

# Agenda

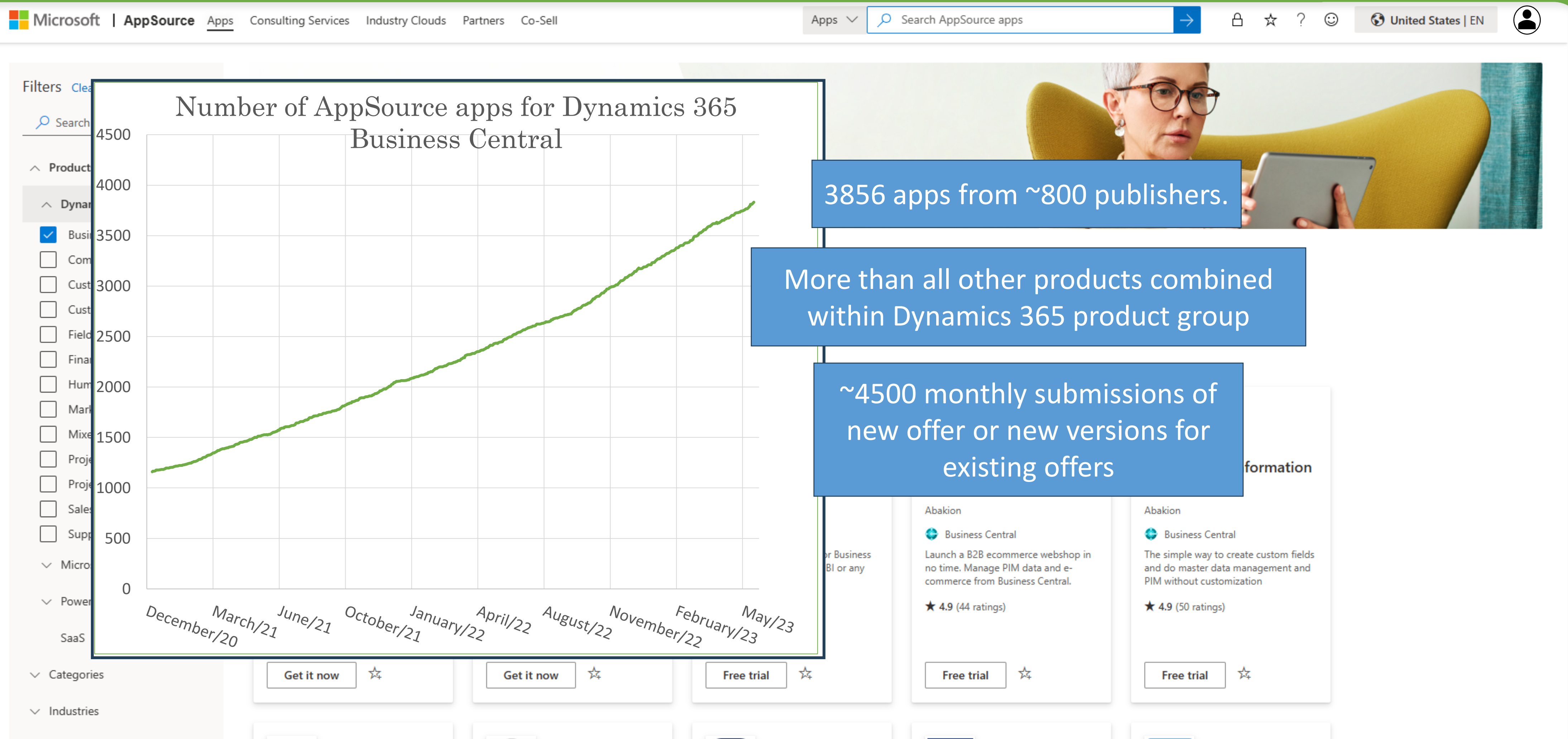
- What is AppSource?
- Getting your app in AppSource
  - Getting ready
  - Preparing your offer in Partner Center
  - Preparing your app
- Going through the AppSource submission process
- Troubleshooting validation failures
- Submitting a hotfix of my AppSource apps
- Leveraging AL-Go for GitHub to be more efficient
- Q&A






# What is AppSource?

<https://appsource.microsoft.com/>






# What is AppSource?

 Microsoft | AppSource


Search AppSource Apps

United States | EN




All Apps Categories Industries Consulting Services Partners Co-Sell

Apps > **Shopify Connector**



## Shopify Connector

by Microsoft

 Dynamics 365 Business Central

★ 5.0 (1 ratings)

Pricing Free

Get it now

☆ Save to my list

Overview

Ratings + reviews

Details + support

### Synchronize order, stock, and customer information.

Dynamics 365 Business Central is teaming up with Shopify to help our customers create a better shopping experience. Shopify provides merchants with an easy-to-use e-commerce solution, and Dynamics 365 Business Central offers comprehensive business management across finance, sales, service, and operations teams in a single application. Seamless connection between the two systems will synchronize order, stock, and customer information to ensure that merchants can fulfill orders faster and better serve their customers. The joint effort furthers the commitment of Dynamics 365 Business Central to connect data to help businesses adapt faster, work smarter, and perform better.

### Adapt faster

Connecting Dynamics 365 Business Central with Shopify will help merchants all over the world implement more agile online business processes, while keeping people focused on selling. With connected data across your online stores and business operations, you can rapidly respond to consumer demands to adjust product pricing and merchandising. With support for multitier pricing structures and multiple currencies, companies, and entities, Business Central will support multiple Shopify store scenarios with ease.

By getting this product, I give Microsoft permission to use or share my account information so that the provider can contact me regarding this product and related products. I agree to the provider's [terms of use](#) and [privacy policy](#) and understand that the rights to use this product do not come from Microsoft, unless Microsoft is the provider. Use of AppSource is governed by separate [terms](#) and [privacy](#).



# Before you begin...

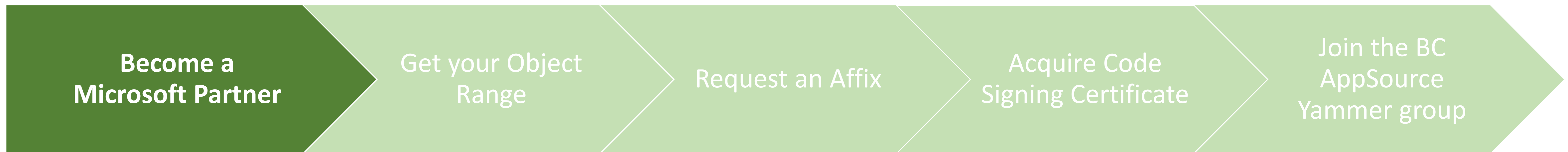




# Prerequisite: Become a Microsoft Partner

- Join the Microsoft Partner Network (MPN)
- Set up your Partner Center account
- Get access to PartnerSource Business Center (PSBC)

More info at: <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/readiness/get-started>





# Prerequisite: Get an object ID range

- Request object range for AppSource from Regional Operational Center
- ID range must be used for all your AL objects
- You can find the template in the online docs

Also covered with: <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/readiness/get-started>





# Prerequisite: Get an object affix

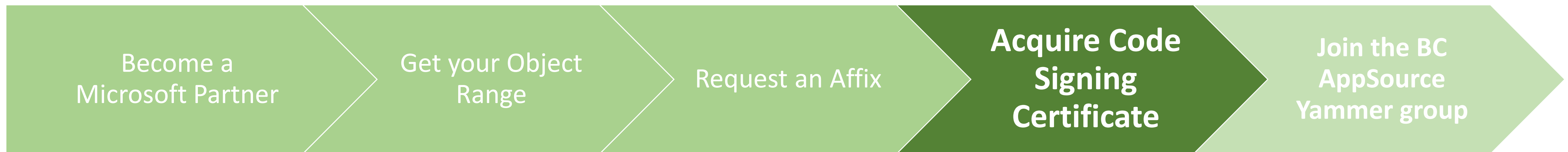
- Request an affix from [d365val@microsoft.com](mailto:d365val@microsoft.com)
- Affixes must be used on all your AL objects, members defined in extension objects
- More info, at <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/compliance/apptest-prefix-suffix>
- Don't forget any of the required info:
  - 1) MPN ID
  - 2) Publisher name for your app.json
  - 3) Five suggestions of 3 characters each (ABC, ABD, etc.)





# Prerequisite: Code Signing Certificate

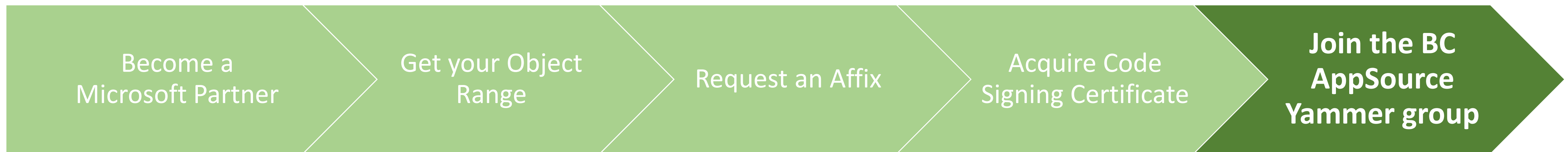
- AppSource apps must be signed with a trusted code signing certificate
- Meaning: the certificate must have its roots in Microsoft Windows.
- You will need to buy a certificate from a code signing provider.
- Signing must be performed from a Windows machine where BC is installed
- More info at: <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-sign-extension>





# Join the BC AppSource Yammer group

- Join us on [aka.ms/bcyammer](https://aka.ms/bcyammer)
  - If needed, email [dyn365bep@microsoft.com](mailto:dyn365bep@microsoft.com) to get access.
- Announcements: new features, updated requirements, service availability status, etc.
- Ask the community for advice or feedback:
  - Great catalog of “getting started” questions
  - See how others are utilizing AppSource Marketplace
- Optional, but highly recommended!





# Creating your offer in Partner Center





# Creating your offer

https://partner.microsoft.com/

Microsoft Partner Center

Search

Home

Workspaces

Benefits

Insights

Internal tools

Marketplace offers

Membership

Payouts

Referrals

My access

Quick starts

Benefits Overview

Indirect reseller enrollment

Marketplace overview

Publishing marketplace offers

Learn about membership requirements

Getting around Partner Center

Getting paid in Partner Center

Marketplace offers

Create, publish, and manage offers in the commercial marketplace and Office Store

Useful links

[Learn about different offer types](#)

[How to publish each offer type](#)






[Learn about commercial marketplace analytics](#)



# Creating your offer

Microsoft Partner Center

Search



Home > Marketplace offers

Overview

Private offers

+

New offer

Software as a Service ⓘ

Azure Application ⓘ

Azure Virtual Machine ⓘ

Azure Container ⓘ

Consulting service ⓘ

Dynamics 365 apps on Dataverse and Power Apps ⓘ

Dynamics 365 Operations Apps ⓘ

Dynamics 365 Business Central ⓘ

IoT Edge module ⓘ

Managed service ⓘ

Power BI app ⓘ

Power BI visual ⓘ

ⓘ Transact capabilities for BC **add-on** offers are now available in public preview. To join the preview, see details at [aka.ms/BCPublicPreview](https://aka.ms/BCPublicPreview).

