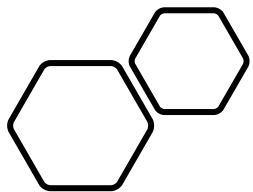




# Extend Teams apps to M365 (Outlook and Office)




**Save one of your recent mails to Teams  
or OneDrive coming from either Teams,  
Office or Outlook**



## About me

- Markus Moeller
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- <https://mmsharepoint.wordpress.com> 
- Proud dad of 1  (2yrs)





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**Save full mails to Teams /  
OneDrive and mark them as  
“Saved”**



# Prerequisites

- A Teams static/personal Tab app
- Teams manifest v1.13 or above
- TeamsJS SDK 2.0 or above
- Demo based on yo teams v4 for instance

# Possible scenarios for M365 across apps

	Teams	Outlook	Office
Personal app	Teams App SPFx	Teams App SPFx	Teams App SPFx
Search-based messaging extension	Teams App	Teams App	-
Action-based messaging extension	Teams App SPFx		-

# The Manifest

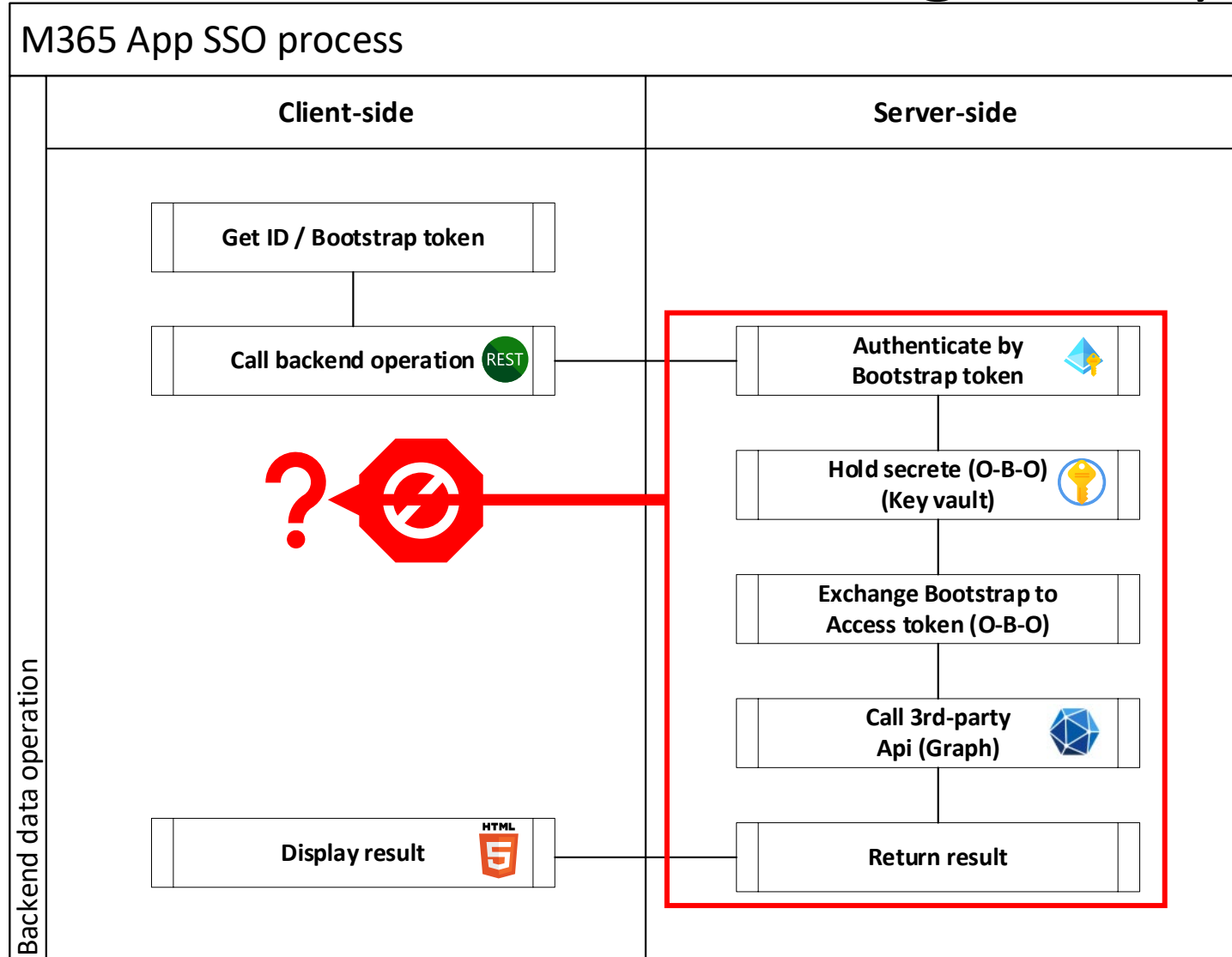
```
{  
  "$schema": "https://developer.microsoft.com/en-us/json-schemas/teams/v1.13/MicrosoftTeams.schema.json",  
  "manifestVersion": "1.13",
```

```
  "staticTabs": [  
    {  
      "entityId": "6604354b-c356-4299-ab0f-5019cc06bc21",  
      "name": "Mail Storage Tab",  
      "contentUrl": "https://{PUBLIC_HOSTNAME}/mailStorageTab/?name={loginHint}&tenant={tid}&theme={theme}",  
      "scopes": [  
        "personal"  
      ]  
    }  
  ],
```

