



Axnosis

Demo script – Safety Permit Mobile App

Microsoft Dynamics 365 FO



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Foreword

A permit-to-work system is an integral part of a safe system of work and is used to ensure that work is done safely and efficiently. These are typically used in hazardous industries and involve procedures to request, review, authorise, document and most importantly, de-conflict tasks to be carried out by front line workers. Permit to work is an essential part of control of work, and the integrated management of maintenance processes. Control of work is made up of permit to work, hazard identification and risk assessment, with the necessary mitigation and control measures, including isolation management.

A permit-to-work is not simply permission to carry out a dangerous task but is an essential part of a system which determines how that task can be carried out safely and helps communicate this to those performing the task. The issue of a permit does not, by itself, make a task safe - that can only be achieved by those preparing for the work, those supervising the work and those performing the work.

A permit-to-work system is a formal recorded process used to control work which is identified as potentially hazardous. It is also a means of communication between site/installation management, plant supervisors and operators and those who carry out the hazardous work.

Related Documentation

DOCUMENT NAME	DATE	REVISION	AUTHOR

Table 1: Related Documentation

Change and Version History

DATE	VERSION	AUTHOR	CHANGES REQUESTED BY

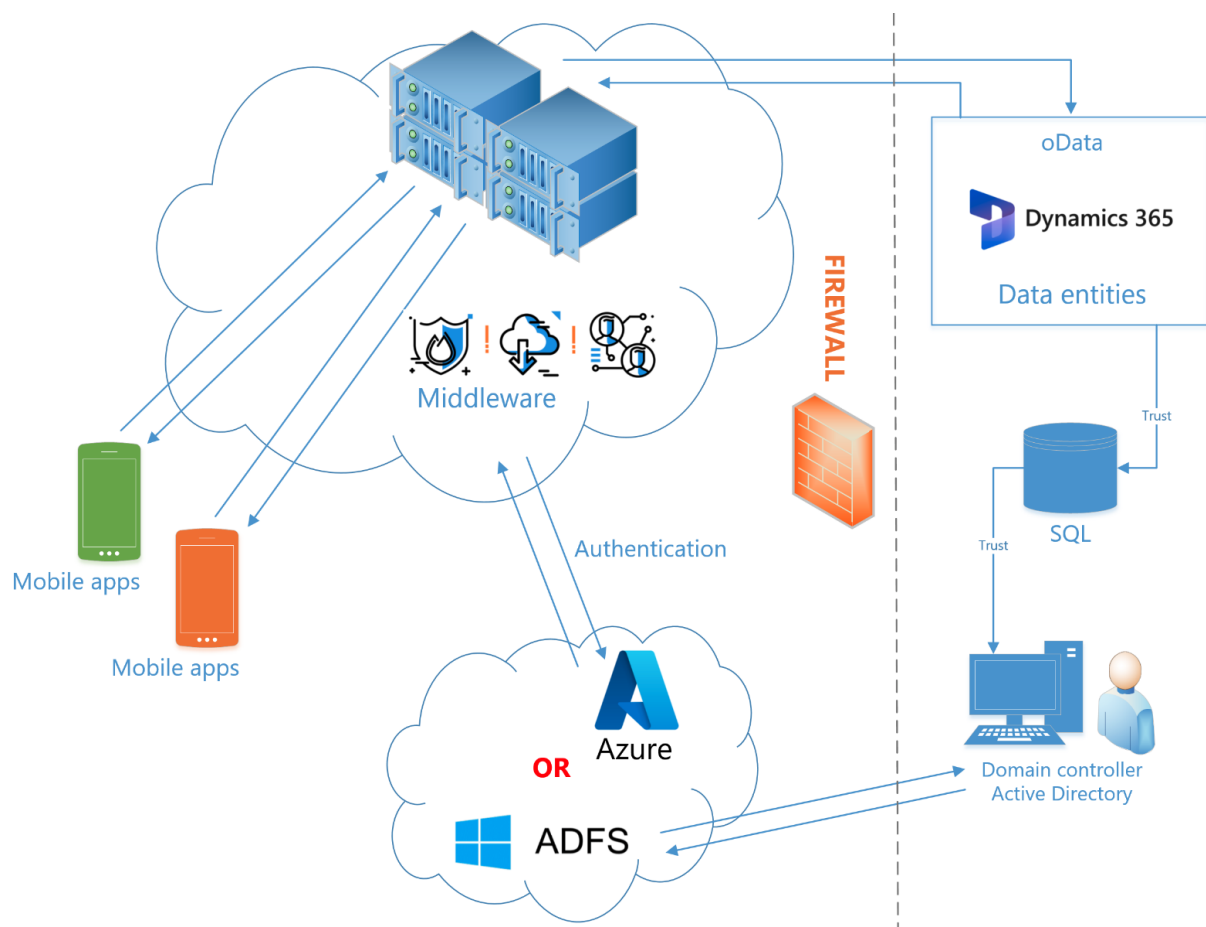
Table 2: Change and Version History

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1. Technology

- Microsoft Dynamics 365 (D365 for Finance and Operations)
 - HSE & GRC modules
- Axnosis middleware
- Ionic/Angular standalone applications
 - Safety permit mobile app



2. Demo setup

- This script is written for use with D365 for Finance and Operations and Axnosis Permits to work mobile app.
- The apps support both platforms



- The apps can be downloaded from:
 - Android: Google Play store
 - iOS: AppStore or TestFlight
- The user must be registered in AAD and should be a registered user in D365 for Finance and Operations:
 - Environment: Same D365 environment as used for transacting
 - Company: Defaults to the user setup in D365
- The users should be able to successfully login to the app by using the same login details as used for D365 for Finance and Operations. The relevant security role restrictions and legal entity allocations on D365 for Finance and Operations should be considered and applied on the mobile app sessions. The same user security roles will permit/exclude the user's right to capture events on the app.
- Whenever a new app update is required to be installed on the mobile phone, first ensure:
 - Current (old) app is uninstalled
 - Clear the mobile phone's cache (Android)
 - Remove all previous downloads of the application from the phone's download folder
 - Re-install the application and use

2.1 Background and Scenario

In construction, identifying safety risks is one of the most important things to do. This includes Hazard identification for key Work breakdown structure (WBS) lines in the construction plan. This is imperative to improve the safety of the workplace. These then should be translated into a formal Permit to work (P2W) or Authority to work.