Marketplace offers | Overview

Show/hide products

Filter

TechDays

Offer type	Publisher name	Last modified (UTC) ↓	Status	Azure IP Co-Sell
No offers found based on search parameters.				



# Setting your offer type and offer listing

Microsoft Partner Center

Search

Home > Marketplace offers > BC TechDays 2023

Offer overview

Offer setup

Properties

Offer listing

Availability

Technical configuration

Co-sell with Microsoft

Supplemental content

History

BC TechDays 2023 | Offer setup

Save draft
 Compare
 Review and publish

Incomplete and not published

You must specify how you'd want potential customers to interact with this listing offer.

Transact capabilities for BC **add-on** offers are now available in public preview. To join the preview, see details at [aka.ms/BCPublicPreview](https://aka.ms/BCPublicPreview).

Package type \*

☒ Addon
 

**Add-on:** Extends functionalities using .app packages created from AL projects.

☐ Connect
 

**Connect:** Extends functionalities through point-to-point connection with 3rd party solutions or services.

Would you like to sell through Microsoft? \*

Choose whether you want to sell this offer through Microsoft. Doing so may improve customer discovery and acquisition. If you select Yes, a set of pre-requisite technical configuration will be required in your service. If you select No, your offer will still be available in the marketplace as a listing only. [Learn more](#)

☐ Yes, I would like to sell through Microsoft and have Microsoft host transactions on my behalf
 ☒ No, I would prefer to only list my offer through the marketplace and process transactions independently

How do you want potential customers to interact with this listing offer? ⓘ \*

☒ Get it now (Free) ⓘ
 

**Get it now:** App can be installed for free but is suitable for a Freemium approach (pay for advanced features).

☐ Free trial ⓘ
 

**Free trial:** App can be tried for given time, number of users, or transactions. Requires payment for further usage.

☐ Contact me ⓘ
 

**Contact me:** App cannot be installed and customers must enter their contact info. Usually used for apps which require some specific setup.

Yes: Leverage built-in capabilities to monetize your apps in AppSource.

No: Define your own approach for monetization and licensing.

Required when using `Connect` offer type.



# Setting your customer leads

Offer setup

Properties

Offer listing

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Co-sell with Microsoft

Supplemental content

History

Complete and ready for publish

Successfully Saved

Transact capabilities for BC **add-on** offers are now available in public preview. To join the preview, see details at [aka.ms/BCPublicPreview](#).

Contact me [i](#)

Test drive

A test drive lets customers try your offer for free for a limited period of time without requiring purchase compared to a free trial. By enabling test drive, you will provide a pre-built environment allowing hands-on experience and receive a lead for each customer that has tried your product (using the lead management system info you provide in Offer setup). Additional technical configuration will be required to manage deployment of test drives. [Learn more](#).

☐ Enable a test drive

Customer leads

You can provide connection details to the CRM system where you would like us to send customer leads. We support a variety of CRM systems.

In any case, you can access customer leads on the [Referrals workspace in Partner Center](#).

[Learn more about configuring customer leads.](#)

No CRM system connected

Connect

Supports Azure Tables, Https endpoint, Dynamics 365 Customer Engagement (CRM), etc.

Save draft

Review and publish

Delete

Enable receiving information from AppSource marketplace about customers interested in your offer.

Required when using `Contact Me` listing type.



# Setting your offer's properties



Microsoft Partner Center

Search

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Home > Marketplace offers > BC TechDays 2023

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Offer overview

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Supplemental content

History

BC TechDays 2023 | Properties

💾 Save draft

🔄 Compare

📄 Review and publish

🔔 Incomplete and not published

Define the categories used to group your offer on the marketplace, the legal contracts supporting your offer, and your app version. These details will appear to your customer when they discover your app in the marketplace.  
[Learn more.](#)

Categories\* ⓘ

Primary category\*

+ Categories\*

Please select at least 1 categories.

Industries

Industry selection applies only for offers published to AppSource. If you offer is not industry specific, do not select one.

Industry ⓘ

+ Industries

App version\* ⓘ

Legal ⓘ

☐ Provide Terms and conditions link

☒ Provide Terms and conditions text

Terms and conditions text\* ⓘ

Fields classifying your offer capabilities. Impacts discoverability in the AppSource marketplace.

Required to match the extension's version (app.json)



# Setting your offer's marketing content



Microsoft Partner Center

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Home > Marketplace offers > BC TechDays 2023

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BC TechDays 2023 | Offer listing

💾 Save draft

🔄 Compare

📄 Review and publish

ⓘ Incomplete and not published

Provide details to be displayed in the marketplace including descriptions of your offer and marketing assets. To create engaging marketplace offers read [tips and best practices](#). Learn more about [configuring offer listings](#)

Marketplace details

⚠️ Offer listing content is not required to be in English as long as the offer description begins with the phrase "This application is

Name\* ⓘ

BC TechDays 2023

Required to match the extension's name (app.json)

Search results summary\* ⓘ

Description\* ⓘ

Normal B I U List Bulleted Numbered Link Unlink

The offer description must contain the list of supported Countries and Languages.

References to Business Programs participation or eligibility are not allowed. Your offer must NOT contain references to Microsoft Azure Consumption Commitment (MACC), Partner Co-Cell, MPN Competency, etc.

Search keywords (Enter no more than 3) ⓘ

Product your apps works with (Enter no more than 3) ⓘ

Marketing materials for your offer's listing.







# Setting your offer's availability



Microsoft Partner Center

Search

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Home > Marketplace offers > BC TechDays 2023

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Supplemental content

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BC TechDays 2023 | Availability

💾 Save draft

🔄 Compare

📄 Review and publish

🕒 Incomplete and not published

Define the markets and preview audience for your offer. [Learn more](#)

Markets

Specify the markets where customers can purchase your offer on the marketplace.  
Your offer will be available in 0 of 102 markets.

✎ Edit markets

Specifies the countries/regions for which your offer will be available in Business Central

Preview Audience

When you publish or update an offer, we will create a preview version accessible to only the audience that you specify. This audience will be able to see and verify the details of your offer before it goes live. [Learn more](#)

Hide Key\* ⓘ

We provide an automatically generated key. If you would like to define your own key, delete the existing key, provide your own and publish the offer.

f3fb8825369744ca8bc76b3ffb06a06d

Auto generated key

Save draft

Review and publish



# Setting your offer's availability

Microsoft Partner Center

Home > Marketplace offers > BC TechDays 2023

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BC TechDays 2023

Incomplete and not published

Define the markets and preview audience

Markets

Specify the markets where your offer will be available

Edit markets

Preview Audience

When you publish or update your offer, you can specify the audience for your offer

Hide Key\* ⓘ

We provide an automatic key for your offer

f3fb8825369744ca8bc76

Auto generated key

Save draft

Review

Edit markets

Required to match the list of countries specified in the offer description.

Search

Select allUnselect all

<input type="checkbox"/> Albania	<input type="checkbox"/> Algeria	<input type="checkbox"/> Angola
<input type="checkbox"/> Argentina	<input type="checkbox"/> Australia	<input type="checkbox"/> Austria
<input type="checkbox"/> Bahrain	<input type="checkbox"/> Bangladesh	<input type="checkbox"/> Belgium
<input type="checkbox"/> Bosnia and Herzegovina	<input type="checkbox"/> Botswana	<input type="checkbox"/> Brazil
<input type="checkbox"/> Bulgaria	<input type="checkbox"/> Canada	<input type="checkbox"/> Chile
<input type="checkbox"/> Colombia	<input type="checkbox"/> Costa Rica	<input type="checkbox"/> Croatia
<input type="checkbox"/> Cyprus	<input type="checkbox"/> Czechia	<input type="checkbox"/> Denmark
<input type="checkbox"/> Dominican Republic	<input type="checkbox"/> Ecuador	<input type="checkbox"/> Egypt
<input type="checkbox"/> El Salvador	<input type="checkbox"/> Estonia	<input type="checkbox"/> Faroe Islands
<input type="checkbox"/> Finland	<input type="checkbox"/> France	<input type="checkbox"/> Georgia
<input type="checkbox"/> Germany	<input type="checkbox"/> Greece	<input type="checkbox"/> Greenland



# Setting your offer's AL extensions

Microsoft Partner Center

Search

Home > Marketplace offers > BC TechDays 2023

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BC TechDays 2023 | Technical configuration

[Save draft](#)
[Compare](#)
[Review and publish](#)

Incomplete and not published

Provide details from the development of your service required for successful integration with Microsoft. [Learn more](#)

Extension package file\*

Upload a .app file.

The main extension (.app) for your offer.

Its manifest (app.json) information must be consistent with the offer listing:

- Name match the name defined under "Offer listing"
- Version must match the version defined under "Properties"
- Publisher must match the publisher name for your Partner Center Account

Library extension package file

Upload a .app or .zip file.

The dependencies (.app or .zip) for your main extension.

Offer is not considered as set of apps, but one main app and its libraries. Libraries which are not required by the main extension will be ignored during the validation and will not be uploaded to Business Central.

If a dependency for your extension is not included here, it will be downloaded from Business Central, if available.

Drag your package here or [browse](#)

Drag your package here or [browse your files](#)

Main app

depends on

Library 1

depends on

Library 2

depends on

Library 3

Library 4



# Setting supplemental content



Microsoft Partner Center

Search

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Home > Marketplace offers > BC TechDays 2023

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Supplemental content

History

Offer ID: bctechdays

Supplemental Content

This tab is pending removal and its information are not used by the service.

📄 Save draft

📄 Review and publish

📘 Changes incomplete, not published

Please provide the following information to help us validate your offer. This information is not shown to customers. [Learn more](#)

Target Release \* ⓘ

☒ Current

☐ Next Major

☐ Next Minor

Supported Editions \* ⓘ

☒ Essentials

☐ Premium

Key Usage Scenario \* ⓘ

Drag your document here (.pdf, .doc, .docx) or [browse your files](#)

Test Accounts ⓘ

Drag your document here (.pdf, .doc, .docx) or [browse your files](#)

App Tests Automation \* ⓘ

Drag your document here (.app) or [browse your files](#)

How do I select the releases targeted by my offer?

Select any value.

Uploading an empty document is enough.

Uploading any .app file is enough.



# How do we define the release targeted?

- Current, Next Minor, Next Major could be ambiguous.
- Replaced by the **Application** property in manifest (app.json)

```
{  
  "id": "faabffd0-d082-4e32-962f-919f4571b2cd",  
  "name": "BC TechDays 2023",  
  "publisher": "Microsoft",  
  "version": "1.0.0.0",  
  "platform": "1.0.0.0",  
  "application": "21.0.0.0"  
}
```

This app will be validated for 21.0, 21.1, 21.2,... until the latest release at the time (currently 22.2).

