QM.X BY C GrantThornton Azure Marketplace Installation Guide



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Prerequisites

To complete the installation of qm.x into your Azure Subscription, you must have the following:

- An Azure Subscription
- Rights in Azure AD for creating Application Registrations
- Owner rights in the subscription where qm.x will be installed for the creation of a resource group and corresponding resources
- Configured logging and analytics
 - Additional information can be found here: <u>https://learn.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs</u> <u>https://learn.microsoft.com/en-us/azure/app-service/monitor-app-service</u>

Azure AD App Registration

Before you begin the application installation from the Marketplace, you must create an app registration for integration with Azure AD for authentication of users.

1. Open <u>https://portal.azure.com</u> and type in the search box **Azure Active Directory** and select it to pull up the Azure Active Directory blade.

P azure active directory	×
All Services (84) Marketplace (4) Documentation (28) Resources (0) Resource Groups (0)	
Azure Active Directory (0)	
Services	See all
♦ Azure Active Directory	
Security	
Activity log 😂 Azure Databricks	
🐼 Azure Cosmos DB 🙎 Azure Lighthouse	
Marketplace	

Over the next several steps, we will be configuring the application registration and capturing the following inputs used later during the qm.x application installation process:

- Tenant ID
- Azure AD Domain
- Client ID
- Client Secret

It is recommended that you open an instance of **Notepad** to temporarily capture these values for later use.

- The first value to capture is available on the initial screen: Azure AD Domain. Copy the value labeled Primary domain, which should end in ".onmicrosoft.com", and paste that value into Notepad.
- 3. Next, select **App Registrations** from the left-hand menu:

\equiv Microsoft Azure		ア Search reso
Home >		
Azure Active Directory		
«	🕂 Add \vee 🍪 Manage tena	nts 🚺 What's new 🛛 🗔
1 Overview		
Preview features	Overview Monitoring T	Tutorials
X Diagnose and solve problems	Search your tenant	
Manage		
🚨 Users	Basic information	
🎎 Groups	Name	Specifican.
📫 External Identities	Tenant ID	where we obtain the second states
🎝 Roles and administrators	Primary domain	opmicrosoft com
Administrative units	Thinkiy donialit	.on microsoft.com
Enterprise applications	License	Azure AD Premium P2
Devices	Alerts	
App registrations		
Identity Governance	Upcoming TLS 1.0, 1	.1 and 3DES deprecation



4. Click the toolbar item to create a New Registration.



5. Enter a descriptive name for the qm.x installation. Leave all other values in their default state, and then click **Register**.



 The next two values that need saving are available on the next screen (client ID and tenant ID). Take a moment to copy these values into Notepad. You may want to label them, so they don't get mixed up.

👯 qm.x - ACME 🛷 …		>
Search (Ctrl+/) «	📋 Delete 🌐 Endpoints 💀 Preview features	5
R Overview	Got a second? We would love your feedback on I	Microsoft identity platform (previously Azure AD for developer). $ ightarrow$
🗳 Quickstart		
💉 Integration assistant	∧ Essentials	
Manage	Display name	Client credentials
Branding & properties	<u>qm.x - ACME</u>	Add a certificate or secret
	bb4b681e-01f9-4492-a5fb-42a3b734cede	Add a Redirect URI
	Object ID	Application ID URI
Certificates & secrets	/8896d5t-9ftd-435d-b006-d79995411bc8	Add an Application ID URI
III Token configuration	Directory (tenant) ID a0b6a447-2d01-4c5d-bab2-29cafae4c989	Managed application in local directory am.x - ACME
 API permissions 	Supported account types	*1
🗠 Expose an API	My organization only	



The remaining steps configure the qm.x application with the required permissions and settings. Once the qm.x application is installed, we will come back to this app registration and update a setting required for redirecting logins back to the installed application.

- 7. Select "Certificates & Secrets" from the left-hand menu, and then click New Client Secret.
- 8. Enter a Description, such as "*authentication*", and set an expiration date according to your company's policies.

NOTE: Expired client secrets must eventually be updated in the Key Vault resource deployed by the application.

 After creating the secret, use the copy icon to copy the Client Secret Value and paste into Notepad IMPORTANT: The secret value will not be shown again after leaving this screen.

This is the final value to capture, but there are still a few more steps to complete the app registration process.