Permit to work systems are formal procedures used to control activities that are considered high-risk. Permits only allow authorised personnel to perform those activities at specified times and in a way set out in the permit and referenced documents.

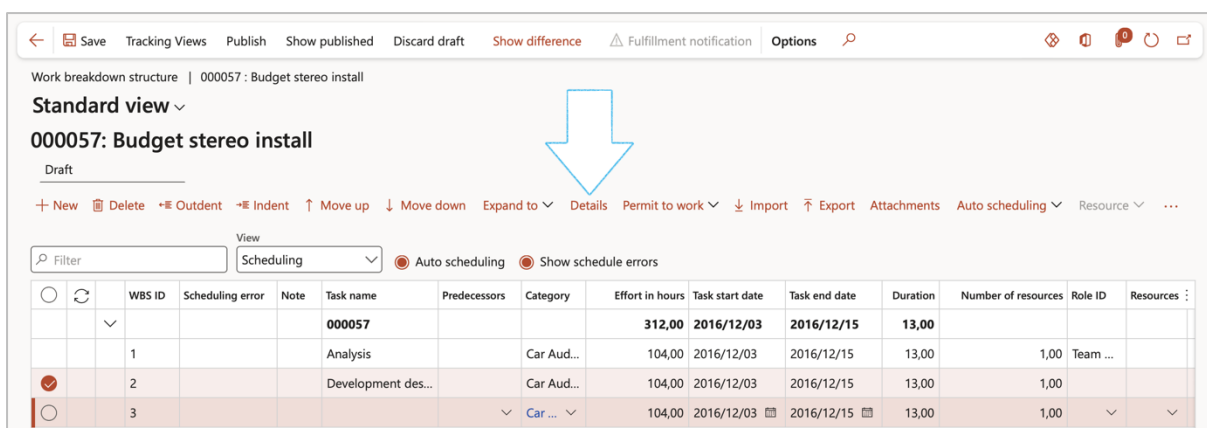
Permit to work systems do not in themselves make activities safer, this is only possible through the implementation of the correct procedures. It is important therefore that systems, not box-ticking exercises, are explained at site inductions and that they are continuously monitored, reviewed and kept up to date.

All of the above provides a compelling reason to have certain P2W functions available on a mobile app.

- It is assumed that D365 HSE and GRC modules are installed on D365.
- Projects and Permits sub modules are configured

Go to: **Project management and accounting > Projects > All projects**

- On the **Action** pane, under the **Plan** tab, click on the **work breakdown structure** button in the **Activities** button group.



Work breakdown structure | 000057: Budget stereo install

Standard view

000057: Budget stereo install

Draft

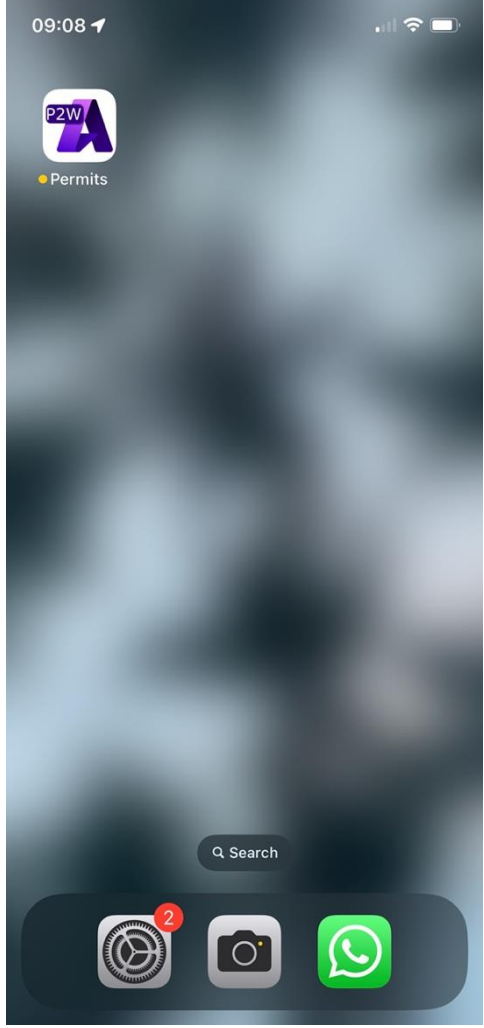
+ New Delete Outdent Indent Move up Move down Expand to Details Permit to work Import Export Attachments Auto scheduling Resource ...

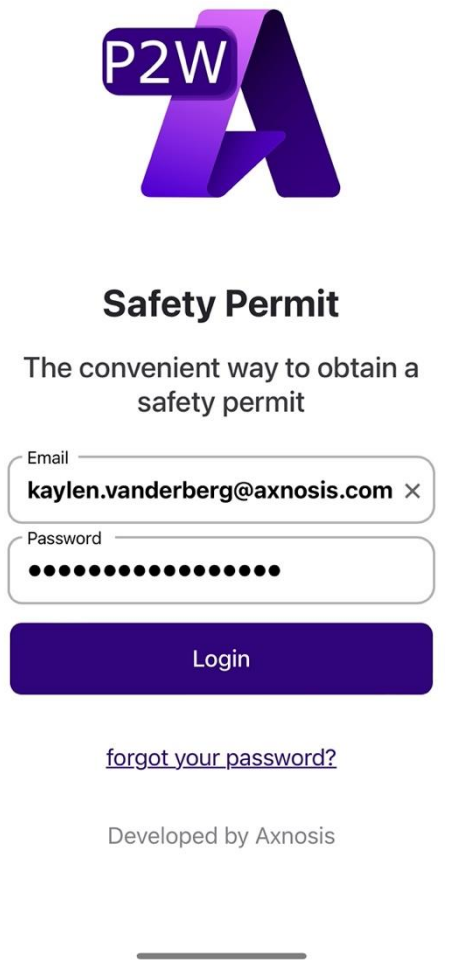
View: Scheduling Auto scheduling Show schedule errors