This app will also be available for environments running on 21.0 and higher.

30 days before the release of a next major, we are also validating against the upcoming major!

- For submissions with multiple extensions, the target release is computed as the maximum of the application versions of the extensions in the submission.

Main App  
Application - 21.0

Library App  
Application - 22.0



Submission target  
release is 22.0





# Preparing your app for AppSource





# Preparing your app for AppSource

- Copy your PTE to a new repository
- **Get a new App ID**
- Enable AppSourceCop
- Create AppSourceCop.json file
- Start fixing diagnostics....

PTEs and AppSource Apps cannot share the same ID.  
You cannot upload PTEs with the same App ID as an AppSource app.

```
{ } settings.json ×
.vscode > { } settings.json > ...
1  {
2    "al.enableCodeAnalysis": true,
3    "al.backgroundCodeAnalysis": "Project",
4    "al.codeAnalyzers": ["${AppSourceCop}"]
5  }
```

```
{ } AppSourceCop.json ×
{ } AppSourceCop.json > ...
1  {
2    "mandatoryAffixes": ["BCTD"],
3    "supportedCountries": [ "BE", "CA", "DK", "US" ]
4  }
```



```
{ } app.json > ...
1 {
2   "id": "9ba1b1ed-1c18-412e-a7e8-7ee8213fcc56",
3   "name": "BC TechDays 2023",
4   "publisher": "Microsoft",
5   "version": "1.0.0.0",
6   "brief": "",
7   "description": "",
8   "privacyStatement": "",
9   "EULA": "",
10  "help": "",
11  "url": "",
12  "logo": "",
13  "dependencies": [],
14  "screenshots": [],
15  "idRanges": [
16    {
17      "from": 50100,
18      "to": 50149
19    }
20  ],
21  "platform": "1.0.0.0",
22  "application": "22.0.0.0",
23  "resourceExposurePolicy": {
24    "allowDebugging": true,
25    "allowDownloadingSource": true,
26    "includeSourceInSymbolFile": true
27  },
28  "runtime": "11.0",
29  "features": [
30    "NoImplicitWith"
31  ]
32 }
```

PTE

```
{ } app.json > ...
1 {
2   "id": "faabffd0-d082-4e32-962f-919f4571b2cd",
3   "name": "BC TechDays 2023",
4   "publisher": "Microsoft",
5   "version": "1.0.0.0",
6   "brief": "BC TechDays 2023 reminder app",
7   "description": "Gives you a reminder to signup for Tech Days 2023",
8   "privacyStatement": "https://www.bctechdays.com/",
9   "EULA": "https://www.bctechdays.com/",
10  "help": "https://www.bctechdays.com/",
11  "url": "https://www.bctechdays.com/",
12  "logo": "C:/temp/logo.png",
13  "contextSensitiveHelpUrl": "https://www.bctechdays.com/",
14  "dependencies": [],
15  "screenshots": [],
16  "idRanges": [
17    {
18      "from": 1000000,
19      "to": 1000001
20    }
21  ],
22  "platform": "1.0.0.0",
23  "application": "22.0.0.0",
24  "resourceExposurePolicy": {
25    "allowDebugging": true,
26    "allowDownloadingSource": true,
27    "includeSourceInSymbolFile": true
28  },
29  "runtime": "11.0",
30  "features": [
31    "TranslationFile",
32    "NoImplicitWith"
33  ]
34 }
```

AppSource app

New Identity

Marketing fields

New ID range

Application property

Secure your IP

Enable translations



```
0 references
pageextension 50100 MyPageExtension extends "Customer List"
{
    actions
    {
        addfirst(Promoted)
        {
            actionref(MyActionRef; MyAction)
            {
            }
        }
        addfirst(creation)
        {
            action(MyAction)
            {
                ApplicationArea = All;
                CaptionML = ENU = 'Am I on time for Tech Days?';

                trigger OnAction()
                var
                    TechDaysOpeningDate: Date;
                begin
                    TechDaysOpeningDate := 20230623D;
                    if (Today() >= TechDaysOpeningDate) then
                        Error('Oh no, you are too late!');
                    Message('You are still on time!')
                end;
            }
        }
    }
}
```

PTE

```
0 references
pageextension 1000001 BCTD MyPageExtension? extends "Customer List"
{
    actions
    {
        addfirst(Promoted)
        {
            actionref(BCTD_MyActionRef; BCTD_MyAction)
            {
            }
        }
        addfirst(creation)
        {
            action(BCTD_MyAction)
            {
                ApplicationArea = All;
                Caption = 'Am I on time for Tech Days?';

                trigger OnAction()
                var
                    TechDaysOpeningDate: Date;
                    ErrorMessage: Label 'Oh no, you are too late!';
                begin
                    TechDaysOpeningDate := 20230623D;
                    if (Today() >= TechDaysOpeningDate) then
                        Error(ErrorMessage)
                    end;
                }
            }
        }
    }
}
```

AppSource app

Use ID range

Affix on objects

Affix on extension members

Use Label properties

Use Labels for texts

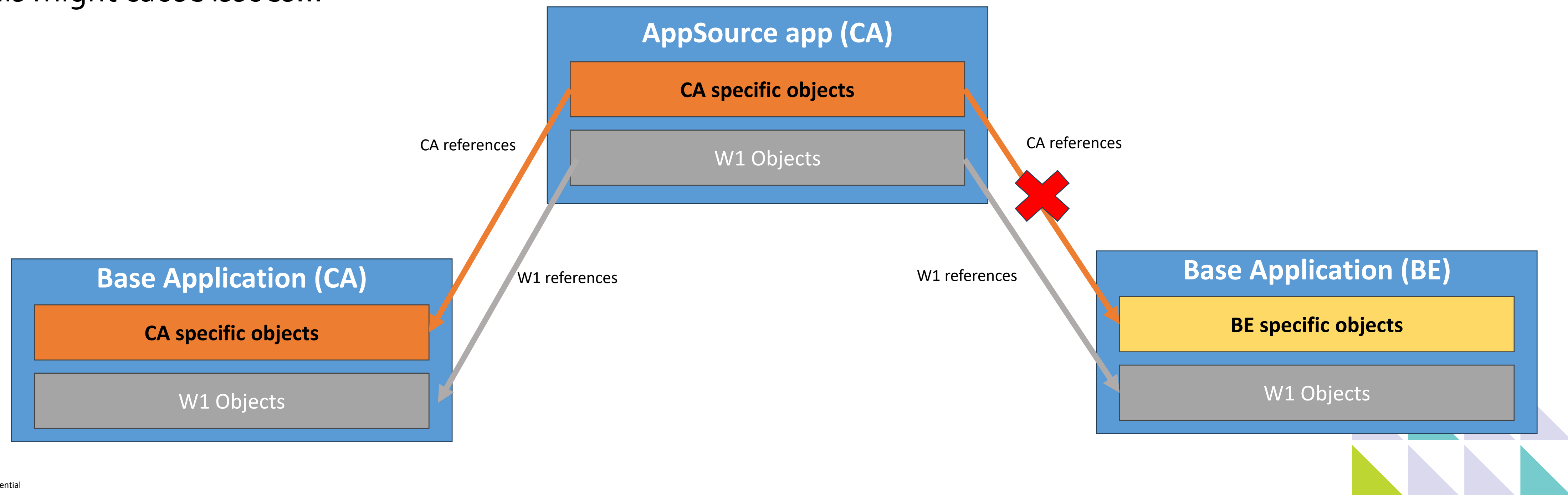


# Get your offer structure right

Think about how you will be targeting new countries/regions in the future because refactoring an app used by customers will be hard and not always completely possible.

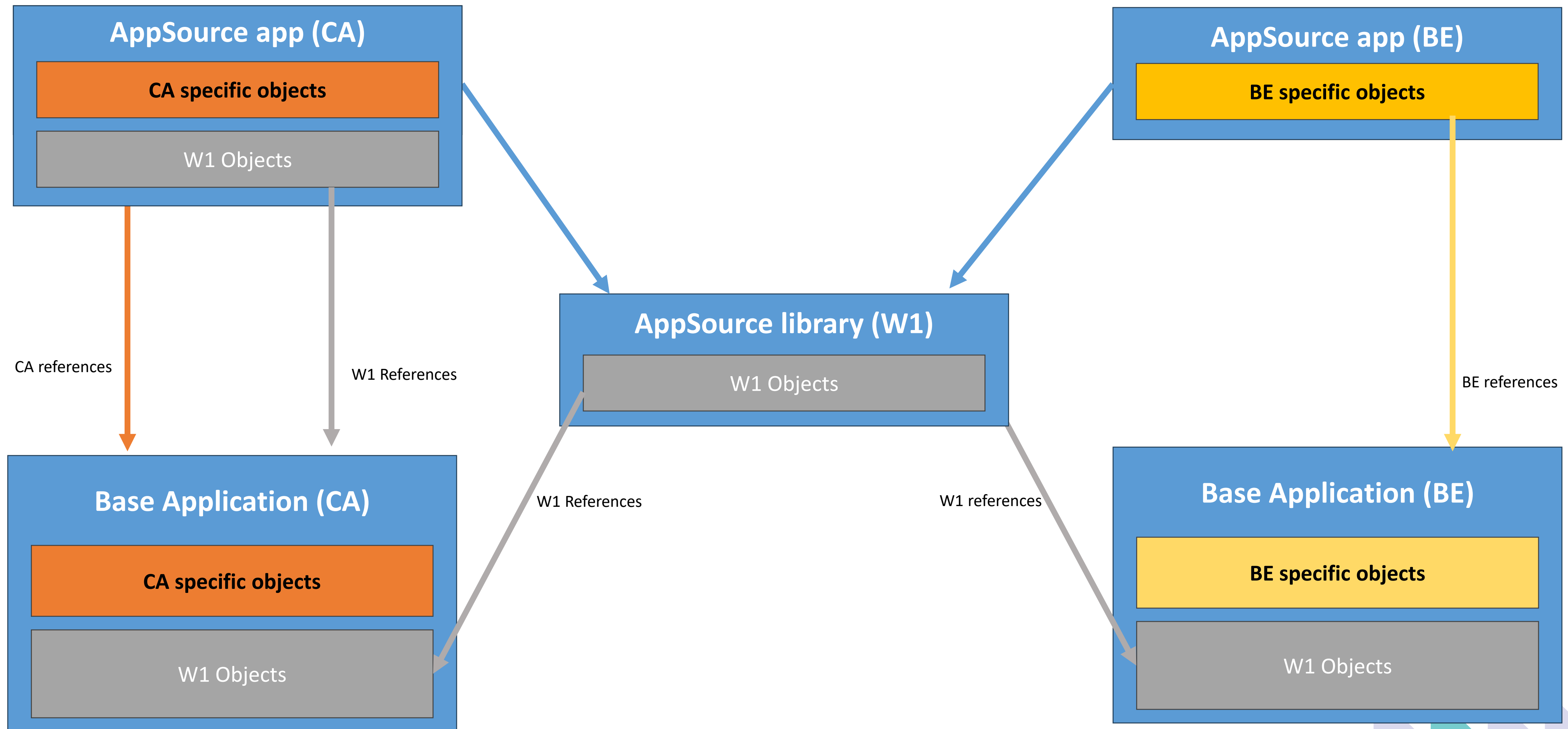
Some Microsoft apps (Base App, System App) are localized: different content depending on countries/regions. This not allowed in AppSource, since an app version must have the same content for all countries.

