverion_M365_30-7_PDSDData-Devices	Gathers data for Azure AD Computers and populates the Computers table in the PDS
Kelverion_M365_30-8_PDSDData-Mailbox	Gathers data for Users Mailbox and populates the Mailbox table in the PDS
Kelverion_M365_30-9_PDSDData-Teams_Add	Gathers data from Azure AD Teams and populates the Teams table in the PDS
Kelverion_M365_30-10_PDSDData-Teams_Remove	Gathers data from Azure AD Teams and the PDS. It runs a comparison and removes redundant data from the PDS

Kelverion_M365_30-11_PDSDData-TeamMembers	Gathers data from Azure AD for Team members. It populates the PDS table. It also then runs a comparison and removes any users from the PDS that are not reported from Azure AD
Kelverion_M365_30-12_ExistIn-TeamsMembership	This runbook runs a check against the PDS Team Members table to see if the entries are there
Kelverion_M365_40-01_CreateTeam	Creates a Team
Kelverion_M365_40-02_RemoveTeam	Removes a Team
Kelverion_M365_40-03_AddTeamMember	Adds a member(s) to a Team
Kelverion_M365_40-04_RemoveTeamMember	Removes a member(s) from a Team
Kelverion_M365_40-05_ApplyTeamSecPolicy	Applies a pre-defined security policy to a Team. This is defined in the TeamsSecurityPolicy table in the PDS
Kelverion_M365_90-01_KAP_Get_NewRequest	Gathers the New requests from the Kelverion Automation Portal. Requires a Logic App to trigger
Kelverion_M365_92-01_ReturnData	Used as a child runbook to handle return data to the Kelverion Automation Portal.

3.10 Runbook Customisation

This application is designed to allow flexibility across multiple service desk applications. The initial runbooks are configured for using the Kelverion Automation Portal as the main user portal for initiating any requests and receiving the status updates.

If you are not using the Kelverion Automation Portal, then the installation engineer will be required to create a gathering runbooks (91_XX) and (92_XX).

3.11 Runbook Process Flow

This section covers a more detailed description of how the runbook logic fits together. You should be able to use it to configure and customise the application.

3.11.1 Gathering the Data

The runbook Kelverion_M365_90-01_KAP_Get_NewRequest is built to gather data from the Kelverion Automation Portal. If you are using a different service desk to gather your request data, then you will need to build a runbook to retrieve the data and store it into the PDS table [dbo].[RequestData].

3.11.2 Worker Runbook Input Data

Each worker runbook has been designed to accept a JSON input, that is stored in a SQL table called [dbo].[RequestData]. You can check the description of a worker runbook to see what the data input requirements are:

E.g.

```
$StopVM = @'
{
  "Server": {
    "Server": 'Test-Server',
    "ResourceGroup": "KUKLab"
  }
}'@
```

To validate this Code, you can place it into a PowerShell ISE and pipe it to ConvertFrom-JSON to see the output.

3.11.3 Returning the Data to your Service Desk

The runbook Kelverion_M365_92-01_ReturnData is built to be used as an inline child runbook. It has been configured with the Kelverion Automation Portal, but the same logic should apply if you need to adjust this for a different service desk.

N.B. It is not recommended to use Start-AzAutomtionRunbook with this runbook, as it was designed as an inline child runbook.

Runbook Inputs:

Input Name	Mandatory	Description
ID	Yes	The parent request ID
Message	Yes	The message you want sent back to update in your service desk
Runbook	Yes	Name of the runbook that you wish to log the message about
Activity	No	(Optional) The name of the runbook activity that you want to record the message about
ErMsg	No	(Optional) Any error message to log back
Offering	No	(Optional) Name of the request
State	No	(Optional) The request state e.g. Complete \ In Progress \ Failed

The runbook also accepts from the parent runbook the variable **ChildRunbook**.