WBS ID	Scheduling error	Note	Task name	Predecessors	Category	Effort in hours	Task start date	Task end date	Duration	Number of resources	Role ID	Resources
000057						312,00	2016/12/03	2016/12/15	13,00			
1			Analysis		Car Aud...	104,00	2016/12/03	2016/12/15	13,00	1,00	Team ...	
2			Development des...		Car Aud...	104,00	2016/12/03	2016/12/15	13,00	1,00		
3					Car ...	104,00	2016/12/03	2016/12/15	13,00	1,00		

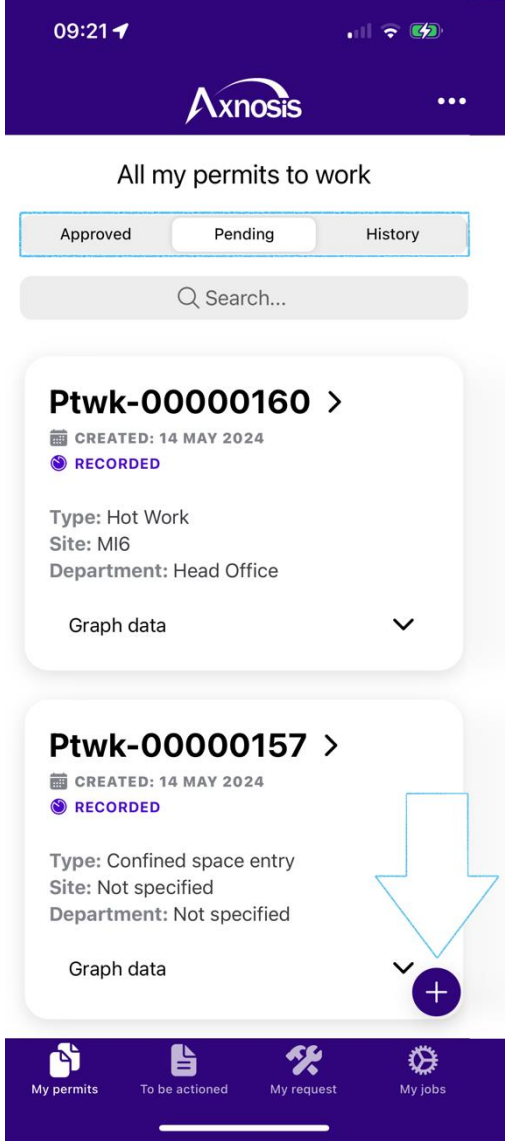
3. Demo script

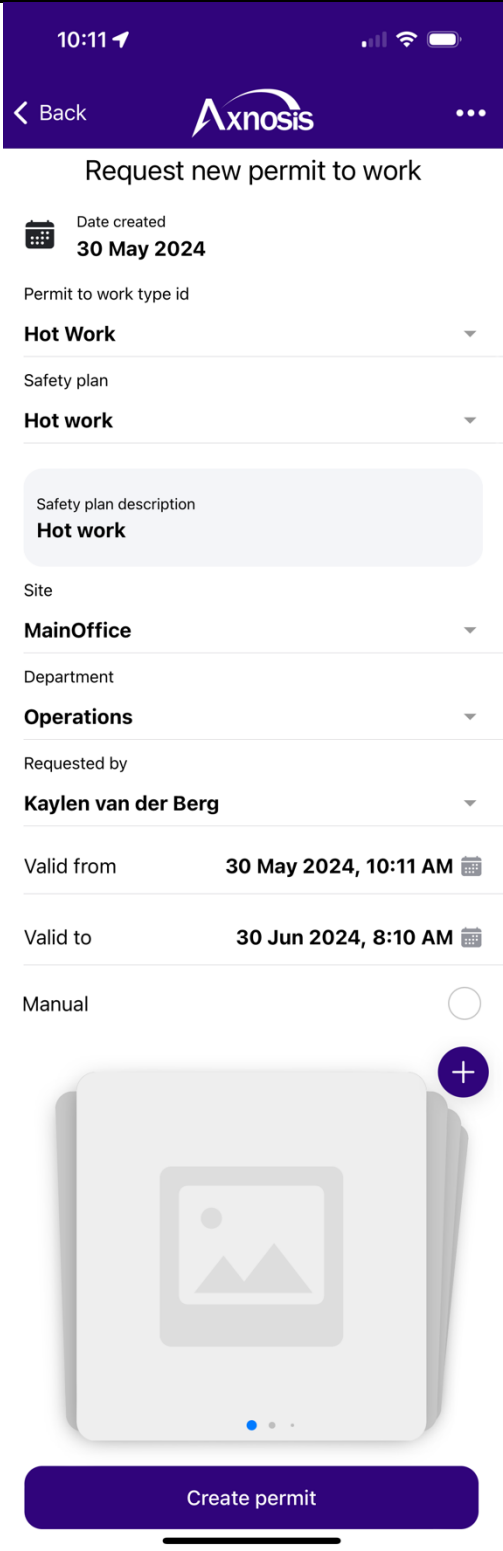
3.1 Log into the Permits app

TALKING POINTS AND STEPS	MOBILE APP
<p>The user takes out his/her mobile phone and taps on the Permits icon.</p>	