This might cause issues...





# Get your offer structure right





# Enabling Azure Application Insights

```

app.json x
{} app.json > version
15  "idRanges": [
16    {
17      "from": 1000000,
18      "to": 1000001
19    }
20  ],
21  "resourceExposurePolicy": {
22    "allowDebugging": true,
23    "allowDownloadingSource": true,
24    "includeSourceInSymbolFile": true
25  },
26  "runtime": "11.0",
27  "applicationInsightsConnectionString": "InstrumentationKey=12345678-90ab-cdef-1234-567890abcdef;IngestionEndpoint=https://westeurope.in.
applicationinsights.azure.com/;LiveEndpoint=https://westeurope.livediagnostics.monitor.azure.com/",
28  "features": [
29    "NoImplicitWith",
30    "TranslationFile"
31  ]

```

- Usefulness ranges from “nice to have” to “mission critical”
  - Usage data for your new features
  - Investigate errors when your app goes live
  - Dive into results of AppSource submissions
- More usages at [aka.ms/BCTech](https://aka.ms/BCTech)



# Enabling Azure Application Insights

Microsoft | AppSource

United States | EN

All Apps Categories Industries Consulting Services Partners Co-Sell

Apps > Dynamics 365 Business Central App Usage Analytics

## Dynamics 365 Business Central App Usage Analytics

by Microsoft

Power BI apps

★ 5.0 (3 ratings)

Pricing Free

Get it now

Save to my list

Power BI app showing usage analytics available in AppSource marketplace

Overview Ratings + reviews Details + support

**Visualize Business Central app usage: user traffic, errors, performance, and administration.**

Visualize different aspects of a Dynamics 365 Business Central app usage: user traffic, errors, performance, administration overview (including changes), and more. Explore and monitor key system metrics in Power BI by connecting to your Dynamics 365 Business Central telemetry data. With Business Central App Usage Analytics, you get a Power BI dashboard and report with insights about how users use your app, which errors occur, recommendations for performance tuning, and an administrator's overview (including which changes happen and when). Use the dashboard and reports as provided or customize them to highlight the information you care about most. Note that this app is for per-app telemetry, not per-environment telemetry.

**At a glance**

By getting this product, I give Microsoft permission to use or share my account information so that the provider can contact me regarding this product and related products. I agree to the provider's [terms of use](#) and [privacy policy](#) and understand that the rights to use this product do not come from Microsoft, unless Microsoft is the provider. Use of AppSource is governed by separate [terms](#) and [privacy](#).



# Secrets, Keys o'plenty

- Azure KeyVault is great for secret management
  - Plaintext secrets makes the security experts sad <sup>1</sup>
  - Potential security risks
- Requires registration after your app has been uploaded to AppSource
  - <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/setup-app-key-vault>
- Resubmit your app after updating the app.json
- Interact with your secrets using codeunit 3800 "App Key Vault Secret Provider"

```

{} app.json  X
{} app.json > ...
24     "includeSourceInSymbolFile": false,
25     "applyToDevExtension": false
26 },
27 "runtime": "11.0",
28 "features": [
29     "NoImplicitWith",
30     "TranslationFile"
31 ],
32 "keyVaultUrls": [
33     "https://myfirstkeyvault.vault.azure.net",
34     "https://mysecondkeyvault.vault.azure.net"
35 ]
36 }
  
```

<sup>1</sup> We don't have a source, but anecdotally this seems universally true



# Selling through Microsoft



Apps > ConvertTemperature



## ConvertTemperature

by Freddy Kristiansen  
Dynamics 365 Business Central

Starts at **Free** **Buy now** **Contact me** ☆ Save to my list

ⓘ You'll need a Dynamics BC license and install permissions to install this app.

New feature, in public preview

Ability purchase the app through different plans

Supports credit card payments

Overview **Plans + Pricing** Ratings + reviews Details + support

Plan	Description	Monthly Price	Annual Price
Gold	The best offer we have	\$0.03/user/month	\$0.30/user/year
Silver	The next best thing is shiny silver	\$0.02/user/month	\$0.20/user/year
Bronze	Our standard plan, also available for trying out	First month free, then \$0.01/user/month	First month free, then \$0.10/user/year



# Selling through Microsoft



Microsoft Partner Center

Search

🔔

😊

?

⚙️

👤

Home > Marketplace offers > BC TechDays 2023

👍

💬

Offer overview

Offer setup

Properties

Offer listing

Availability

Technical configuration

Co-sell with Microsoft

Supplemental content

History

BC TechDays 2023 | Offer setup

💾 Save draft

🔄 Compare

📄 Review and publish

📘 Complete and ready for publish

📘 Transact capabilities for BC **add-on** offers are now available in public preview. To join the preview, see details at [aka.ms/BCPublicPreview](#).

Package type\*

☒ Addon

☐ Connect

Would you like to sell through Microsoft? \*

Choose whether you want to sell this offer through Microsoft. Doing so may improve customer discovery and acquisition. If you select Yes, a set of pre-requisite technical configuration will be required in your service. If you select No, your offer will still be available in the marketplace as a listing only. [Learn more](#)

☒ Yes, I would like to sell through Microsoft and have Microsoft host transactions on my behalf

☐ No, I would prefer to only list my offer through the marketplace and process transactions independently

Test drive

A test drive lets customers try your offer for free for a limited period of time without requiring purchase compared to a free trial. By enabling test drive, you will provide a pre-built environment allowing hands-on experience and receive a lead for each customer that has tried your product (using the lead management system info you provide in Offer setup). Additional technical configuration will be required to manage deployment of test drives. [Learn more](#).

☐ Enable a test drive

Customer leads

1. Enable selling through Microsoft



# Selling through Microsoft



Microsoft Partner Center

Search

Home > Marketplace offers > BC TechDays 2023

Offer overview

Offer setup

Properties

Offer listing

Preview audience

Technical configuration

Plan overview

Co-sell with Microsoft

Supplemental content

History

BC TechDays 2023 | Plan overview

Create new plan

Edit display rank

Review and publish

Offers need to have at least one plan. Click 'Create new plan' to get started.

3. Create new plan

New plan

Define unique plans for BC TechDays 2023

Plan ID \*

gold-plan-id

38

Use only lowercase, alphanumeric characters, dashes or underscores. ID cannot end with "-preview" and cannot be modified after selecting Create.

Plan name \*

My Gold Plan

188

Create

Cancel

2. New 'Plan overview' tab

4. Enter plan ID

5. Enter plan name, shown in AppSource marketplace



# Selling through Microsoft

Microsoft Partner Center

Search

Home > Marketplace offers > BC TechDays 2023 > Plan overview > My Gold Plan

LikeComment

Plan listing

Pricing and availability

My Gold Plan | Pricing and availability

Save draftCompareReview and publish

Incomplete and not published

Markets

Specify the markets where customers can purchase your offer on the marketplace.  
Your plan will be available for users in the 0 of 118 markets to deploy this offer in any of the Azure regions.

Edit markets

Pricing

Define the pricing model, billing term, and price for your plan. To define custom market pricing, see the pricing data section below. [Learn more about configuring pricing on your offer.](#)

User limits

The user limits defines the minimum and maximum number of user licenses (seats) that a customer can purchase for this plan. If left blank, the default minimum and maximum users are 1 and 1,000,000.

Minimum users

0

Maximum users

0

Billing term

Price\*

Monthly

USD per user / month

Annual

USD per user / year

Pricing data

6. Configure the markets

List of all markets across all plans now defines the countries targeted by your offer.

7. Configure the pricing model

But also... enable free trial, make plan public or private...



# Selling through Microsoft



Microsoft Partner Center

Search

🔔

😊

?

⚙️

👤

Home > Marketplace offers > BC TechDays 2023

👍

💬

Offer overview

Offer setup

Properties

Offer listing

Preview audience

Technical configuration

Plan overview

Co-sell with Microsoft

Supplemental content

History

BC TechDays 2023 | Plan overview

+

 Create new plan

✎

 Edit display rank

📄

 Review and publish

Display rank	Name	Pricing model	Availability	Status	Action
	<div>My Gold Plan</div> <div>Service ID: microsoftdynsmb.bctechdays.gold-plan-id</div>	Flat rate	Public	Draft	Delete draft

8. Get the service ID



# Selling through Microsoft

AL MyEntitlement.al > ...

0 references

```
1 entitlement "BCTD Gold Plan"
2 {
3     Type = PerUserOfferPlan;
4     Id = 'microsoftdynsmb.bctechdays.gold-plan-id'
5     ObjectEntitlements = "BCTD Gold Perms";
6 }
7
8 1 reference | 1 reference
9 permissionset 1000000 "BCTD Gold Perms"
10 {
11     Assignable = true;
12     Permissions = page "BCTD - Welcome page!" = X;
13 }
14
```

9. Create an entitlement object

10. Reference the plan ID from Partner Center

11. Assign permissions for the entitlement

For more info, join the preview at [aka.ms/BCPublicPreview](https://aka.ms/BCPublicPreview)



# Other considerations....

- Test your apps – define automated tests!
- Performance – Business Central Performance Toolkit (BCPT) is your friend
- How will you handle throttling? 429 errors (=too many requests) must be handled gracefully
- Think about your public API. What are you exposing to other apps? How?
- How will you upgrade existing customers?





# Going through the submission process





# Submitting your first offer



Microsoft Partner Center

Search

🔔

😊

?

⚙️

👤

Home > Marketplace offers > BC TechDays 2023

👍

💬

Offer overview

Offer setup

Properties

Offer listing

Availability

Technical configuration

Co-sell with Microsoft

Supplemental content

History

BC TechDays 2023 | Offer overview

🗑️ Delete offer

🔒 Hide offer

📄 Review and publish

Publish status

Hiding details

Automated validation

Preview creation

Publisher signoff

Certification

Publish

Marketplace Programs

View the Co-sell status and marketplace program enrollment for BC TechDays 2023

Name	Status
Co-sell with Microsoft ⓘ	In Market
Microsoft Azure consumption commitment ⓘ	Not eligible. <a href="#">Learn more</a>

Offer setup

Opt in to use key features and how to sell your offer through Microsoft.

[Get started](#)

Properties

Define the categories and industries used to group your offer on the marketplace, the legal contracts supporting your offer, and your app version.

[Get started](#)

Offer listing

Define the details to be displayed in the marketplace, including descriptions of your offer and marketing assets.

[Get started](#)

Availability

Define a limited Preview Audience for releasing your offer prior to publishing your offer live to the broader marketplace audience(s).

[Get started](#)

Technical configuration

Define the technical details required for successful integration with Microsoft.