💡 qm.x - ACME Cert	tificates & secrets 👒				;
	🔗 Got feedback?				
Sverview					
📣 Quickstart	Got a second to give us some	feedback? \rightarrow			×
💉 Integration assistant					
Manage	Credentials enable confidential app addressable location (using an HTT as a credential	plications to identify the IPS scheme). For a high	emselves to the authentica er level of assurance, we r	ition service when receiving tokens at a w ecommend using a certificate (instead of	veb a client secret)
Branding & properties	as a credential.				
Authentication					×
📍 Certificates & secrets	 Application registration certifi 	icates, secrets and federat	ted credentials can be found	in the tabs below.	
Token configuration					
 API permissions 	Certificates (0) Client secre	ts (1) Federated cr	edentials (0)		
Expose an API	A secret string that the applicatio	n uses to prove its iden	tity when requesting a tol	en. Also can be referred to as application	n password.
App roles	+ New client secret				
A Owners	Description	Expires	Value ①	Secret ID	
& Roles and administrators	authentication	. 10/1/2022	and the second s		- D 🗊
0 Manifest					

 qm.x requires an additional delegated permission to allow the application to look up users on behalf of the signed in user. The next step is to add the required permission by selecting the API Permissions menu item on the left, and then select Add a permission.

_• qm.x - ACME API	permissions 🖈 …	×	<
Search (Ctrl+/) « Integration assistant	🕐 Refresh 🛛 🕅 Got feedback?		
Manage		~	
 Branding & properties Authentication 	The "Admin consent required" column shows the default value for an permission, user, or app. This column may not reflect the value in you more	n organization. However, user consent can be customized per × ur organization, or in organizations where this app will be used. <u>Learn</u>	
Certificates & secrets II Token configuration Certificates & secrets Certificates & secret	Configured permissions Applications are authorized to call APIs when they are granted permissionfigured permissions should include all the permissions the application + Add a permission Grant admin consent for Quisitive API / Permissions na Type Description	sions by users/admins as part of the consent process. The list of ion needs. Learn more about permissions and consent Admin consent req Status	
🊨 Owners	✓ Microsoft Graph (1)		•
 Roles and administrators Manifest 	User.Read Delegated Sign in and read user profile	No	•
Support + Troubleshooting	To view and manage permissions and user consent, try Enterprise appli	ications.	



11. Select the Microsoft Graph option.

Request A	PI permissions
Select an API	
Microsoft APIs	APIs my organization uses My APIs
Commonly us	ed 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.

- 12. Select Delegated Permissions, then type "User.ReadBasic.All" in the search box.
- 13. Expand and select the check box for the permission, and then click the Add permissions button.

Request API permissions	X
All APIs Microsoft 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
P User.ReadBasic.All	×
The "Admin consent required" column shows the default value for a permission, user, or app. This column may not reflect the value in yo more	n organization. However, user consent can be customized per $$\times$$ uur organization, or in organizations where this app will be used. Learn
Permission	Admin consent required
✓ User (1)	
User.ReadBasic.All ① Read all users' basic profiles	No
Add permissions Discard	

14. The permission screen should now show the following.

Configured permissions Applications are authorized to configured permissions shoul + Add a permission </th <th>; o call APIs wh Id include all Grant admir</th> <th>hen they are granted permissions by use the permissions the application needs. I n consent for Quisitive</th> <th>rs/admins a .earn more</th> <th>s part of the consent process. The list of about permissions and consent</th> <th></th>	; o call APIs wh Id include all Grant admir	hen they are granted permissions by use the permissions the application needs. I n consent for Quisitive	rs/admins a .earn more	s part of the consent process. The list of about permissions and consent	
API / Permissions na Ty	vpe D	Description	Admin cor	nsent req Status	
∽ Microsoft Graph (2)					•••
User.Read De	elegated S	ign in and read user profile	No		•••
User.ReadBasic.All De	elegated F	Read all users' basic profiles	No		•••
To view and manage permissi	ions and use	r consent, try Enterprise applications.			

15. At this point, we are now ready to proceed with the installation of qm.x. Keep this browser tab open as you will revisit after the application installation has completed.



Marketplace Install

- 1. Open <u>https://portal.azure.com</u> in a new browser tab.
- 2. Under Azure Services, select the Marketplace option.