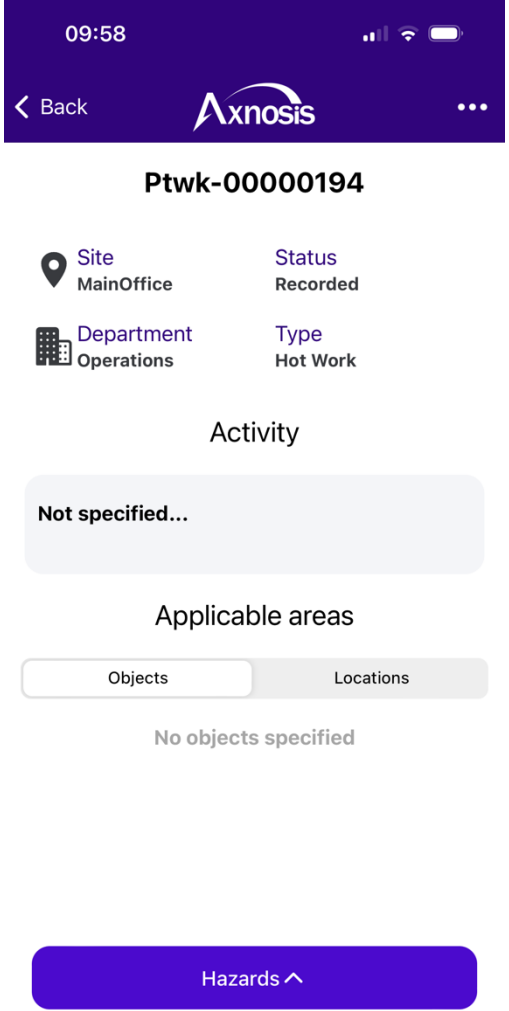
TALKING POINTS AND STEPS	MOBILE APP
<p>The logo on the login screen appears ...</p> <p>The user's D365 login details (Username and Password) are entered and used by the app for validation.</p> <p>The user then taps on the Login button to log into the app session.</p> <p>The D365 URL is optional and will be removed in future releases of the apps</p> <p>Login as demo@axnosis.com.</p>	 <p>The screenshot shows the login screen of the 'Safety Permit' mobile app. At the top is a logo with a stylized 'A' and 'P2W'. Below the logo is the title 'Safety Permit' and a subtitle 'The convenient way to obtain a safety permit'. There are two input fields: 'Email' with the value 'kaylen.vanderberg@axnosis.com' and a close button, and 'Password' with masked characters. A blue 'Login' button is below the fields. A link 'forgot your password?' is below the button. At the bottom, it says 'Developed by Axnosis' and there is a horizontal line for a home indicator.</p>

3.2 Requesting a new Permit via the D365 Permits mobile app

TALKING POINTS AND STEPS	MOBILE APP
<p>The All permits to work screen opens. The three tabs on this screen gives the user the option to view:</p> <ul style="list-style-type: none"> • Approved – All approved permits • Pending - All permits pending approval with status: <ul style="list-style-type: none"> ○ Recorded ○ Submitted • History – All rejected permits as well as permits that have expired <p>These permits have been created via the Permits app as well as through D365.</p> <p>To request a new permit to work:</p> <p>The user taps on the + button at the bottom of the screen.</p>	

TALKING POINTS AND STEPS	MOBILE APP
<p>The Request new permit to work screen opens and the user can enter the following information:</p> <ul style="list-style-type: none"> • Select the Permit to work type ID • Select the relevant Safety plan from the list • Enter a brief Safety plan description • Select the relevant Site • Select the relevant Department • Select the name of the person who is requesting the permit in the Requested by field • Select the date and time from which the permit will be valid • Select the date and time to which the permit will be valid • If a Manual permit was issued from a printed book and you now want to create an electronic one, then flag the permit accordingly <p>Tap on the Create permit button.</p> <p>(Red text will indicate that the field is mandatory for the request to be submitted)</p>	

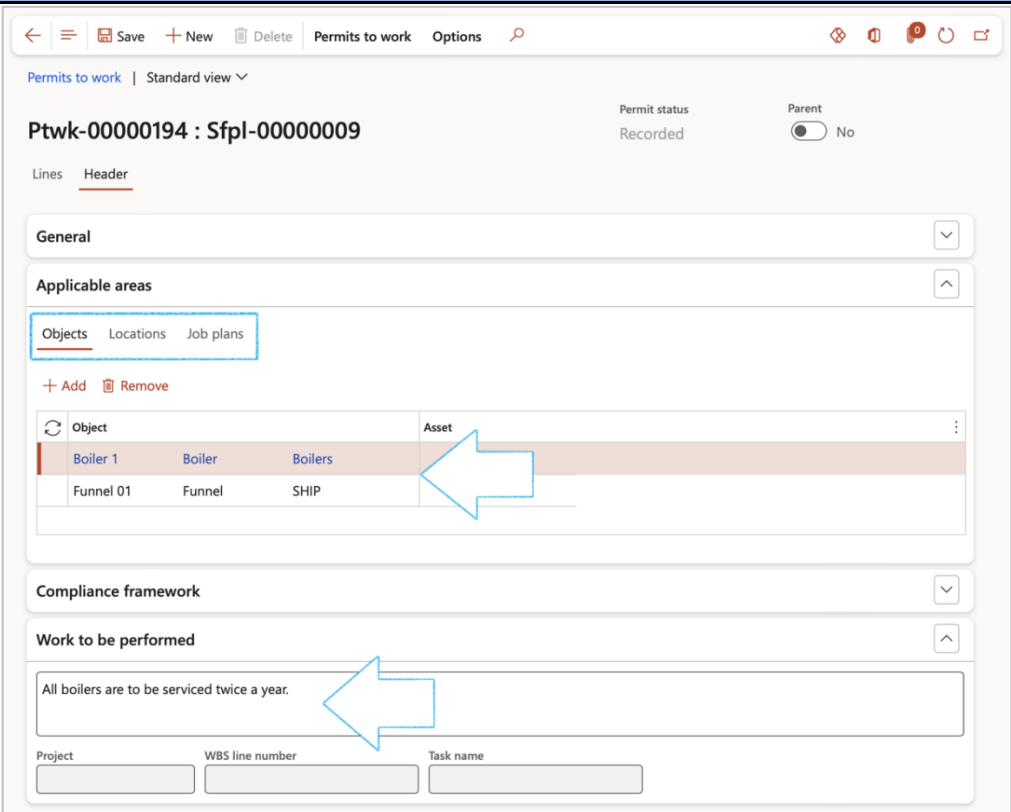
3.2.1 Viewing the permit details on the mobile device