[Get started](#)



# Submitting your first offer

Search

BC TechDays 2023 | Offer overview 

Delete offer

Hide offer

Review and publish

The latest version of your offer is not live yet. Please select the **Go live** button.

Publish status

Showing details

Version of offer in Preview is different from Live version. Select to Go live on the version in Preview when you are ready to replace what is Live.

Automated validation  
May 30, 2023, 2:03:51 PM UTC

Automated application validation (< 3 hrs)

Finalize the application workflow

Test drive provisioning (<30 min)

Lead management validation and registration (<15 min)

Preview creation  
May 30, 2023, 2:10:08 PM UTC

Preview creation (<1 hr)

It can take up to 4 hours for the offer preview to be visible in the marketplace after the Preview Creation step has completed.

Publisher signoff  
May 30, 2023, 2:10:39 PM UTC

Go live

App source links:  
App source preview

Certification  
Manual validation (<2 business days)

Publish

Publish application with the service

Finalize the application workflow

Test drive provisioning (<30 min)

Lead management validation and registration (<15 min)

Final publish (<30 min)

App source links:  
App source

## 1. Technical Validation

Fully automated, running 24/7 with average processing time of 7 mins and 99% of the submissions processed under 30 mins, 77% of submissions passing validation



# Technical validation

Requirements	FAQ
<a href="https://aka.ms/CheckBeforeYouSubmit">aka.ms/CheckBeforeYouSubmit</a>	<a href="https://aka.ms/TechValidationFAQ">aka.ms/TechValidationFAQ</a>

- Ensures that your apps meet the standards for the AppSource marketplace (AppSourceCop).
- Ensures that your apps are compatible for all targeted countries/regions and releases.
- Ensures that your app does not contain unannounced breaking changes



Extensive validation which can result in 1000+ compilation tasks for a submission  
(100+ countries \* ~15 releases \* number of apps)



# Submitting your first offer

Search

BC TechDays 2023 | Offer overview

Delete offer

Hide offer

Review and publish

The latest version of your offer is not live yet. Please select the **Go live** button.

Publish status

Showing details

Version of offer in Preview is different from Live version. Select to Go live on the version in Preview when you are ready to replace what is Live.

Automated validation  
May 30, 2023, 2:03:51 PM UTC

Automated application validation (< 3 hrs)

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May 30, 2023, 2:10:39 PM UTC

Go live

App source links:  
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Certification  
Manual validation (<2 business days)

Publish

Publish application with the service

Finalize the application workflow

Test drive provisioning (<30 min)

Lead management validation and registration (<15 min)

Final publish (<30 min)

App source links:  
App source

1. Technical Validation

Fully automated, running 24/7 with average processing time of 7 mins and 99% of the submissions processed under 30 mins, 77% of submissions passing validation

2. Sign-off after preview

Sign-off on the offer to go live after reviewing the offer listing in AppSource. Deployment to Business Central environment as preview is not support yet.



# Offer preview

- Currently only supports a preview of the listing, but not installing the app.
- Current approach is to install the preview on the sandbox of selected customers:
  1. Check your IP exposure using [ResourceExposurePolicy](#) (see *applyToDevExtension*)
  2. Request Admin access from the customer to their Sandbox environment
  3. Deploy the extension from Visual Studio Code

**Important:** Before publishing to AppSource, change the version (app.json). An app cannot exist as extension from VS Code and AppSource app with the same version, see [Moving between extension scopes - Business Central | Microsoft Learn](#)

Currently working on supporting deploying preview of extensions out-of-the box!





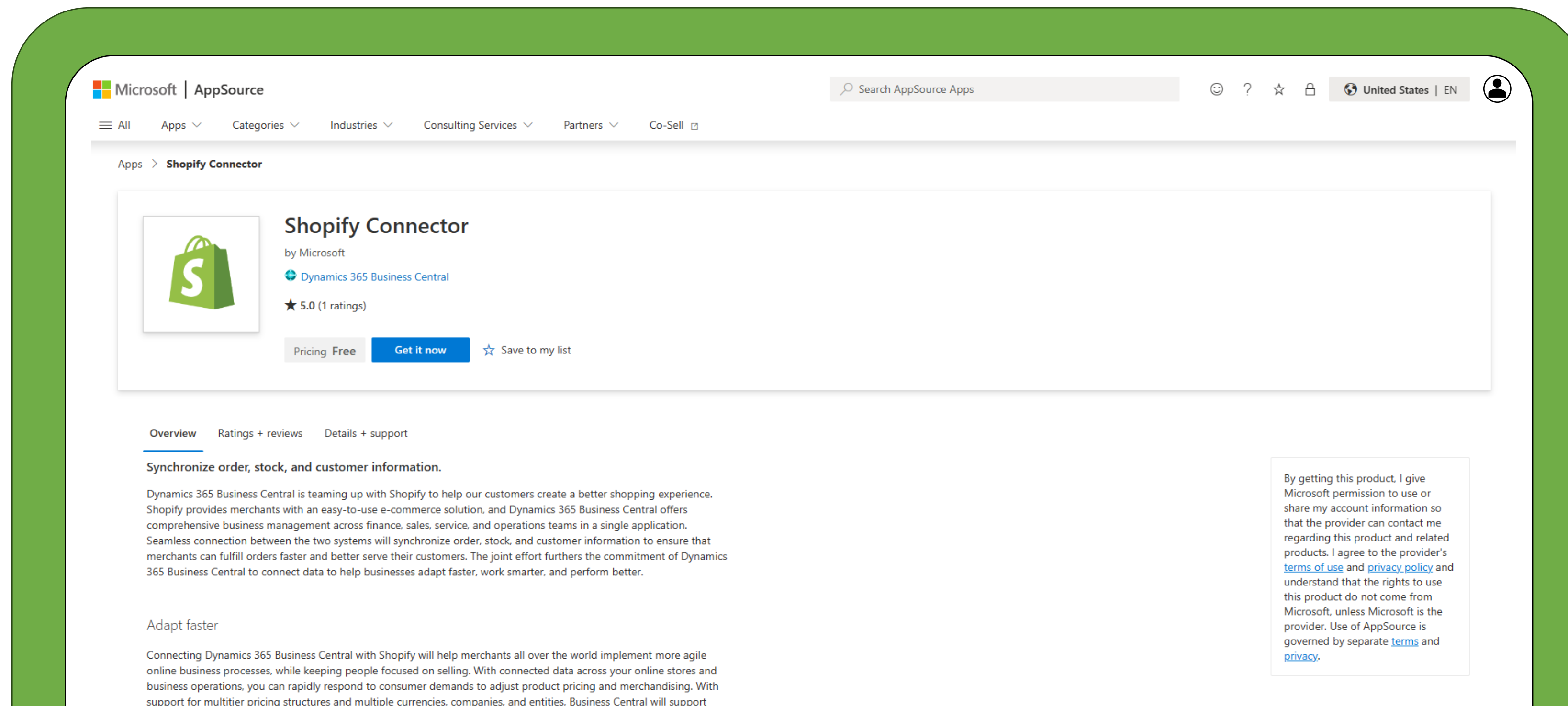




# Marketing validation

Requirements	FAQ
<a href="https://aka.ms/AppSourceGo">aka.ms/AppSourceGo</a>	<a href="https://aka.ms/MarketingValidationFAQ">aka.ms/MarketingValidationFAQ</a>

- Ensures that your store front offer is attractive for AppSource prospects
- Ensures that your offer listing meets the standards for the AppSource marketplace
- Ensures that your offer listing doesn't contain trademarked or copyrighted materials
- Ensures that your offer description is in-line with your offer metadata (i.e. supported countries)

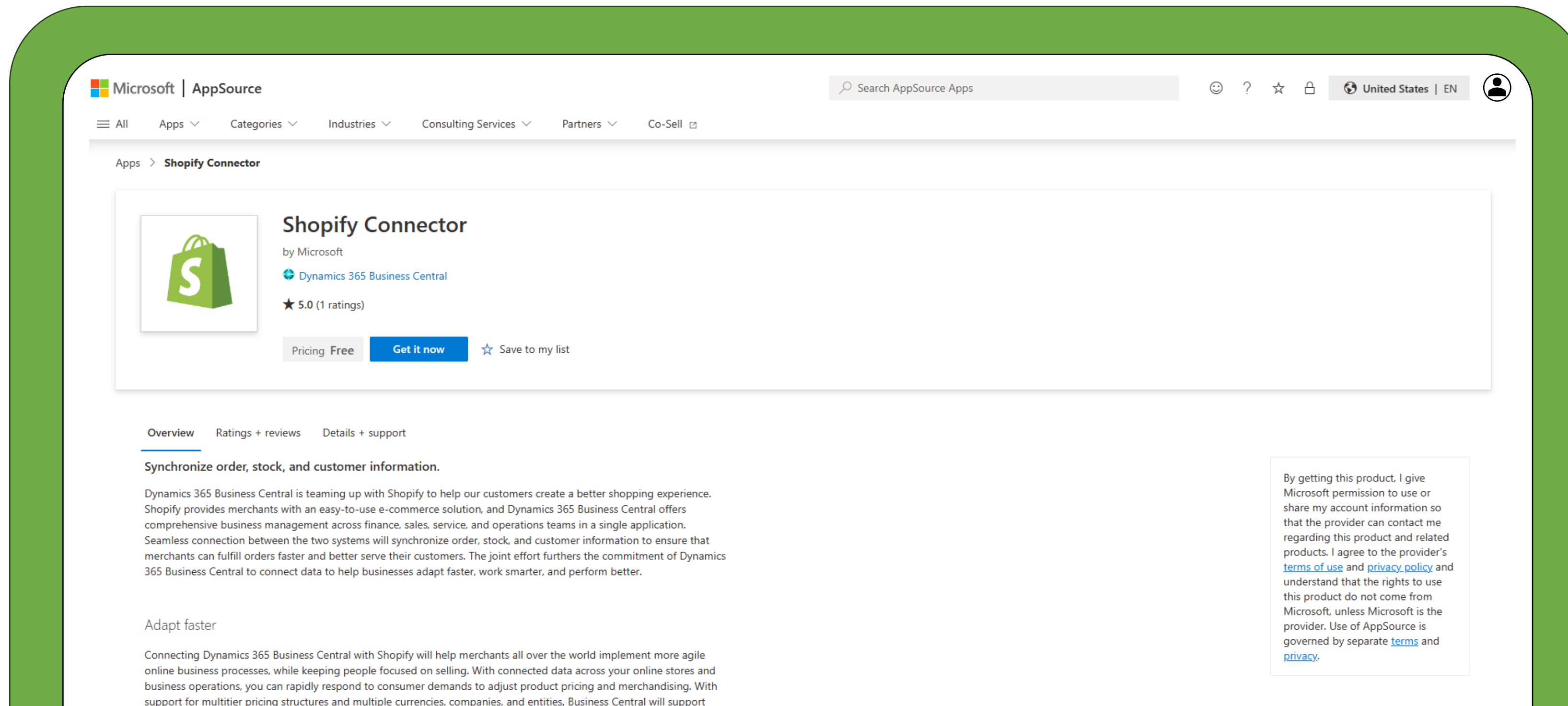




# Marketing validation

Requirements	FAQ
<a href="https://aka.ms/AppSourceGo">aka.ms/AppSourceGo</a>	<a href="https://aka.ms/MarketingValidationFAQ">aka.ms/MarketingValidationFAQ</a>

- Automatically approved if the marketing material haven't changed for your offer.
- Submitting a new version of your app where only the version number has changed doesn't trigger a manual validation of your offer.
- Updating your country list, your offer description, your screenshots, etc. will trigger a manual validation of your offer.