3. In the search box, search the Marketplace for qm.x.

Home >				
Marketplace				
Get Started	*			
Get started	₽ qm.x	×	Pricing : All × Operating System	$_{: AII} \times$
Service Providers	Streamline ISQM 1 quality ma	nagement with qm.x. Easie		
Management				
management	Recommended for you 🕕			
Private Marketplace			- to - to	
Private Offer Management		RedHat	cisco	oudiocode
	F5 BIG-IP Virtual Edition	Red Hat Enterprise Linux	Cisco Firepower	Media
My Marketplace	(BYOL)		Management Center Virtual	Contr
	F5 Networks	Red Hat Inc	Cisco Systems, Inc.	Audio
Favorites	Virtual Machine	Virtual Machine	Azure Application	Azure /
Recently created	The BIG-IP Virtual Edition (VE) is F5's	Red Hat Enterprise Linux Pay-As-You-	Firepower Management Center	Direct 9
	application delivery services platform	Go Images. This offer contains all	Virtual can manage Firepower Threat	voice se
Private products	Tor the rear cloud	mages, meaning Gen ar	orenae opproveds	skype i

4. Click the qm.x product





5. Click Create to begin the installation process.



The installation is separated into three parts, with the first being the resource group, the second being the details required for qm.x to authenticate against your Azure AD tenant (an App Registration), and the third being the names for provisioned resources.

6. Select to create a new **Resource Group** and select your organization's appropriate **Region** from the drop down for deployment.

NOTE: An existing resource group can be used, although a new one is recommended. It is also recommended that the resource group region be chosen to reflect the correct geographical location at the time of installation. Moving regions after resource group creation is not supported by the qm.x Support team. If this becomes required, please refer to the Microsoft Learn link for more information: Move resources to another region with Azure Resource Mover | Microsoft Learn

Home > Marketplace > qm.x (prev	iew) >
Create qm.x	
Basics App Registration App	plication Settings Review + create
Project details	
Select the subscription to manage dep manage all your resources.	ployed resources and costs. Use resource groups like folders to organize and
Subscription * 💿	ADC-ET-MKTPL
Resource group * ()	(New) RG_ACME_QMX Create new
Instance details	
Region * 💿	
Review + create < Previo	us Next : App Registration >



7. The values copied to **Notepad** in the creation of the app registration steps are now entered into the App Registration section as shown below. After entering the fields, click **Next: Application Settings**.

asics	App Registration	Application Settings	Review + create	
he Micr legisteri	osoft identity platform ing your application es	performs identity and acc ablishes a trust relationsh	tess management (IAM) only for registered appl ip between your app and the Microsoft identity	ications. platform. The
ionant is	nidirectional: your app	trusts the Microsoft ident	ity platform, and not the other way around.	
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			and the second se	

8. This section controls the resource names used when deploying qm.x. Fill out the resource fields according to the standards of your organization.

For example, for ACME, the following resource names will be used following an "*<organization>-<app name>-<recommended abbreviation>-<instance number>*" format.

- App Service Plan Name: acme-qmx-plan-01
- App Service Name: acme-qmx-app-01
- App Configuration Name: acme-qmx-appcs-01
- Key Vault Name: acme-qmx-kv-01
- SQL Server Name: acme-qmx-sql-01
- Database Name: acme-qmx-sqldb-01
- Log Analytics Workspace Name: acme-qmx-law-01
- App Insights Name: acme-qmx-appi-01
- Storage Account Name: acmeqmxst01
 - o Note restrictions on storage account names, which do not allow for dashes

This section also captures the administrative username and password for SQL. These values will be saved in Key Vault after installation for use by the app and recovery by authorized users. **IMPORTANT:** The administrator login username is a SQL Server Login, NOT a domain account login. You cannot use a UPN (User Principal Name) formatted account, for example, login_name@DomainName.



10.