TALKING POINTS AND STEPS	MOBILE APP
<p>The new permit will now be on the All permits to work screen under the Pending tab.</p> <p>Tap on the relevant permit to see the details.</p> <p>The Activity, Applicable areas, and Hazards are added via D365.</p>	

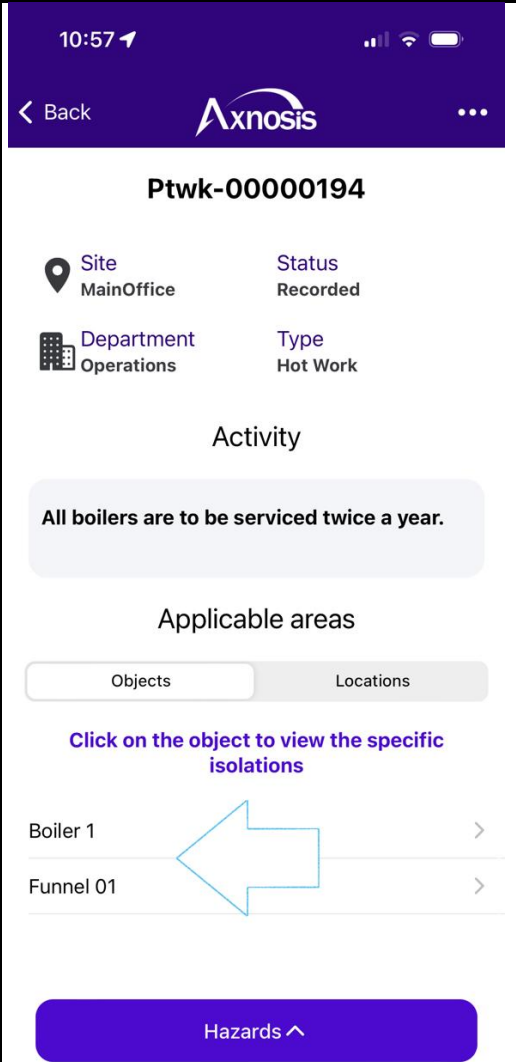
3.2.2 Viewing the “mobile created” Permit request inside D365

TALKING POINTS AND STEPS	DYNAMICS HSE 365 MODULE																																																																																				
<p>The mobile created permit request can be viewed inside D365 – log into D365 and navigate to the HSE module.</p>	<div><div><div><div><div><div></div><div>+ New</div><div>🗑 Delete</div></div><div><div>Permits to work</div><div>Options</div><div>🔍</div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div>Maintain</div><div>Control</div><div>References</div></div><div><div>Edit</div><div>Submit</div><div>Print permit</div></div><div><div>List children</div><div>Void</div><div>Print permit in columns</div></div><div><div>Overlapping ▾</div><div>Permits to work pool</div><div>Reject</div><div>Preparation</div><div>Print permit in columns (admin)</div></div><div><div></div><div>Surrender</div><div>Documents</div></div><div><div></div><div>Hand-over</div><div>Answers</div></div><div><div></div><div>File</div><div>Work orders</div></div><div><div></div><div>Approve</div><div></div></div><div><div></div><div>Issue-Accept</div><div></div></div><div><div></div><div>Sign off</div><div></div></div></div><div>All permits to work</div><div>Standard view ▾</div><div><div>🔍 Filter</div><div>View options ▾</div></div><table><tr><th><input type="radio"/> Suspended</th><th>Parent</th><th>Permit to work</th><th>Description</th><th>Permit to work type</th><th>Site</th><th>Permit status</th><th>Issue status</th><th>Valid from</th><th>Time</th><th>Valid to</th><th>⋮</th></tr><tr><td><input checked="" type="checkbox"/></td><td></td><td>Ptwk-00000194</td><td>Hot work</td><td>Cold Work</td><td>MainOffice</td><td>Recorded</td><td>Not issued</td><td>2024/05/30</td><td>07:51</td><td>2024/06/30</td><td></td></tr><tr><td></td><td></td><td>Ptwk-00000193</td><td></td><td>Working at Heights</td><td>007</td><td>Recorded</td><td>Not issued</td><td>2024/05/30</td><td>06:55</td><td>2024/06/06</td><td></td></tr><tr><td></td><td></td><td>Ptwk-00000192</td><td></td><td>Hot Work</td><td>001SiloMBY</td><td>Recorded</td><td>Not issued</td><td>2024/05/23</td><td>14:48</td><td>2024/05/24</td><td></td></tr><tr><td></td><td></td><td>Ptwk-00000190</td><td>Boiler cleaning</td><td>Cold Work</td><td>JLS</td><td>Recorded</td><td>Not issued</td><td>2021/05/24</td><td>14:13</td><td>2024/05/30</td><td></td></tr><tr><td></td><td></td><td>Ptwk-00000188</td><td>MMC Hot Work</td><td>Cold Work</td><td>3</td><td>Recorded</td><td>Not issued</td><td>2021/05/24</td><td>14:08</td><td>2024/05/30</td><td></td></tr><tr><td></td><td></td><td>Ptwk-00000186</td><td>2023 GER Hot work Saf...</td><td>Cold Work</td><td>3</td><td>Recorded</td><td>Not issued</td><td>2021/05/23</td><td>14:01</td><td>2024/05/31</td><td></td></tr></table></div>	<input type="radio"/> Suspended	Parent	Permit to work	Description	Permit to work type	Site	Permit status	Issue status	Valid from	Time	Valid to	⋮	<input checked="" type="checkbox"/>		Ptwk-00000194	Hot work	Cold Work	MainOffice	Recorded	Not issued	2024/05/30	07:51	2024/06/30				Ptwk-00000193		Working at Heights	007	Recorded	Not issued	2024/05/30	06:55	2024/06/06				Ptwk-00000192		Hot Work	001SiloMBY	Recorded	Not issued	2024/05/23	14:48	2024/05/24				Ptwk-00000190	Boiler cleaning	Cold Work	JLS	Recorded	Not issued	2021/05/24	14:13	2024/05/30				Ptwk-00000188	MMC Hot Work	Cold Work	3	Recorded	Not issued	2021/05/24	14:08	2024/05/30				Ptwk-00000186	2023 GER Hot work Saf...	Cold Work	3	Recorded	Not issued	2021/05/23	14:01	2024/05/31	
<input type="radio"/> Suspended	Parent	Permit to work	Description	Permit to work type	Site	Permit status	Issue status	Valid from	Time	Valid to	⋮																																																																										
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		Ptwk-00000193		Working at Heights	007	Recorded	Not issued	2024/05/30	06:55	2024/06/06																																																																											
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		Ptwk-00000188	MMC Hot Work	Cold Work	3	Recorded	Not issued	2021/05/24	14:08	2024/05/30																																																																											
		Ptwk-00000186	2023 GER Hot work Saf...	Cold Work	3	Recorded	Not issued	2021/05/23	14:01	2024/05/31																																																																											