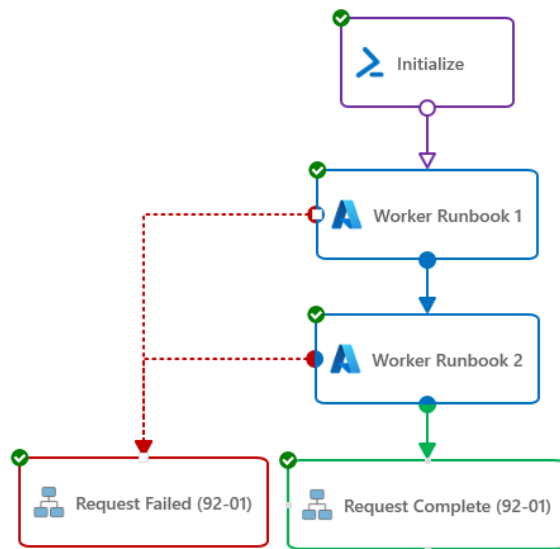
By default, **ChildRunbook** is set as False for the worker runbooks. See the section 'Calling Multiple Worker Runbooks' for more information on this.

3.11.4 Calling Multiple Worker Runbooks

The worker runbooks in this solution have been designed to run on their own, or as a child runbook from a parent request. You may have specific scenario where you need to do multiple actions from a single service desk request, that require more than one worker runbook to run. To do this you will need to:

1. Build a parent request runbook
2. Analyse the JSON inputs for each worker runbook you are calling
 - a. Ensure all worker JSON input is gathered in your Parent JSON
3. Call the required worker runbooks from the parent runbook
 - a. Set the ChildRunbook property to \$true
 - b. Pass the Parent request ID to the child runbook

Example Parent Runbook:



The return runbooks process the request as either Complete or Failed by calling the inline child return runbook.

The parent runbook has an input of ID, that is passed through to the child runbooks.

Each worker runbook will pass the additional parameter of ChildRunbook, set to True

```

Parameters ①
(PowerShell expression)

Data source
PowerShell expression

Expression
$RunPar = New-Object PSObject -Property $hash @{
    ID = $ID
    ChildRunbook = $true
}
$RunPar
  
```

3.12 Scheduling runbook execution

Once all the runbooks (and other assets) are in place and the runbooks have been tested you will need to schedule the runbooks for repeated execution.

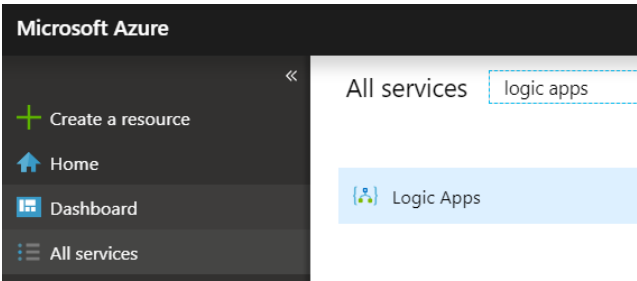
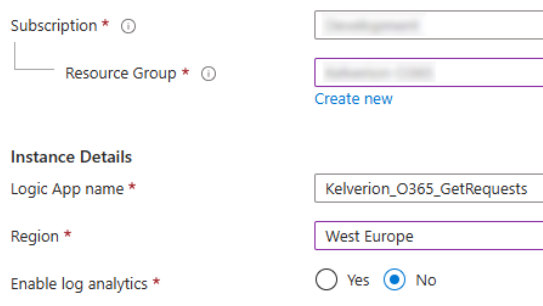
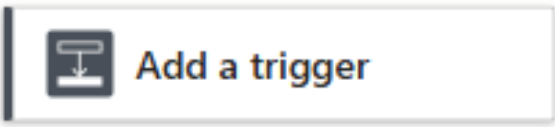
Azure provides the following options for scheduling runbooks:

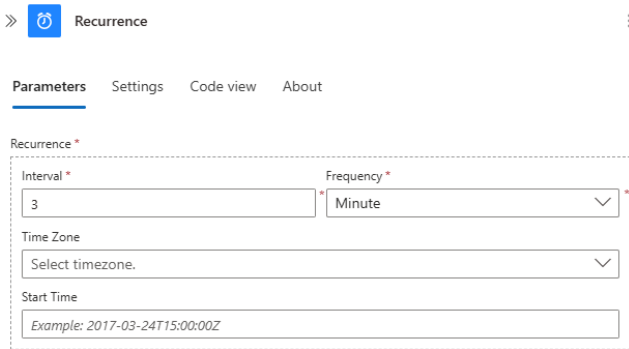
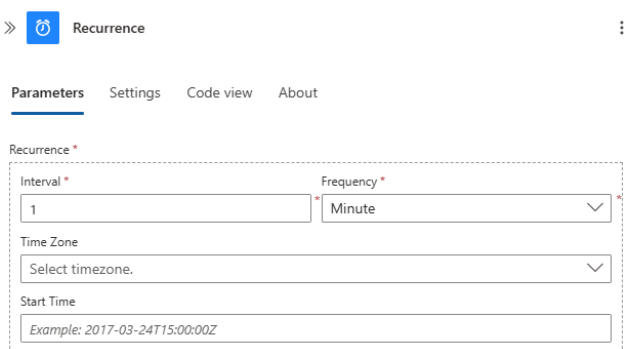
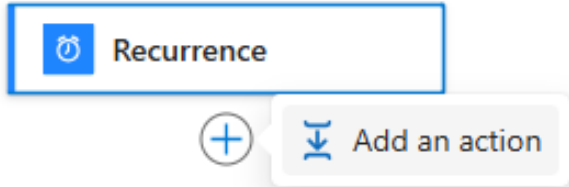
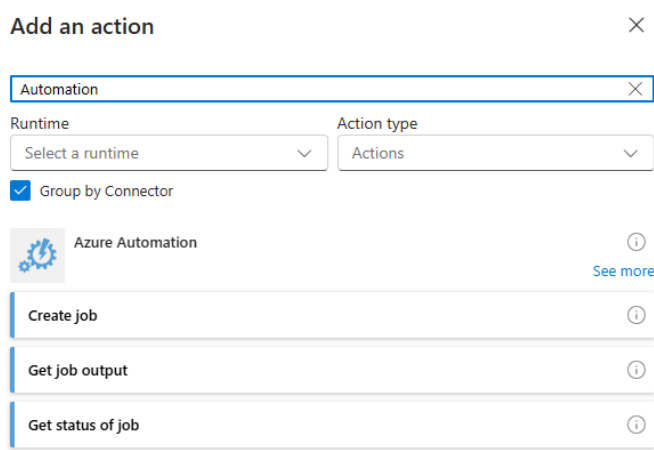
- Runbook Schedules
- Webhooks
- Logic Apps

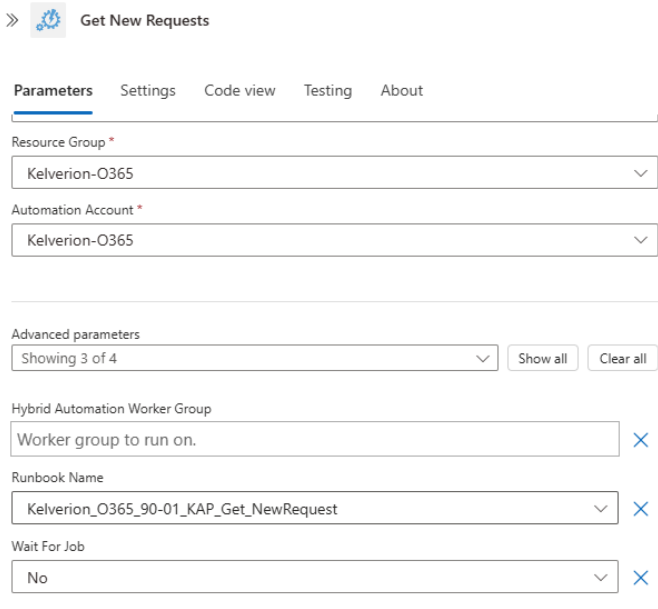
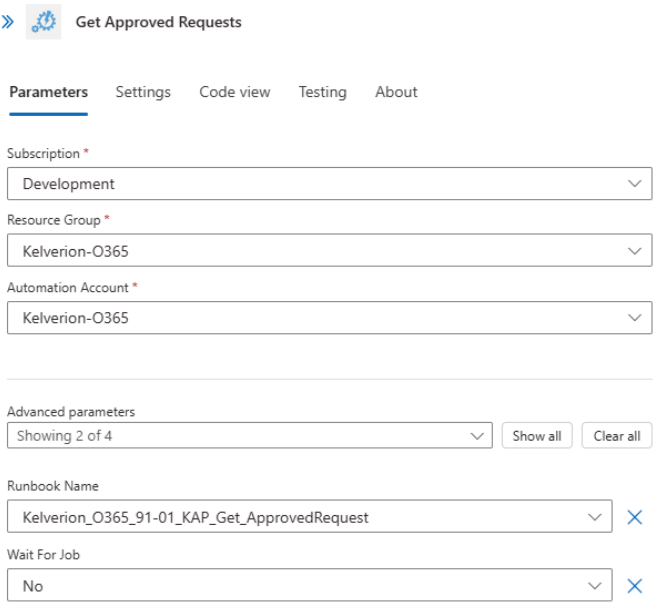
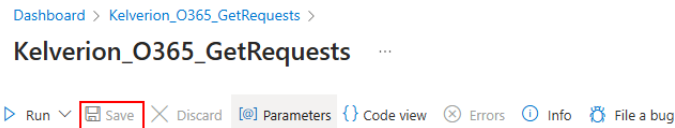
If you are using the Kolverion Automation Portal, then we recommend that you use a Webhook. Please refer to the Kolverion Automation Portal user guide on setting this up. If you are not using a webhook with the Kolverion Automation Portal, then you will need to look at other scheduling methods.