9. Enter your resource names and settings, and then click **Next: Review + create** to continue.

Home > Marketplace > qm.x (preview) >		
Create qm.x			
,	· · · · · · · · · · · · · · · · · · ·		
Database			
Sql Server Name * 🕕	acme-qmx-sql-01		
Database Name * 🕕	acme-qmx-sqldb-01		
Administrator Login * 🛈	localadmin 🗸		
Administrator Login Password * 🛈	······································		
Confirm password * 🛈	······································		
Monitoring			
Log Analytics Workspace Name * 🕕	acme-qmx-law-01 🗸		
App Insights Name * 🕕	acme-qmx-appi-01 🗸		
Storage			
Storage Account Name * 🕕	acmeqmxst01 🗸		
Review + create < Previous	Next : Review + create >	Home > Marketplace > qm.x (previ Create qm.x	iew) >
		Validation Passed	
		Basics App Registration App	olication Settings
		PRODUCT DETAILS	
		qm.x	
		by Grant Thornton LLP Terms of use Privacy policy	
		TERMS	
The values you pro be asked to provide	vided will be validated and you will contact information before	By clicking "Create", I (a) agree to the listed above; (b) authorize Microsoft to with the same billing frequency as my and transactional information with the activities. Microsoft does not provide details.	legal terms and privacy statement(s) associated with the Marketplace offering(s) o bill my current payment method for the fees associated with the offering(s). Araure subscription and (c) agree that Microsoft may share my contact, usage provide(s) of the offering(s) for support, billing and other transactional rights for third-party offerings. See the Azure Marketplace Terms for additional
installation. When	ready, select Create to begin the	Name	Million constit
installation.	<i>,,</i>	Preferred e-mail address *	- La contra a procedencia de la contra de la

11. The installation may take several minutes to complete. **IMPORTANT:** Do not attempt to navigate to any of the resources until the deployment is complete. Doing so may cause the deployment to fail.)

Create < Previous Next Download a template for automation

Once installed, you should see a screen similar to the following.

nome >	
Srantthorntonllp158	38703404475.qm_x-preview-20220404174419 Overview * ··· ×
Search (Ctrl+/) «	📋 Delete 🛇 Cancel ሰ Redeploy 💍 Refresh
👶 Overview	Ø We'd love your feedbackl →
😫 Inputs	
≆ Outputs	🤣 Your deployment is complete
E Template	 Deployment name: grantthorntonllp1588703404475.qm_x-prev Subscription: Subscription: Correlation ID: f77916ee-a15a-4de2-92b4 Resource group: RG_ACME_QMX
	✓ Deployment details (Download)
	∧ Next steps
	Go to resource group



App Registration Redirect URL

1. Before launching the application, you must first update the app registration created earlier with the redirect URL for the app service. To get the URL for the app service, click the **Go to resource group** button on the deployment screen above, and then click the hyperlinked app service name that was created in the Resources table.

RG_ACME_QMX	\$ ····			
₽ Search (Ctrl+/)	🔹 🕂 Create 🚳 Manage view 🗸 📋 Delete re	esource group 🕐 Refresh 🚽	Export to CSV ···	
Overview	Essentials			JSON View
Activity log	Subscription (move) ADC-ET-MKTPL	Deployments 2 Succeeded		
Access control (IAM)	Subscription ID 3f7a16fb-5c48-4d81-9dca-289b1aab3487	Location East US 2		
A Resource visualizer	Tags (<u>edit)</u> <u>Click here to add tags</u>			
-				
Events				
 Events Settings 	Resources Recommendations			
Events Settings Deployments	Resources Recommendations		Add filter	
Events Settings Deployments Security	Resources Recommendations Filter for any field Type == all ×	Location == all × +	· Add filter	
Settings Deployments Security Policies	Resources Recommendations Filter for any field Type == all × Showing 1 to 9 of 9 records. Show hidden to 100 million	Location == all × ⁴ Y	Add filter No grouping	~
Settings Ceployments Security Policies Properties	Resources Recommendations Filter for any field	Location == all × ⁴ਯ ypes ⊙	Add filter No grouping	~
 ✓ Events Settings △ Deployments ○ Security ○ Policies ※ Properties △ Locks 	Resources Recommendations Filter for any field. Type == all × Showing 1 to 9 of 9 records. Show hidden to 1000 hidden t	Location == all × ⁴ γ ypes ⊙ Type ↑↓	Add filter No grouping Location ↑↓	~
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 ✓ Events Settings ✓ Deployments ✓ Security ✓ Policies ﷺ Properties △ Locks Cost Management 	Resources Recommendations Filter for any field. Type == all X Showing 1 to 9 of 9 records. Show hidden t EI List view Name †1 © anne-grav app-01 © anne-grav app-01	Location == all × th ợ ypes ⊙ Type ↑↓ App Service App Configuration	Add filter No grouping Location ↑↓ East US 2 East US 2	~
 ✓ Events Settings ✓ Deployments Ø Policies Ø Policies ✓ Evroperties ✓ Locks Cost Management § Cost analysis 	Resources Recommendations Fritter for any field	Location == all X (types 0) Type 14 App Service App Configuration Application resoluts	Add filter No grouping Location ↑↓ East US 2 East US 2 East US 2 East US 2	~