3.2.3 Adding detail to the permit

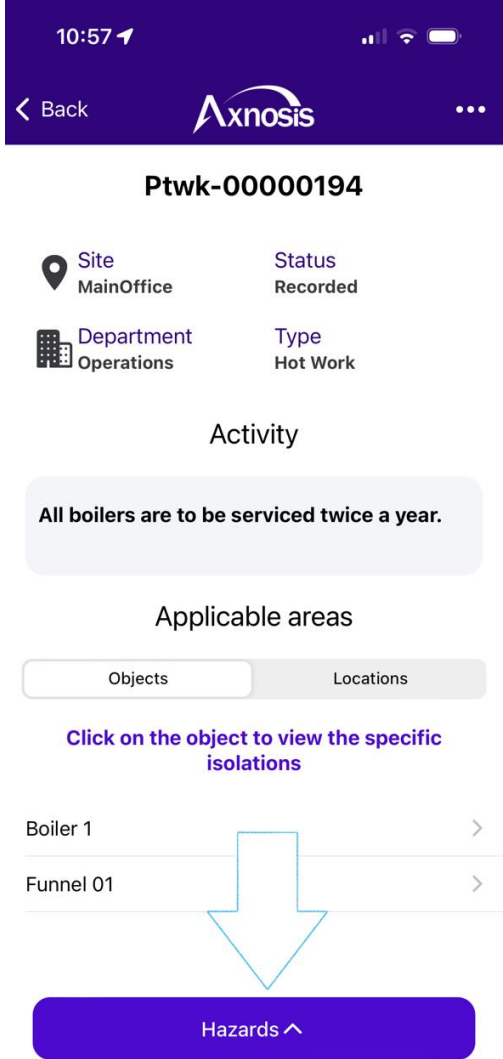
TALKING POINTS AND STEPS	DYNAMICS HSE 365 MODULE
<p>Open the Header view</p> <ul style="list-style-type: none"> Expand the Applicable areas Fast tab Enter the applicable areas under the relevant Index tab: <ul style="list-style-type: none"> Objects Locations Job plans Expand the Work to be performed Fast tab Enter the activity details 	 <p>The screenshot displays the 'Permits to work' form in the Dynamics HSE 365 mobile app. The form is in 'Standard view' and shows the 'Header' tab. The 'Applicable areas' section is expanded, showing a table with columns 'Object' and 'Asset'. The 'Work to be performed' section is also expanded, showing a text area for activity details. Blue arrows point to the 'Asset' column and the 'Work to be performed' text area.</p>

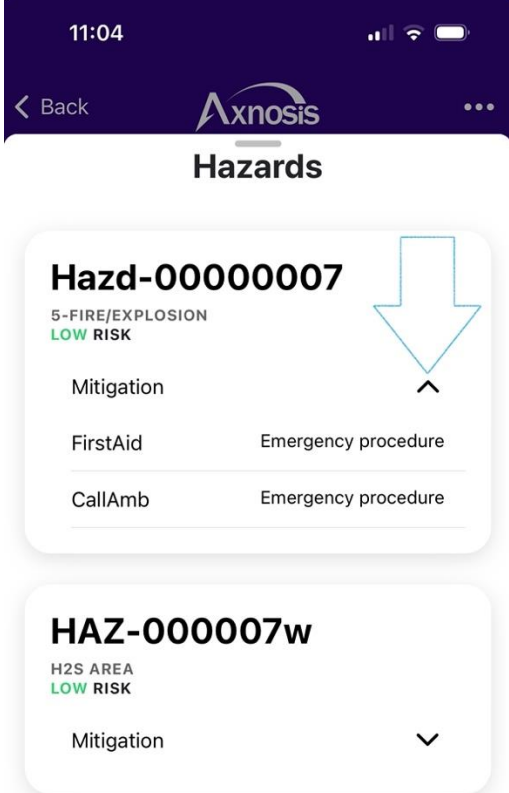
3.3 View added detail on the mobile device