The screenshot shows the Microsoft AppSource interface for the 'Shopify Connector' app. The app is listed as 'by Microsoft' and is compatible with 'Dynamics 365 Business Central'. It has a 5.0 rating from 1 review. The pricing is 'Free', and there is a 'Get it now' button. Below the app card, there are tabs for 'Overview', 'Ratings + reviews', and 'Details + support'. The 'Overview' tab is selected, showing a description: 'Synchronize order, stock, and customer information. Dynamics 365 Business Central is teaming up with Shopify to help our customers create a better shopping experience. Shopify provides merchants with an easy-to-use e-commerce solution, and Dynamics 365 Business Central offers comprehensive business management across finance, sales, service, and operations teams in a single application. Seamless connection between the two systems will synchronize order, stock, and customer information to ensure that merchants can fulfill orders faster and better serve their customers. The joint effort furthers the commitment of Dynamics 365 Business Central to connect data to help businesses adapt faster, work smarter, and perform better.' Below this, there is a section titled 'Adapt faster' with a description: 'Connecting Dynamics 365 Business Central with Shopify will help merchants all over the world implement more agile online business processes, while keeping people focused on selling. With connected data across your online stores and business operations, you can rapidly respond to consumer demands to adjust product pricing and merchandising. With support for multitier pricing structures and multiple currencies, companies, and entities, Business Central will support'. On the right side of the page, there is a legal disclaimer: 'By getting this product, I give Microsoft permission to use or share my account information so that the provider can contact me regarding this product and related products. I agree to the provider's terms of use and privacy policy and understand that the rights to use this product do not come from Microsoft, unless Microsoft is the provider. Use of AppSource is governed by separate terms and privacy.'



# Submitting your first offer

Search

BC TechDays 2023 | Offer overview

Delete offer

Hide offer

Review and publish

The latest version of your offer is not live yet. Please select the **Go live** button.

Publish status

Showing details

Version of offer in Preview is different from Live version. Select to Go live on the version in Preview when you are ready to replace what is Live.

Automated validation

May 30, 2023, 2:03:51 PM UTC

Automated application validation (< 3 hrs)

Finalize the application workflow

Test drive provisioning (<30 min)

Lead management validation and registration (<15 min)

1. Technical Validation

Fully automated, running 24/7 with average processing time of 7 mins and 99% of the submissions processed under 30 mins, 77% of submissions passing validation

Preview creation

May 30, 2023, 2:10:08 PM UTC

Preview creation (<1 hr)

It can take up to 4 hours for the offer preview to be visible in the marketplace after the Preview Creation step has completed.

2. Sign-off after preview

Sign-off on the offer to go live after reviewing the offer listing in AppSource. Deployment to Business Central environment as preview is not support yet.

Publisher signoff

May 30, 2023, 2:10:39 PM UTC

Go live

App source links:

App source preview

2. Sign-off after preview

Sign-off on the offer to go live after reviewing the offer listing in AppSource. Deployment to Business Central environment as preview is not support yet.

Certification

Manual validation (<2 business days)

3. Marketing Validation

Manual validation, generally processed under 1 business day. Skipped when resubmitting without changing offer listing.

Publish

Publish application with the service

Finalize the application workflow

Test drive provisioning (<30 min)

Lead management validation and registration (<15 min)

Final publish (<30 min)

App source links:

App source

4. Upload to Business Central

The app(s) can now be installed in customer environments.



# Submitting your first offer

Search

BC TechDays 2023 | Offer overview

Delete offer

Hide offer

Review and publish

Publish status

Showing details

Live and Preview versions are the same. Preview version replaced Live version.

✓

Automated validation  
May 30, 2023, 2:03:51 PM UTC

✓ Automated application validation (< 3 hrs)

✓ Finalize the application workflow

✓ Test drive provisioning (<30 min)

✓ Lead management validation and registration (<15 min)

✓

Preview creation  
May 30, 2023, 2:10:08 PM UTC

✓ Preview creation (<1 hr)

⚠ It can take up to 4 hours for the offer preview to be visible in the marketplace after the Preview Creation step has completed.

✓

Publisher signoff  
May 30, 2023, 2:10:39 PM UTC

App source links:

App source preview

✓

Certification  
Jun 2, 2023, 8:06:52 AM UTC

✓ Manual validation (<2 business days)

✓

Publish  
Jun 2, 2023, 8:16:24 AM UTC

✓ Publish application with the service

✓ Finalize the application workflow

✓ Test drive provisioning (<30 min)

✓ Lead management validation and registration (<15 min)

✓ Final publish (<30 min)

App source links:

App source

Congratulations! Your app is now in AppSource!



# Troubleshooting technical validation failures





# How to avoid technical validation errors?

- Review the requirements in [aka.ms/TechValidationChecklist](https://aka.ms/TechValidationChecklist)
- Run the self-validation script before submitting:  
<https://github.com/microsoft/navcontainerhelper>
  - Enabled when using AL-Go for GitHub, *more on that later*.
- When getting an error, review the FAQ [aka.ms/TechValidationFAQ](https://aka.ms/TechValidationFAQ).





# Technical Validation FAQ



aka.ms/TechValidationFAQ

Learn

Documentation

Training

Certifications

Q&A

Code Samples

Assessments

Shows

Events

Search

Dynamics 365

Release plans

Support

Regional availability

Resources

Get Dynamics 365

Free trial

Filter by title

Discontinuing an AppSource app

Development of a localization solution

Microsoft responsibilities

Components and capabilities

Add your app to AppSource

AppSource validation

- Marketing validation checklist
- Marketing validation FAQ
- Technical validation checklist
- Technical validation FAQ**
- How to make compelling videos
- How to create an effective sales landing page

Embed apps

Sell

Frequently asked questions

What's new or changed

Help and support

Developer and Admin

Developer

Develop

AppSource validation

Feedback

Technical Validation FAQ

Article • 06/12/2023 • 2 contributors

In this article

Questions about the validation process

Questions about hotfixing an AppSource app

Questions about Azure Application Insights usage during AppSource submissions

Questions about developing and maintaining AppSource apps

Questions about code-signing validation

Questions about names, affixes, and ID ranges

Questions about app identity

Questions about Business Central offers

Channels to ask questions or report issues

See also

Show less

This article addresses some of the most frequently asked questions around validation of apps for AppSource submission.

Additional resources

Documentation

Add your App to AppSource - Business Central

Read about how to get your app added to the Microsoft marketplace, AppSource.

App type, contact type, and customer leads - Business Central

Guidelines on app type, contact type, and customer leads.

Marketing Validation Checklist - Business Central

The marketing checklist for validation of Business Central apps

Upgrading AppSource Apps in Production - Business Central

Describes how to upgrade apps available on AppSource that are already in running in production.



# How to avoid technical validation errors?

- Review the requirements in [aka.ms/TechValidationChecklist](https://aka.ms/TechValidationChecklist)
- Run the self-validation script before submitting:  
<https://github.com/microsoft/navcontainerhelper>
  - Enabled when using AL-Go for GitHub, more on that later.
- When getting an error, review the FAQ [aka.ms/TechValidationFAQ](https://aka.ms/TechValidationFAQ).
- Review documentation for related diagnostic codes (reason, examples, how to fix, etc.)  
For instance: <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/analyzers/appsourcecop-as0032>
- For advanced scenarios, when using Azure Application Insights, you can investigate errors via the dedicated troubleshooting guide: [aka.ms/TechValidationTroubleshoot](https://aka.ms/TechValidationTroubleshoot).



# Technical Validation Troubleshooting Guide

aka.ms/TechValidationTroubleshoot

The screenshot shows a GitHub repository page for BCTech. The left sidebar displays the file tree with folders like AnalyzeData, AppInsights, and TroubleshootingGuides. The main content area shows a Jupyter Notebook titled 'AppSource-Submission-TSG.ipynb' by EmilDamsbo. The notebook content includes a title 'Dynamics 365 Business Central Troubleshooting Guide (TSG) - AppSource Submission Results (SaaS)', a description of the notebook's purpose, and two sections: '1. Get setup: Load up Python libraries and connect to Application Insights' and '2. Define filters'. The first section includes code to load the KQLmagic module and connect to the Application Insights API. The second section includes code to define the validation request ID.

Code Issues 49 Pull requests 3 Discussions Actions Projects Wiki Security 18 Insights Settings

BCTech / samples / AppInsights / TroubleshootingGuides / D365BC Troubleshooting Guides (TSG) / content / AppSource-Submission-TSG.ipynb

EmilDamsbo Docs -> Learn in AppSource TSG f8c2755 · last month History

Preview Code Blame 621 lines (621 loc) · 29.9 KB Raw Copy Download Edit

## Dynamics 365 Business Central Troubleshooting Guide (TSG) - AppSource Submission Results (SaaS)

This notebook contains Kusto queries that can help analyzing the results of the technical validation of your AppSource submission.

NB! The signal used in this notebook is only available starting from October 2021 when the fully automated technical validation was released.