2. **Copy the URL** for the app service to the clipboard using the icon that appears when you hover over the link:

acme-qmx-app-01 App Service	A	:
P Search (Ctrl+/) «	${igstarrows}^{\!$	💼 Delete 🛛 💍 Refresh 🚽 Get publish profile \cdots
Overview	↑ Essentials	JSON View
Activity log	Resource group (<u>move</u>) <u>RG_ACME_QMX</u>	URL https://acme-gmx-app-01.azurewebsites.net
Access control (IAM)	Status	Health Check
Tags	Running	Not Configured
Diagnose and solve problems	Location East US 2	App Service Plan acme-gmx-plan-01 (S1: 1)
Security	Subscription (move) ADC-ET-MKTPL	FTP/deployment username No FTP/deployment user set
Events (preview)	Subscription ID 3f7a16fb-5c48-4d81-9dca-289b1aab3487	FTP hostname ftp://waws-prod-bn1-135 ftp.azurewebsites.windo
eployment	5/781010 5040 4001 5008 2050 1880 5407	TTO besteres
Quickstart		ftps://waws-prod-bn1-135.ftp.azurewebsites.windo
Deployment slots	Tags (edit)	

3. Go to Azure Services and click on **Azure Active Directory** in order to go back to the previous app registration.

Azure service	es () Resource	Marketplace	Azure Active	† Subscriptions	All resources	Quickstart	Virtual	App Services	\rightarrow More services
Resources	groups		Directory			Center	machines		
Recent	nte					[₂			
Name				Туре				Last Viewed	
😵 snggt-qmx-a	ipp-01			App Se	rvice			3 minutes ago	
() RG_Risk_and	_Technology			Resour	ce group			3 minutes ago	
👼 snggt-qmx-a	ppcs-01			App Co	onfiguration			a day ago	
👗 snggt-qmx-p	👗 snggt-qmx-plan-01 App Service plan a day ago								
📍 Azure CSP - I	Production			Subscri	ption			a day ago	
See all									



4. Back in the open tab/window for your app registration, select the **Authentication** menu item on the left-hand side and then the **Add a platform** link

₽ Search (Ctrl+/)	« 🕅 Got feedback?
 Overview Quickstart Integration assistant Manage 	Platform configurations Depending on the platform or device this application is targeting, additional configuration may be required such as redirect URIs, specific authentication settings, or fields specific to the platform. Add a platform
 Branding & properties Authentication Certificates & secrets Token configuration API permissions Expose an API App roles 	Supported account types Who can use this application or access this API? Accounts in this organizational directory only (Quisitive only - Single tenant) Constraints in any organizational directory (Any Azure AD directory - Multitenant) Help me decide
Owners Roles and administrators Manifest	▲ Due to temporary differences in supported functionality, we don't recommend enabling personal Microsoft accounts for an existing registration. If you need to enable personal accounts, you can do so using the manifest editor. Learn more about these restrictions.

5. Select Web under Web applications.

ACME		Configure platforms	
Auth	entication 🖈 …	5 .	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	R Got feedback?	Web applications	7
^	Platform configurations	Web Build, host, and deploy a web server	Single-page application
	Depending on the platform or device this application is targeting, additional con redirect URIs, specific authentication settings, or fields specific to the platform.	application. INET, Java, Python	and progressive web applications. Javascript.
- 1	+ Add a platform		
- 1		Mobile and desktop applications	
- 1	Supported account types		
	Who can use this application or access this API?	iOS / macOS	Android
	Accounts in this organizational directory only (Quisitive only - Single tenant)	Objective-C, Swift, Xamarin	Java, Kotlin, Xamarin
	O Accounts in any organizational directory (Any Azure AD directory - Multitenant)		
	Help me decide		

 For Redirect URIs, add the following, which is the URL for your app service copied previously and the following path "/signinoidc".