3.12.1 Gather Request Logic App

A single Logic App should be sufficient to schedule a main gathering runbook from your service desk. This Logic App will run on a chosen recurrence to schedule calling the runbook (90-XX) e.g. Kolverion_M365_90-01_KAP_GetNewRequest.

Step	
Login to the Azure Portal and go to "Logic Apps"	
Create a New Logic App and name it appropriately for this application. e.g. Kolverion_M365_GetRequests Add it to the same Resource Group that you have deployed the runbooks too	
Open the newly created Logic App and select "Add a trigger"	

<p>Search for “Schedule” and select the Trigger “Recurrence”</p>	
<p>Decide how frequently you need to check for new requests from the portal and edit accordingly.</p>	
<p>Click the + and add an action</p>	
<p>Search for “Automation” and select “Create Job”</p>	

<p>Change the activity name to “Get New Requests”.</p> <p>Select the appropriate Resource Group \ Automation Account.</p> <p>Select the runbook “Kelverion_M365_90-01_KAP_Get-NewRequest” in the Runbook Name.</p> <p>N.B. This activity will require a Logic App Managed Identity with Automation Operator role to the resource group with the runbooks.</p>	
<p>Add a 2nd Create Job activity and name it “Get Approved Requests”.</p> <p>This time select the runbook “Kelverion_M365_91-01_KAP_Get_ApprovedRequest” in the Runbook Name.</p> <p>N.B. This activity will require a Logic App Managed Identity with Automation Operator role to the resource group with the runbooks.</p>	
<p>Click Save to finish</p>	

4 Data Discovery

The following section lists the data discovery tables used by the runbooks that are present in the PDS.

4.1 PDS Discovered Data

The following data has runbooks provided to gather the data:

- EntraID Groups [EntraID].[Groups]
- EntraID Users [EntraID].[Users]
- Service Plans [EntraID].[ServicePlans]
- EntraID Group Members [EntraID].[GroupMembership]
- EntraID User Licenses [EntraID].[User_License]
- EntraID Computers [EntraID].[Computers]
- Exchange Mailbox [EntraID].[Mailbox]
- Teams [EntraID].[Teams]
- Team Members [EntraID].[TeamsMembership]

4.2 PDS Manual Insert Data

The following data is stored in the PDS. This data has been determined to rarely change and should be updated by either:

- Populate the PDS tables with a bespoke script
- Populate the PDS tables with a discovery runbook

Data Types:

PDS Table: [SaTasks].[MSEExchange]

- Exchange Mailbox Database
- Exchange Mail Domain

4.3 Portal Static Data

The following data is stored in static Lists in the automation portal.

If the customer wishes to change this to dynamic data, then they would need to be changed to queries with appropriate backed SQL tables \ views.