### 1. Get setup: Load up Python libraries and connect to Application Insights

First you need to set the notebook Kernel to Python3, load the KQLmagic module (did you install it?) and connect to your Application Insights resource (get appid and appkey from the API access page in the Application Insights portal)

```
In [ ]: # Load the KQLmagic module
%reload_ext Kqlmagic
```

```
In [ ]: # Connect to the Application Insights API
%kql appinsights://appid='<add app id from the Application Insights portal>';appkey='<add API key from the Application Insights portal>'
```

### 2. Define filters

This workbook is designed for analyzing a single submission. Please provide a value for the validationRequestId. This ID is provided in Partner Center UI if your submission has failed at the automated validation step.

```
In [ ]: # Validation Request Id
validationRequestId = "<add validation request ID>"
```



# Common technical validation errors





# Most common errors in the last 30 days

Top 10 failure reasons	Failed submissions	AppSourceCop rule(s)	Covered by Self-Validation script	Covered by FAQ or documentation
Page compilation breaking changes	174	AS0031, AS0032	Yes	Yes
Procedure compilation breaking changes	172	AS0018 to AS0026	Yes	Yes
App.json not consistent with the offer	171		No	Yes
App is not signed or self-signed	137		Yes	Yes
Missing affixes	48	AS0011	Yes	Yes
Removal of object	34	AS0088, AS0030	Yes	Yes
Renaming an enum value	21	AS0082	Yes	Yes
Missing field data classification	16	AS0016	Yes	Yes
Missing ApplicationArea property	15	AS0062	Yes	Yes
Missing affix registration	12		No	Yes





# Most common errors in the last 30 days

Top 10 failure reasons	Failed submissions	AppSourceCop rule(s)	Covered by Self-Validation script	Covered by FAQ or documentation
Page compilation breaking changes	174	AS0031, AS0032	Yes	Yes
Procedure compilation breaking changes	172	AS0018 to AS0026	Yes	Yes
App.json not consistent with the offer	171		No	Yes
App is not signed or self-signed	137		Yes	Yes
Missing affixes	48	AS0011	Yes	Yes
Removal of object	34	AS0088, AS0030	Yes	Yes
Renaming an enum value	21	AS0082	Yes	Yes
Missing field data classification	16	AS0016	Yes	Yes
Missing ApplicationArea property	15	AS0062	Yes	Yes
Missing affix registration	12		No	Yes

Breaking change validation





# Breaking changes with previous version

- Compilation breaking changes
  - Changes breaking the compilation of dependent extensions
  - Allowed when baseline objects are obsolete
  - Example: *Removing a procedure* ([ASoo18](#))
- Runtime breaking changes
  - Changes breaking the runtime behavior of dependent extensions
  - Allowed when baseline objects are obsolete
  - Example: *Adding a var modifier for an event* ([ASoo77](#)), *increasing length of a field* ([ASoo86](#))
- Schema breaking changes
  - Changes breaking the schema of the table/table extensions of the app
  - **Currently not supported in SaaS.**
  - Example: *Removing a table* ([ASooo1](#))





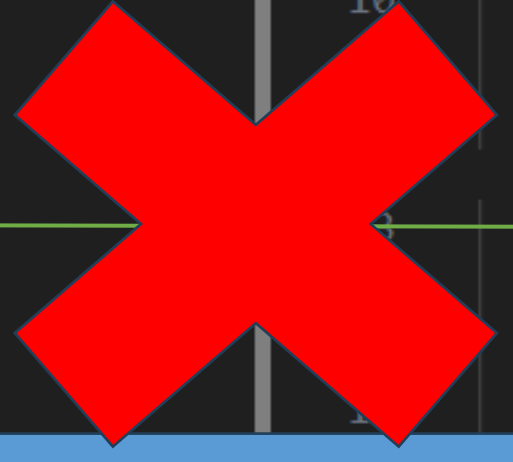
# Schema Breaking Change - Example

```

1  table 1000001 BCTD_Honeybadgers
2  {
3      DataClassification = CustomerContent;
4      InherentPermissions = RIMDX;
5
6      fields
7      {
8          1 reference
9          field(1; BCTD_Name; Text[256])
10         {
11             DataClassification = CustomerContent;
12         }
13         0 references
14         field(2; BCTD_BirthYear; Integer)
15         {
16             DataClassification = CustomerContent;
17         }
18         0 references
19         field(3; BCTD_ForestName; Text[64])
20         {
21             DataClassification = OrganizationIdentifiableInformation;
22         }
23     }
24     keys
25     {
26         - reference
27         key(PrimaryKey; BCTD_Name)
28         {
29             Clustered = true;
30         }
31     }

```

V 1.0.0.0



```

1  table 1000001 BCTD_Honeybadgers
2  {
3      DataClassification = CustomerContent;
4      InherentPermissions = RIMDX;
5
6      fields
7      {
8          1 reference
9          field(1; BCTD_Name; Text[256])
10         {
11             DataClassification = CustomerContent;
12         }
13         0 references
14         field(2; BCTD_Birthday; Date)
15         {
16             DataClassification = CustomerContent;
17         }
18         0 references
19         field(3; BCTD_ForestName; Text[64])
20         {
21             DataClassification = OrganizationIdentifiableInformation;
22         }
23     }
24     keys
25     {
26         - reference
27         key(PrimaryKey; BCTD_Name)
28         {
29             Clustered = true;
30         }
31     }

```

V 2.0.0.0

Field name changed, and field type changed from Integer to Date!



# Schema Breaking Change - Example

```

1  table 1000001 BCTD_Honeybadgers
2  {
3      DataClassification = CustomerContent;
4      InherentPermissions = RIMDX;
5
6      fields
7      {
8          1 reference
9          field(1; BCTD_Name; Text[256])
10         {
11             DataClassification = CustomerContent;
12         }
13         0 references
14         field(2; BCTD_BirthYear; Integer)
15         {
16             DataClassification = CustomerContent;
17             ObsoleteState = Pending;
18             ObsoleteReason = 'Replaced by Birthday field.';
19         }
20         0 references
21         field(3; BCTD_ForestName; Text[64])
22         {
23             DataClassification = OrganizationIdentifiableInformation;
24         }
25         0 references
26         field(4; BCTD_Birthday; Date)
27         {
28             DataClassification = CustomerContent;
29         }
30     }
31 }

```

V 2.0.0.0

- Set the ObsoleteState to Pending
- Provide an ObsoleteReason to help dependent extensions know what to do
- Introduce your change as an addition
- **Important:** Consider the runtime behavior of these dependent apps by keeping the obsoleted field updated
- Later on, set the ObsoleteState to Removed on the original field - <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-deprecation-guidelines>



# Most common errors in the last 30 days

Top 10 failure reasons	Failed submissions	AppSourceCop rule(s)	Covered by Self-Validation script	Covered by FAQ or documentation
Page compilation breaking changes	174	AS0031, AS0032	Yes	Yes
Procedure compilation breaking changes	172	AS0018 to AS0026	Yes	Yes
App.json not consistent with the offer	171		No	Yes
App is not signed or self-signed	137		Yes	Yes
Missing affixes	48	AS0011	Yes	Yes
Removal of object	34	AS0088, AS0030	Yes	Yes
Renaming an enum value	21	AS0082	Yes	Yes
Missing field data classification	16	AS0016	Yes	Yes
Missing ApplicationArea property	15	AS0062	Yes	Yes
Missing affix registration	12		No	Yes





# Inconsistency between offer and manifest

**Error:** *The manifest property 'Name' of the extension '**MyAppName**' by 'MyPublisher' (version '1.0.0.0') specifies '**MyAppName**' while the offer description specifies '**MyOtherName**'. Update the extension's manifest (app.json) or the offer description.*

**Cause:** The information specified in the offer description (name, version) and in your partner center account (publisher) doesn't match the information in the app.json of your main extension for the offer.

**Fix:** Review your offer description and the app.json of your app and make sure the values are in sync. First submissions usually fail on name/publisher. Later ones usually fail on version.





# Most common errors in the last 30 days

Top 10 failure reasons	Failed submissions	AppSourceCop rule(s)	Covered by Self-Validation script	Covered by FAQ or documentation
Page compilation breaking changes	174	AS0031, AS0032	Yes	Yes
Procedure compilation breaking changes	172	AS0018 to AS0026	Yes	Yes
App.json not consistent with the offer	171		No	Yes
App is not signed or self-signed	137		Yes	Yes
Missing affixes	48	AS0011	Yes	Yes
Removal of object	34	AS0088, AS0030	Yes	Yes
Renaming an enum value	21	AS0082	Yes	Yes
Missing field data classification	16	AS0016	Yes	Yes
Missing ApplicationArea property	15	AS0062	Yes	Yes
Missing affix registration	12		No	Yes





# Code Signing – App not signed

**Error:** *The extension 'MyApp' by 'MyPublisher' (version '1.0.0.0') has not been signed. Packages submitted to the AppSource marketplace must be signed*

**Cause:** Your app is not signed while this is required.

**Fix:** Sign your app using a windows machine with BC installed and a trusted code signing certificate. See <https://learn.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-sign-extension>





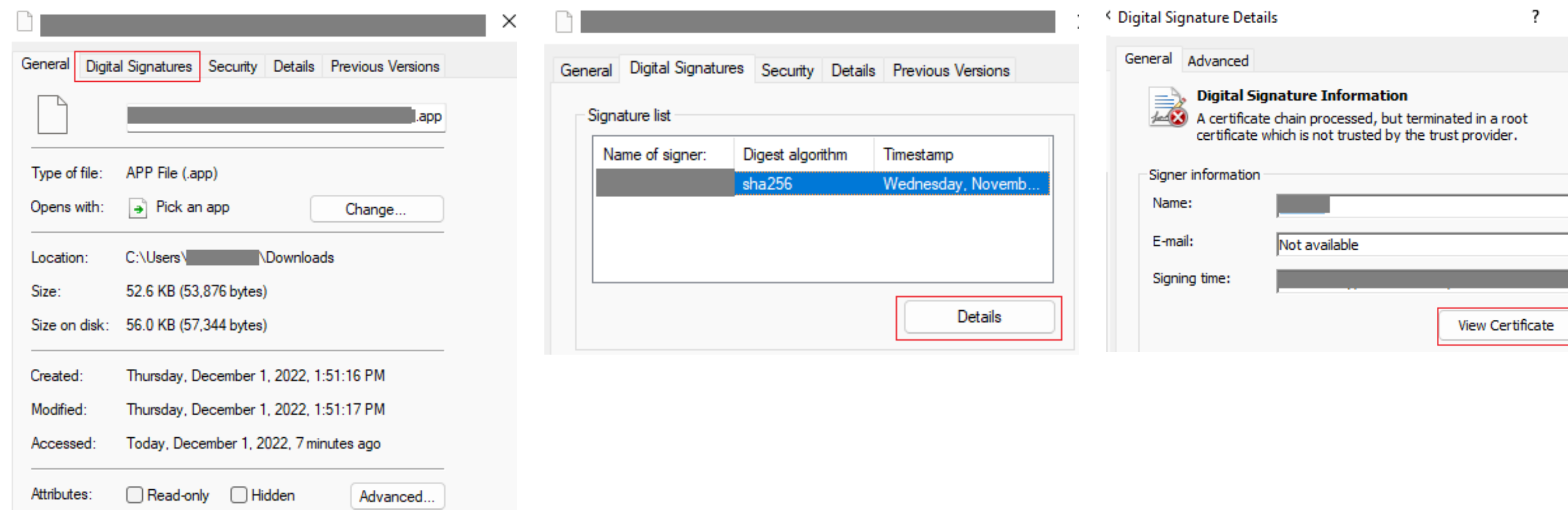
# Code Signing – App signed, but not trusted

**Error:** *The extension 'MyApp' by 'MyPublisher' (version '1.0.0.0') has been signed, but the root certificate authority (CA) certificate is not trusted. Sign your extension using a certificate created by a trusted root certificate authority*

**Cause:** Your app has been signed by a certificate that doesn't have its roots in Microsoft Windows.

**Fix:** Use a code signing certificate purchase from a trusted certificate provider.

**Note:** You can verify this by checking the validity using another windows machine with BC installed.





# Most common errors in the last 30 days

Top 10 failure reasons	Failed submissions	AppSourceCop rule(s)	Covered by Self-Validation script	Covered by FAQ or documentation
Page compilation breaking changes	174	AS0031, AS0032	Yes	Yes
Procedure compilation breaking changes	172	AS0018 to AS0026	Yes	Yes
App.json not consistent with the offer	171		No	Yes
App is not signed or self-signed	137		Yes	Yes
Missing affixes	48	AS0011	Yes	Yes
Removal of object	34	AS0088, AS0030	Yes	Yes
Renaming an enum value	21	AS0082	Yes	Yes
Missing field data classification	16	AS0016	Yes	Yes
Missing ApplicationArea property	15	AS0062	Yes	Yes
Missing affix registration	12		No	Yes

Affix validation





# Missing affix registration

**Error:** *The publisher 'MyPublisher' does not have any affixes registered. Affixes registration is mandatory in order to submit AppSource extensions.*

## Cause:

- A) You do not affixes registered yet,
- B) Or the name registered is different than the one in the app.json of your apps.