In this example, the full URL is <u>https://acme-gmx-app-01.azurewebsites.net/signin-oidc</u>.

* Redirect URIs			
The URIs we will accept as destinations when ret after successfully authenticating or signing out t request to the login server should match one lis more about Redirect URIs and their restrictions	urning authentication Isers. The redirect URI red here. Also referred	responses (toke you send in the to as reply URL	ens) s. Lea
https://acme-qmx-app-01.azurewebsites.net/s	gnin-oidc		
Front-channel logout URL			
This is where we send a request to have the app required for single sign-out to work correctly.	lication clear the user'	s session data. T	his i
This is where we send a request to have the app required for single sign-out to work correctly. e.g. https://example.com/logout	ication clear the user	s session data. T	his i:
This is where we send a request to have the app required for single sign-out to work correctly. e.g. https://example.com/logout Implicit grant and hybrid flows Request a token directly from the authorization architecture (SPA) and doesn't use the authorization JavaScript, select both access tokens and ID tokk web apps that use hybrid authentication, select	ication clear the user endpoint. If the applic tion code flow, or if it rns. For ASP.NET Core only ID tokens. Learn r	s session data. T ation has a singl invokes a web A web apps and o more about toke	le-pa PI via ther
This is where we send a request to have the app required for single sign-out to work correctly. e.g. https://example.com/logout Implicit grant and hybrid flows Request a token directly from the authorization architecture (SPA) and doesn't use the authoriza JavaScript, select both access tokens and ID tokk web apps that use hybrid authentication, select Select the tokens you would like to be issued by	endpoint. If the applic tion code flow, or if it rss. For ASP.NET Core only ID tokens. Learn r the authorization end	s session data. T ation has a singl invokes a web A web apps and o more about toke Ipoint:	le-pa Pl vi ther
This is where we send a request to have the app required for single sign-out to work correctly. e.g. https://example.com/logout Implicit grant and hybrid flows Request a token directly from the authorization architecture (SPA) and doesn't use the authorization JavaScript, select both access tokens and ID toke web apps that use hybrid authentication, select Select the tokens you would like to be issued by Access tokens (used for implicit flows)	endpoint. If the applic tion code flow, or if it rns. For ASP.NET Core only ID tokens. Learn r the authorization end	s session data. T ation has a singl invokes a web A web apps and c more about toke lpoint:	le-pa Pl vi other

**Configure Web** 

7. Next, check the box next to **ID tokens**, then click **Configure**.

 $\times$ 



## Post Installation Configuration

You may now navigate to the qm.x application by clicking the URL, which will be back in the app service settings blade. In this example, it is <u>https://acme-qmx-app-01.azurewebsites.net</u>. The initial load of <u>the</u> <u>application may take several minutes</u> due to just in time compilation and the initialization of the application database.

 When completed, you will be prompted to login using your Active Directory Credentials and to accept the permissions required by the application.
 NOTE: If you have Global Administrator privileges in your tenant, you will also see an additional check box on this prompt providing you with the option to accept the permissions on behalf of everyone in your organization. Checking the box is optional and not required.



After doing so you should see the following screen for entering your license key.

2. Enter your license key and click Launch to proceed.

Welcome to Grant Thornton	
Enter your license key.	



3. After entering your license, click the Admin link.

<b>qm.x</b>   🕲 Grant Thornt	on
	<b>Overview</b> Period: 1/1/2022 - 12/31/2022
Balant Creath Tourister, Pageselleges	:≡Status view ≡ Hierarchy view
Strapport Pro	
Dvervlew	
⊑∵ Evaluations	
Items	
I:I Reports	
2¢ Admin	

4. Select Users.

Admin			F	
i≡ Audit log =\$ Defaults	<b>≜</b> Export	1 Import	🖻 Periods	🙁 Users
			L.	

5. On this screen, add the business users that require the System Administrator role. System Administrators have access to the Admin section, which allows for control over evaluation periods, default data, importing of data, and addition of additional users to the system.

dmin			
E Audit log 😅 Defaults 🔹 Export	1 Import 🖻 Periods 🙁 Users		
ers			Export Application Use
Name	Email	Role	Actions
Crouch (Quisitive), Robert	Robert.Crouch@us.gt.com	System Administrator	▼ ⊖
Begin typing email	▼ System Administrator	Cancel Save	
	1 5 💌		Add User

6. The qm.x application is now installed and ready to be shared with your business owners.

# Troubleshooting / Rollback

If the deployment fails or you need to roll back the deployment for any reason, simply delete the Resource Group you created in step 6 of the **Marketplace Install** section above . This will delete all resources within the resource group.