Data Types:

- M365 Usage Locations
- June_2024_MSLicenses

License information can be obtained from:

<https://learn.microsoft.com/en-us/entra/identity/users/licensing-service-plan-reference>

4.4 Portal Query Data

The following data is gathered from queries in the portal. By default, these queries are pointing at PDS tables, that will have demo data in them.

It is advisable for the end customer to either:

- Populate the PDS tables with a bespoke script
- Populate the PDS tables with a discovery runbook
- Re-point the queries at their own CMDB tables

5 Runbook Inputs

The runbooks require a JSON input. If you are using a different ServiceDesk than the Kolverion Automation Portal, then use the following data to define the JSON required for each runbook.

Runbook Name	Example JSON
Kelverion_M365_10-1_Worker-Restore-User	<pre>{ "User": { "GivenName": "Frank", "Surname": "Smith", "UserPrincipalName": "Frank.Smith@kelveriondemo.onmicrosoft.com", "ObjectId": "ea1d0aba-0545-415d-8f48-1e9641e31e49" } }</pre>
Kelverion_M365_10-2_Worker-Enable-User	<pre>{ "User": { "GivenName": "Tom", "Surname": "Vande Velde", "UserPrincipalName": "tom0@kelveriondemo.onmicrosoft.com", "ObjectId": "bd41a97b-690c-4b8d-acb8-194e157bb5f1" } }</pre>
Kelverion_M365_10-3_Worker-Delete-User	<pre>{ "User": { "FirstName": "Tom", "Surname": "Stoppard", "UserPrincipalName": "Tom.Stoppard@kelveriondemo.onmicrosoft.com", "ObjectId": "0ed8aed7-fb96-4e4e-9531-c1e9ff79e453" } }</pre>
Kelverion_M365_10-4_Worker-Disable-User	<pre>{ "Reason for Blocking Account": "Testing", "User": [{ "FirstName": "Tom", "Surname": "Vande Velde", "UserPrincipalName": "tom0@kelveriondemo.onmicrosoft.com", "ObjectId": "bd41a97b-690c-4b8d-acb8-194e157bb5f1" }] }</pre>
Kelverion_M365_10-5_Worker-Assign-License	<pre>{ "User": { "FirstName": "John", "Surname": "Wood", "UserPrincipalName": "john5@kelveriondemo.onmicrosoft.com", "ObjectId": "5fef8330-5553-47c3-ae1e-7490fc65a789" } }</pre>

	<pre> }, "License": { "SkuPartNumber": "WINDOWS_STORE", "ConsumedUnits": "0", "EnabledCount": "25", "SuspendedCount": "0", "WarningCount": "0", "AppliesTo": "Company", "SKUid": "6470687e-a428-4b7a-bef2-8a291ad947c9" }, "UsageLocation": "GB" } </pre>
Kelverion_M365_10-6_Worker-Unassign-License	<pre> { "User": { "FirstName": "Tom", "Surname": "Stoppard", "UserPrincipalName": "Tom.Stoppard@kelveriondemo.onmicrosoft.com", "ObjectId": "0ed8aed7-fb96-4e4e-9531-c1e9ff79e453" }, "License": [{ "SkuPartNumber": "O365_BUSINESS_ESSENTIALS" }] } </pre>
Kelverion_M365_10-7_Worker-SetLocation	<pre> { "User": { "FirstName": "Alan", "Surname": "Brewer", "UserPrincipalName": "alan0@kelveriondemo.onmicrosoft.com", "ObjectId": "08695420-299c-4a1c-827f-0ac4e51fac15" }, "UsageLocation": "US" } </pre>
Kelverion_M365_10-8_Worker-Modify-User-Service-Availability	<pre> { "User": { "FirstName": "kelverion", "Surname": "Demo", "UserPrincipalName": "DemoUser@kelveriondemo.onmicrosoft.com", "ObjectId": "f60ef6a7-8814-4e0b-bedc-48b695f7f418" }, "Service": [{ "ServicePlanName": "PROJECT_O365_P1", "UserPrincipalName": "DemoUser@kelveriondemo.onmicrosoft.com", "SkuPartNumber": "O365_BUSINESS_ESSENTIALS", "ProvisioningStatus": "Success", "ObjectId": "f60ef6a7-8814-4e0b-bedc-48b695f7f418" }] } </pre>