# Detect host (M365 product)

```
useEffect(() => {  
  if (context) {  
    switch (context.app.host.name) {  
      case "Teams":  
        setDialogContent(<Teams getJoinedTeams={getJoinedTeams} currentFolder={  
          break;  
        case "Outlook":  
        default:  
          setDialogContent(<OneDrive currentFolder={currentFolder} getFolders={ge  
          break;  
      }  
    }  
  }, [token, currentFolder, selectedIndex]);
```

# SSO with TeamsJS SDK 2 the right way





# Upload small file vs resumable upload

```
if (mailMIMEContent.length < (4 * 1024 * 1024)) { // If Mail size bigger 4MB use resumable upload
  mailDriveItem = await storeMail2OneDrive(driveID, folderID, mailMIMEContent, fileName, accessToken);
}
else {
  mailDriveItem = await saveBigMail(driveID, folderID, mailMIMEContent, fileName, accessToken);
}
```

```
const saveBigMail = async (driveID: string, folderID: string, mimeType: string, fileName: string, accessToken: string) => {
  const sessionOptions = {
    "item": {
      "@microsoft.graph.conflictBehavior": "rename"
    }
  };
  let requestUrl = `https://graph.microsoft.com/v1.0/drives/${driveID}/`;
  requestUrl += driveID !== folderID ? `items/${folderID}/${fileName}.eml:/createUploadSession` : `root/${fileName}.eml:/createUploadSession`;
  const response = await Axios.post(requestUrl, sessionOptions, {
    headers: {
      Authorization: `Bearer ${accessToken}`,
    },
  });
  const resp = await uploadMailSlices(mimeType, response.data.uploadUrl);
  return resp.data;
};
```

# Microsoft Graph Open Extensions

```
const saveMailMetadata = async (mailId: string, displayName: string, url: string, accessToken: string) => {  
  const savedDate: Date = new Date();  
  const metadataBody = {  
    "@odata.type" : "microsoft.graph.openTypeExtension",  
    "extensionName" : metadataExtensionName,  
    "saveDisplayName" : displayName,  
    "saveUrl" : url,  
    "savedDate" : savedDate.toISOString()  
  };  
  let requestUrl = `https://graph.microsoft.com/v1.0/me/messages/${mailId}/extensions`;  
  
  const response = await Axios.post(requestUrl, metadataBody,  
    {  
      headers: {  
        Authorization: `Bearer ${accessToken}`,  
      }  
    }  
  );  
};
```

## Select storage location

! You already saved this mail on 8/28/2022, 11:58:13 AM  
to [Your weekly PIM digest for mmoellermvp.eml](#)

# Resources

- <https://mmsharepoint.wordpress.com/2022/08/31/extend-teams-apps-to-m365-with-sso-the-right-way/>  
[BlogPost]
- <https://github.com/pnp/teams-dev-samples/tree/main/samples/tab-office-sso-mail-save>  
[PnP Sample]
- <https://learn.microsoft.com/en-us/microsoftteams/platform/m365-apps/overview>  
[Microsoft Documentation]
- <https://pnp.github.io/blog/post/microsoft-365-app-scenarios/>  
[Different scenarios]