TALKING POINTS AND STEPS	MOBILE APP
<p>On the All permits to work screen, tap on the relevant permit to view the added detail.</p> <p>The Activity, Objects (as well as the isolations/tag outs) and Locations that were added via D365, are now visible on the mobile device.</p>	 <p>The screenshot shows the Axnosis mobile app interface. At the top, the status bar displays the time 10:57 and signal/battery icons. The app header is dark blue with a 'Back' arrow, the Axnosis logo, and a menu icon. The main content area has a white background. The permit ID 'Ptwk-00000194' is displayed in bold. Below it, there are two rows of information: 'Site: MainOffice' and 'Status: Recorded' in the first row, and 'Department: Operations' and 'Type: Hot Work' in the second row. The 'Activity' section shows a light blue box with the text 'All boilers are to be serviced twice a year.' The 'Applicable areas' section has two tabs: 'Objects' (selected) and 'Locations'. Below the tabs, a blue text prompt says 'Click on the object to view the specific isolations'. A list of objects follows: 'Boiler 1' and 'Funnel 01', each with a large blue arrow pointing left and a right-pointing chevron. At the bottom, there is a blue button labeled 'Hazards ^'.</p>

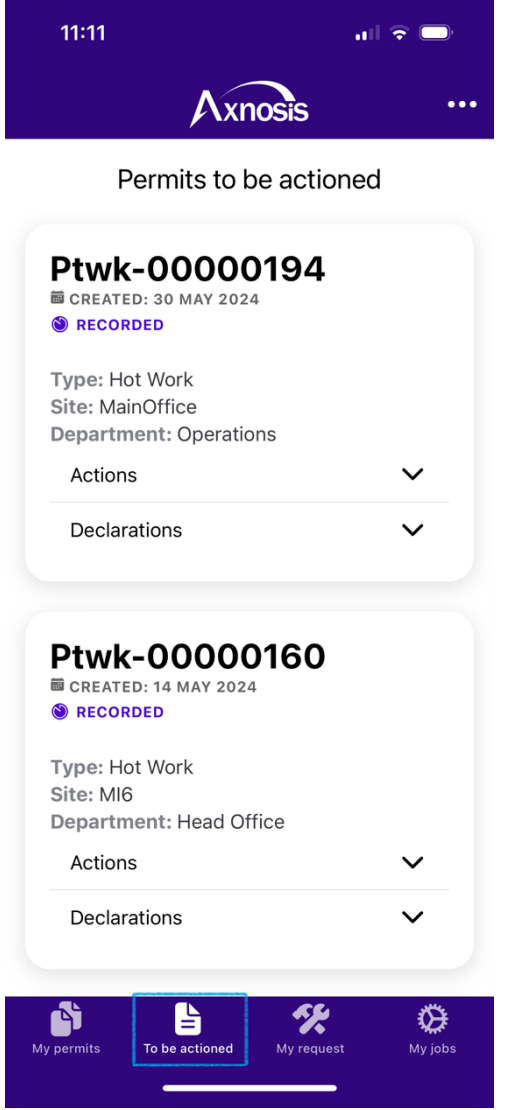
Tap on the object to view the specific isolations

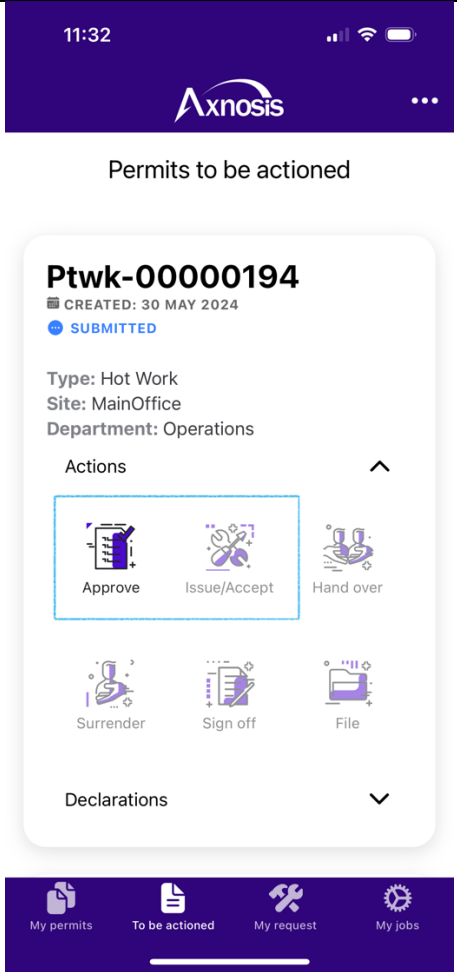
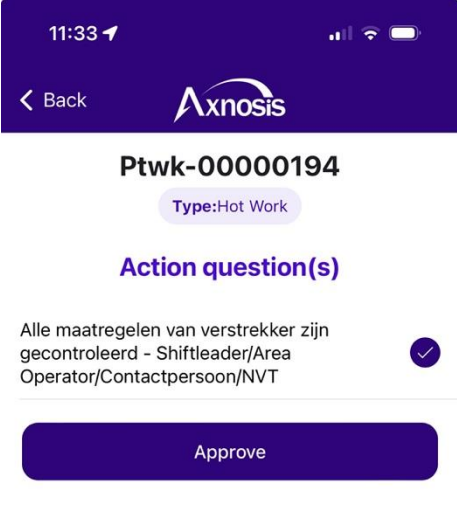
11:00			
			
Ptwk-00000194			
Isolations			
Apply sequence	Description	Remove sequence	Tag out status
1	Boiler inlet	2	Close
2	Boiler outlet	1	Open