	<pre> }], "Status": { "ProvisioningStatus": "Disabled" } } </pre>
Kelverion_M365_10-9_Create-Group	<pre> { "Display Name": "Group_Test_ToDelete", "Description": "This is a test group to be deleted" } </pre>
Kelverion_M365_10-10_Add-Group-Members	<pre> { "User": [{ "FirstName": "Robert", "Surname": "Holness", "UserPrincipalName": "bob.holness@kelveriondemo.onmicrosoft.com", "ObjectId": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }, { "FirstName": "Tom", "Surname": "Stoppard", "UserPrincipalName": "Tom.Stoppard@kelveriondemo.onmicrosoft.com", "ObjectId": "0ed8aed7-fb96-4e4e-9531-c1e9ff79e453" }], "Group": { "Groupname": "Inventory Management", "GID": "836F678B-F323-43D5-86B4-2FD74BE42E70" } } </pre>
Kelverion_M365_10-11_Remove-Group-Members	<pre> { "Group": { "Groupname": "Inventory Management", "GID": "836F678B-F323-43D5-86B4-2FD74BE42E70" }, "User": [{ "GivenName": "Tom", "Surname": "Stoppard", "Mail": "Tom.Stoppard@kelveriondemo.onmicrosoft.com", "UserId": "0ed8aed7-fb96-4e4e-9531-c1e9ff79e453", "GroupId": "836f678b-f323-43d5-86b4-2fd74be42e70", "Groupname": "Inventory Management" }, { "GivenName": "Robert", "Surname": "Holness", "Mail": "bob.holness@kelveriondemo.onmicrosoft.com", </pre>

	<pre> "UserId": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab", "GroupId": "836f678b-f323-43d5-86b4-2fd74be42e70", "Groupname": "Inventory Management" }] } </pre>
Kelverion_M365_10-12_Add-User-ToGroups	<pre> { "User": { "FirstName": "Robert", "Surname": "Holness", "UserPrincipalName": "bob.holness@kelveriondemo.onmicrosoft.com", "ObjectId": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }, "Groups": [{ "DisplayName": "Inventory Management", "ObjectId": "836f678b-f323-43d5-86b4-2fd74be42e70" }, { "DisplayName": "Manufacturing", "ObjectId": "b0fa0e1d-5bd8-48fd-9fd8-ed4f006fbd41" }] } </pre>
Kelverion_M365_10-13_Remove-User-FromGroups	<pre> { "User": { "FirstName": "Robert", "Surname": "Holness", "UserPrincipalName": "bob.holness@kelveriondemo.onmicrosoft.com", "ObjectId": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }, "Groups": [{ "GroupName": "Inventory Management", "GroupID": "836f678b-f323-43d5-86b4-2fd74be42e70", "UserID": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }, { "GroupName": "Manufacturing", "GroupID": "b0fa0e1d-5bd8-48fd-9fd8-ed4f006fbd41", "UserID": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }] } </pre>
Kelverion_M365_10-14_Enable-Litigation	<pre> { "Users": { "DisplayName": "kelverion Demo", "UsageLocation": "United Kingdom", </pre>

	<pre> "UserPrincipalName": "DemoUser@kelveriondemo.onmicrosoft.com" } } </pre>
Kelverion_M365_10-15_Disable-Litigation	<pre> { "Users": { "DisplayName": "kelverion Demo", "UsageLocation": "United Kingdom", "UserPrincipalName": "DemoUser@kelveriondemo.onmicrosoft.com" } } </pre>
Kelverion_M365_10-16_Create-User	<pre> { "FirstName": "Tina", "LastName": "Smith", "JobTitle": "Tech Lead", "Location": "GB", "Manager": { "FirstName": "Simon", "Surname": "White", "UserPrincipalName": "simon.white@kelveriondemo.onmicrosoft.com", "ObjectId": "9de0563a-8e2d-4097-b41d-546af0a3c98e" }, "License": { "SkuPartNumber": "O365_BUSINESS_ESSENTIALS", "ConsumedUnits": "0", "EnabledCount": "1", "SuspendedCount": "0", "WarningCount": "0", "AppliesTo": "User", "SKUId": "3b555118-da6a-4418-894f-7df1e2096870" }, "Address": "123 Test Street, Test City" } </pre>
Kelverion_M365_10-17_Reset-Password	<pre> { "User": { "GivenName": "Tom", "Surname": "Vande Velde", "UserPrincipalName": "tom0@kelveriondemo.onmicrosoft.com", "ObjectId": "bd41a97b-690c-4b8d-acb8-194e157bb5f1" }, "Notifier": { "GivenName": "Simon", "Surname": "White", "JobTitle": "Snr Consultant", "OtherMails": "\"simon.white@demo.com\"", "ObjectID": "9de0563a-8e2d-4097-b41d-546af0a3c98e" } } </pre>