**IMPORTANT**: Before deleting, check to see if the Key Vault instance was successfully deployed. If so, you will not be able to use the same name for that resource when attempting another installation. Key Vault has a built-in soft-delete feature that retains deleted vaults for a default retention period of 90 days. You cannot reuse the name of a key vault that has been soft-deleted until the retention period has passed. Therefore, if you elect to reinstall make sure you use a different key vault name or the deployment will fail.

## **Post-Installation**

## SMTP Configuration (Optional)

The release of qm.x contains a user-notifications feature that supports both in-application viewing of notifications along with email notifications. The email notification feature is designed to send a periodic "digest" of accumulated notifications for a given user. In order to take advantage of the emailing of notifications, you must configure SMTP submission with your organization's email server. qm.x does not target or require any specific email platform, only SMTP. The following instructs how to configure qm.x to utilize SMTP for outbound emails. You must configure SMTP submission with your organization's mail server prior to completing these steps.

**NOTE**: Due to the many different email platforms that organizations may be using, instructions for configuring SMTP submission with your organization's email platform is not provided.

Once you have setup and determined that your SMTP submission is working with your mail server (outside of qm.x), follow the steps below to configure qm.x to connect and use it.

Before you begin, the following values will be needed from your SMTP resource configuration in order to proceed:

- SMTP Host Name
- Port
- Username
- Password
- Email address to use as sender

#### Update key vault secrets

Navigate to your Key Vault service and select the Secrets blade.

**NOTE**: The ability to view and modify Key Vault secrets requires an Access Policy to be in place that grants those permissions. If you get an unauthorized message when you attempt to view the secrets, you will need to add an Access Policy using the steps below:

- 1. Select Access policies
- 2. + Add Access Policy
- 3. Select the Key & Secret Management template
- 4. Select principal (your user account)
- 5. Click Add
- 6. Click Save

Once you have successfully added an Access Policy:

- 1. Select the Secrets blade
- 2. Select smtp-username secret
- 3. + New version
- 4. Enter your SMTP connection Username into the value text box
- 5. Click Create

Repeat the above steps for the smtp-password secret.

### Update App Configuration Key/Value Settings

Next, navigate to the qm.x App Configuration service

Select the **Configuration Explorer** blade under Options

Edit each of the following configuration key values and provide the applicable values for your SMTP configuration:

Application:SMTP:Host	SMTP hostname or IP address
Application:SMTP:Port	SMTP port, typically 587
Application:SMTP:FromAddress	Email address that will be used as the
	"sender" address

The recurring job should now detect your SMTP configuration and begin to send daily notification digest emails.

#### **Email Frequency**

qm.x uses an internal recurring timer job mechanism for connecting to SMTP and sending notification emails. The default configuration is set to execute the email send operation daily at 10:00am UTC time (6:00am EST). You can alter this schedule if desired.

#### Changing the Recurring Job Frequency

qm.x utilizes two recurring timer jobs to perform periodic operations:

- 1. Notification email sending
- 2. Purging aged notifications

The timer jobs use the CRON format to define the recurring execution schedule. You can alter the CRON value by editing the **RecurringJob:NotificationEmailCRON and/or RecurringJob:NotificationPurgeCRON** configuration value.

The default notification email CRON schedule value is:

0 10 * * *

This value specifies a daily execution at 10:00 am UTC. As an example, to change the schedule to run at 14:00 UTC daily (2:00pm UTC), the value would be:

0 14 * * *

Details on how CRON works can be found at the following link:

https://en.wikipedia.org/wiki/Cron#CRON_expression

A helpful utility to help you define a desired CRON schedule can be found at the following link:

https://crontab.guru/#0_10_*_*_*

**IMPORTANT:** In order for your CRON changes to take effect, you need to navigate to your qm.x App Service and Stop/Start the service. You should perform this step outside of normal business hours as it will cause brief downtime of the qm.x application.