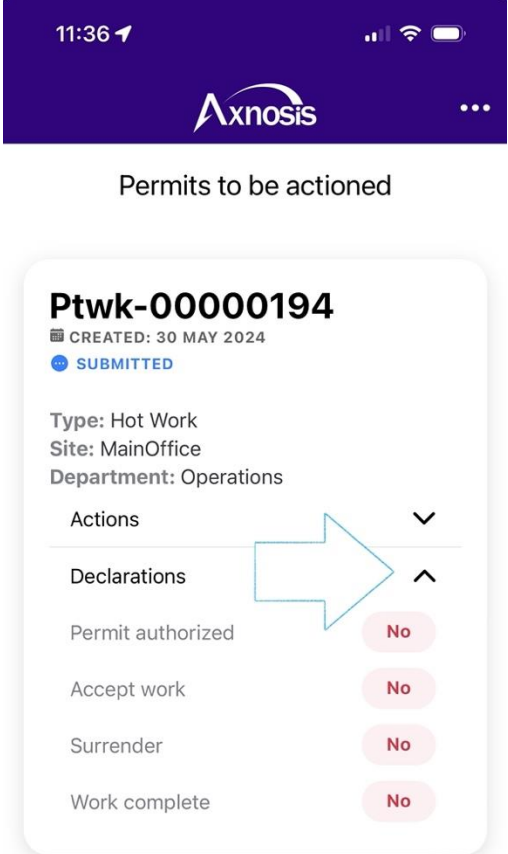
TALKING POINTS AND STEPS	MOBILE APP
<p>Tap on the Hazards button to view the Hazards that have been added.</p>	

TALKING POINTS AND STEPS	MOBILE APP
<p>On the Hazards screen, tap on the drop-down arrow to view the Mitigation for the selected hazard.</p>	

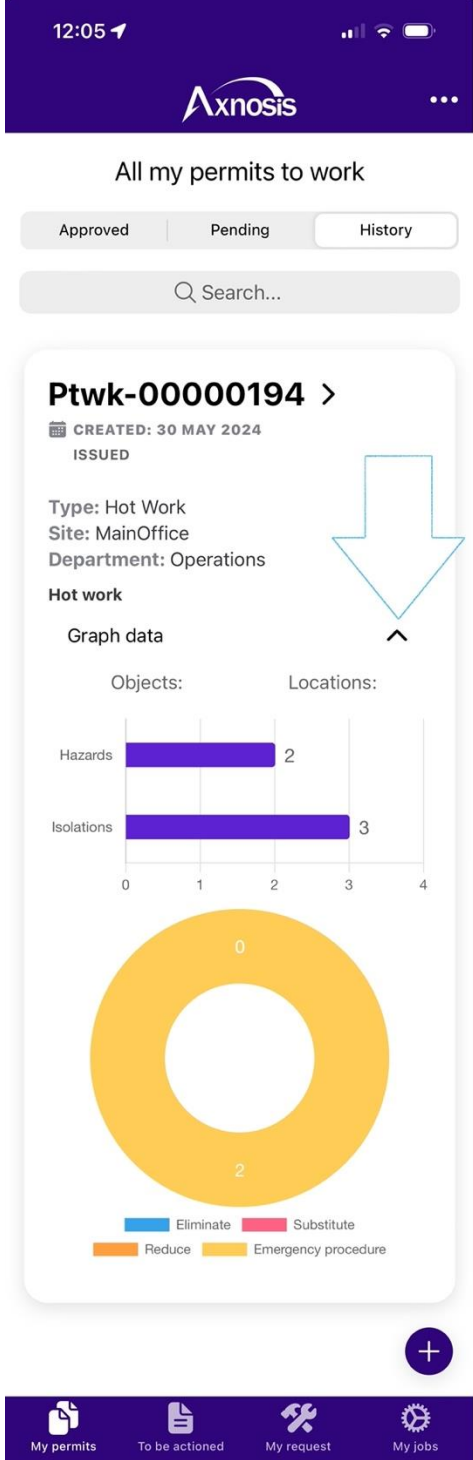
3.4 Action a permit on the mobile device

TALKING POINTS AND STEPS	MOBILE APP
<p>On the All permits to work screen, tap on the To be actioned icon at the bottom of the screen.</p>	 <p>The screenshot shows the Axnos mobile app interface. At the top, the status bar shows the time 11:11 and signal strength. The app header is purple with the Axnos logo and a menu icon. Below the header, the title 'Permits to be actioned' is displayed. Two permit cards are listed:</p> <ul style="list-style-type: none"> Ptwwk-00000194: CREATED: 30 MAY 2024, RECORDED, Type: Hot Work, Site: MainOffice, Department: Operations. It has expandable sections for 'Actions' and 'Declarations'. Ptwwk-00000160: CREATED: 14 MAY 2024, RECORDED, Type: Hot Work, Site: M16, Department: Head Office. It also has expandable sections for 'Actions' and 'Declarations'. <p>At the bottom, a navigation bar with four icons is shown: 'My permits', 'To be actioned' (highlighted with a red box), 'My request', and 'My jobs'.</p>

TALKING POINTS AND STEPS	MOBILE APP
<p>On the relevant permit:</p> <p>Tap on the Actions drop-down arrow to select the relevant action</p> <p>To be able to approve a permit using the app, the record has to be submitted in D365.</p> <p>*Currently only the first two actions are supported on the mobile app: Approve and Issue/accept</p>	
<p>Answer the Action questions and tap on Approve</p>	

TALKING POINTS AND STEPS	MOBILE APP
<p>On the relevant permit:</p> <p>Tap on the Declarations drop-down arrow to view the progress of declarations based on the permit actions/controls (The same as in D365)</p>	

3.5 Permit stats and graphs

TALKING POINTS AND STEPS	MOBILE APP
<p>On the All permits to work screen, tap on To be actioned at the bottom of the screen.</p> <p>Tap on the drop-down arrow of the relevant permit, to view the Graph data.</p> <p>These include:</p> <ul style="list-style-type: none"> A count of the related hazards and isolations and a bar chart of the said values 	

TALKING POINTS AND STEPS	MOBILE APP
<p>The ellipsis at the top of the screen provides the following functions:</p> <ul style="list-style-type: none"> Displays the D365 Legal entity that the user is currently logged into The Refresh data button is used to update the app with recently captured data (via the app and D365) The Help button opens the Axnosis Contact Support screen Logout 	