Kelverion_M365_10-18_Create-Distribution-Group	<pre>{ "Group Name": "ProjectOne", "Description": "This is a test group", "Owner": [{ "FirstName": "Rachel", "Surname": "Holder", "UserPrincipalName": "Rachel.Holder@kelveriondemo.onmicrosoft.com", "ObjectId": "f560d204-fb47-4cee-8912-00875843b674" }], "Owner as Member": true, "Members": [{ "FirstName": "Tina", "Surname": "Smith", "UserPrincipalName": "Tina.Smith@kelveriondemo.onmicrosoft.com", "ObjectId": "92ffd0a5-3a4e-4f35-ba3d-4015bc0b8f5d" }], "Moderated": false }</pre>
Kelverion_M365_10-19_Create-Shared-Mailbox	<pre>{ "Shared Mailbox Name": "ProjectOneShare", "Owners": [{ "FirstName": "Amy", "Surname": "Alberts", "UserPrincipalName": "amy0@kelveriondemo.onmicrosoft.com", "ObjectId": "80cf5346-ef21-47e0-a3a7-d9b588936ca4" }], "Send As Users": [{ "FirstName": "Tom", "Surname": "Vande Velde", "UserPrincipalName": "tom0@kelveriondemo.onmicrosoft.com", "ObjectId": "bd41a97b-690c-4b8d-acb8-194e157bb5f1" }, { "FirstName": "Robert", "Surname": "Holness", "UserPrincipalName": "bob.holness@kelveriondemo.onmicrosoft.com", "ObjectId": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }] }</pre>

Kelverion_M365_40-01_CreateTeam	{ "Team Name": "Test May Team", "Team Description": "Test Team to be deleted", "Visibility": "Public", "Security Policy": { "PolicyName": "Default", "Description": "Default Policy (Restricted)", "PolGID": "F711186B-D183-4100-87FE-1C195D6642ED" } }
Kelverion_M365_40-02_RemoveTeam	{ "Team Name": { "Team": "Test May Team", "GID": "E1BFC7E9-0E94-4ED1-BE7F-9186B627C0F2" } }
Kelverion_M365_40-03_AddTeamMember	{ "User": [{ "FirstName": "Robert", "Surname": "Holness", "UserPrincipalName": "bob.holness@kelveriondemo.onmicrosoft.com", "ObjectId": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }], "Membership Level": "Member", "Team": { "Team": "Test May Team", "GID": "E1BFC7E9-0E94-4ED1-BE7F-9186B627C0F2" } }
Kelverion_M365_40-04_RemoveTeamMember	{ "Team": { "Team": "Test May Team", "GID": "E1BFC7E9-0E94-4ED1-BE7F-9186B627C0F2" }, "User": [{ "User": "Robert Holness", "GID": "f9735a00-6d7a-43c7-b58f-0b2da145b4ab" }] }
Kelverion_M365_40-05_ApplyTeamSecPolicy	{ "Team": { "Team": "Test May Team", "GID": "E1BFC7E9-0E94-4ED1-BE7F-9186B627C0F2" }, }

	<pre>"Security Policy": { "PolicyName": "Marketing", "Description": "Marketing", "PolGID": "E4A38C6F-F78F-4C0A-86A4-C63728D70059" }</pre>
--	---

Kelverion UK Limited
Compass House, Vision Park
Chivers Way
Histon
Cambridge CB24 9AD
United Kingdom
Email: info@kelverion.com
Web: www.kelverion.com