## Fix:

- A) Reach out to [d365val@microsoft.com](mailto:d365val@microsoft.com) to register affixes
- B) Update the publisher name to match your affix registration





# Most common errors in the last 30 days

Top 10 failure reasons	Failed submissions	AppSourceCop rule(s)	Covered by Self-Validation script	Covered by FAQ or documentation
Page compilation breaking changes	174	AS0031, AS0032	Yes	Yes
Procedure compilation breaking changes	172	AS0018 to AS0026	Yes	Yes
App.json not consistent with the offer	171			Yes
App is not signed or self-signed	137		Yes	Yes
Missing affixes		AS0011	Yes	Yes
Removal of object	34	AS0088, AS0030	Yes	Yes
Renaming	21	AS0082	Yes	Yes
Missing data classification	16	AS0016	Yes	Yes
Missing ApplicationArea property	15	AS0062	Yes	Yes
Missing affix registration	12		No	Yes

**App not compatible with some countries or releases.**



# Incompatible with some targeted countries

**Error:** *Some compilation errors about objects which could not be resolved. Missing pages, missing tables, etc.*

**Cause:** Your app relies on capabilities which are specific to some countries and isn't compatible with other countries. For instance, referencing CA specific objects while targeting CA and BE.

## Fix:

- A) Target only countries for which your app can be compiled.
- B) Remove the references to country specific objects – if possible
- C) Consider creating country specific offers





# Incompatible with some targeted BC releases

**Error:** *Some compilation errors about objects which could not be resolved. Missing pages, missing tables, etc.*

**Cause:** Your app relies on capabilities which were introduced in recent releases of Business Central, while you are targeting older releases. For instance, targeting 21.0 while relying on functionalities introduced in BC 22.0.

## Fix:

- A) Update the Application property (app.json) to match the min release of BC required for your app.
- B) Remove reference to new features to make it compatible with older releases





# Submitting a hotfix targeting older releases of Business Central





# Releasing hotfixes for AppSource apps

## Given that...

- Some of your customers might be running on older BC versions.
- They might then also be running on older versions of your app.
- These older versions are not compatible with newer BC releases, so technical validation against the latest releases will fail.

## Problem...

- How can you release a hotfix for these customers on old versions?

Since BC 2023 release wave 1, we have support for hotfix targeting older releases!





# New: hotfix support for app versions targeting older BC releases

Submission validated from 21.0 (included) to 22.0 (excluded)



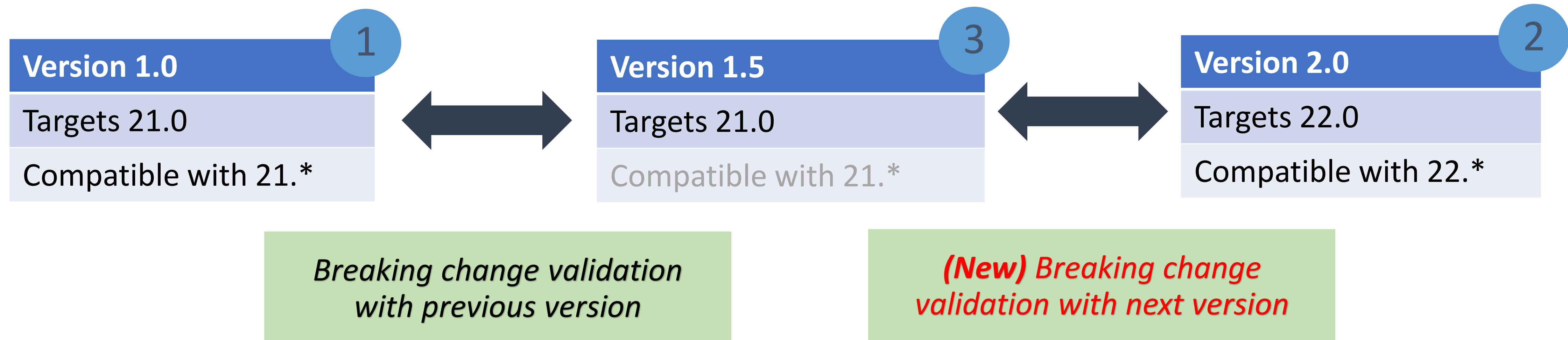
1. Your app was submitted for BC 21 in October 2022

2. You **could not** submit a version compatible with BC 21 & 22 in May 2023

3. You must submit a fix for your customers on BC 21



# Submission validation for hotfix of older BC release



**Goal:** Ensure that customers can upgrade from 1.0 to 1.5 and from 1.5 to 2.0

As a hotfix, you can change business logic, introduce new local procedures or internal objects, but you cannot add new public objects or tables which are not in the next version.

For hotfixes, do not change the version number in the offer description, keep the latest version.



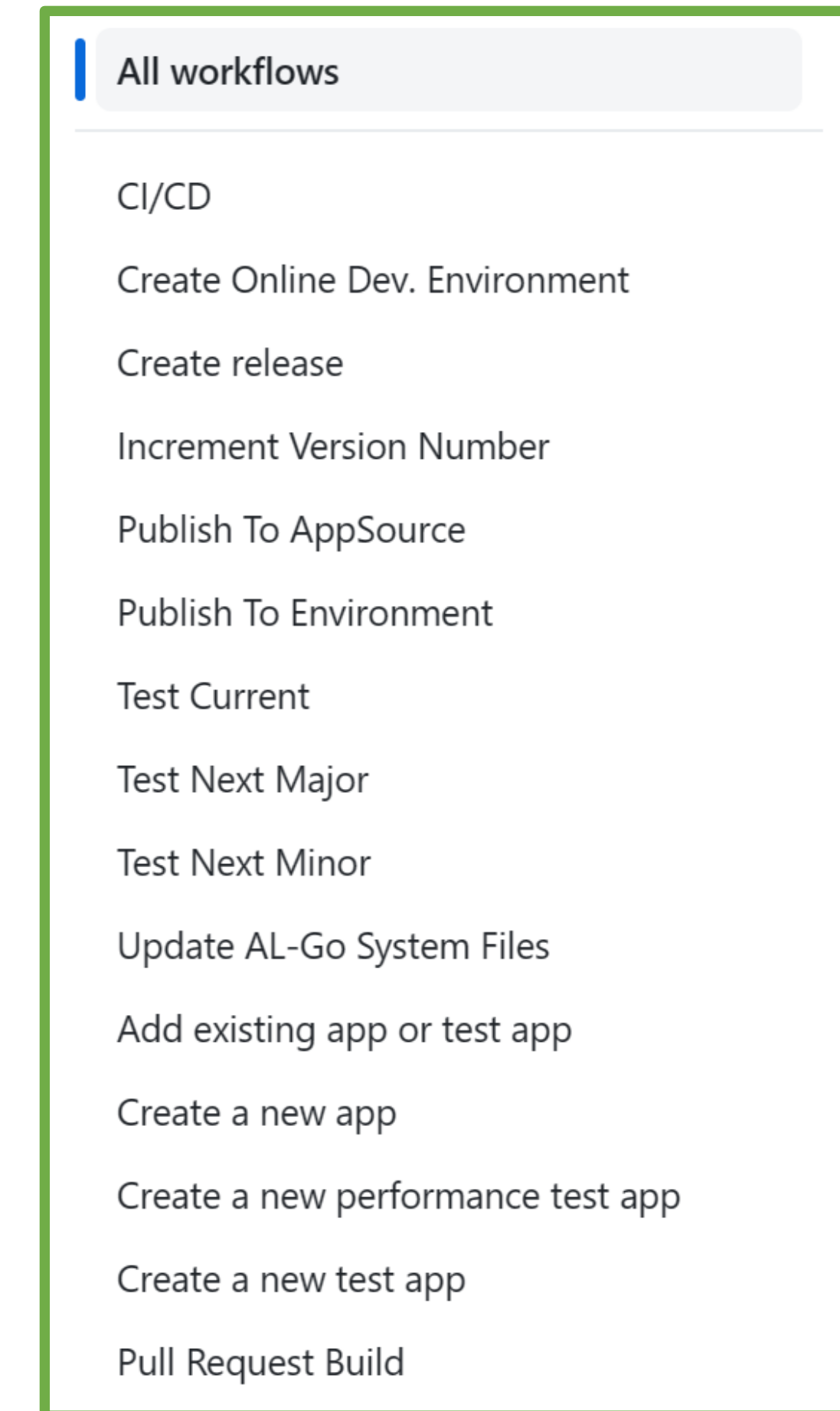
# Automating your submissions with AL-GO for GitHub





# How to automate all of this?

- You've seen how to do it manually, let's automate it...
- AL-Go for GitHub is a plug and play solution for CI/CD
- Create your own repository from a template  
[aka.ms/ALGoAppSource](https://aka.ms/ALGoAppSource)
- Upload your app and go through some configuration steps
- Get access to many useful automated workflows





# Sneak peak at AL-Go for GitHub

- Continuous integration validation on your pull requests

← CI/CD

✓ Merge pull request #122 from BusinessCentralApps/3mtmagxi.taa #409

Summary

Jobs

- ✓ Build BingMaps-AppSource - Defa...
- ✓ Initialization
- ✓ CheckForUpdates
- ⌚ Deploy to \${{ matrix.environment }}
- ✓ Deliver to GitHubPackages
- ✓ Deliver to NuGet
- ✓ Deliver to Storage
- ✓ Deliver to Teams
- ✓ PostProcess

Run details

- ⌚ Usage
- 📄 Workflow file

Triggered via push 4 days ago

fredydk pushed f8f3a65 main

Status: Success

Total duration: 6m 10s

Artifacts: 4

CICD.yaml  
on: push

Matrix: Build

- ✓ Initialization 36s
- ✓ Build .../ BuildALGoProject 3m 58s
- ✓ CheckForUpdates 28s

Matrix: Deliver

- ✓ Deliver to GitHubPackages 44s
- ✓ Deliver to NuGet 36s
- ✓ Deliver to Storage 57s
- ✓ Deliver to Teams 32s

Matrix: Deploy

- ⌚ Deploy to \${{ matrix.environment }} 0s

PostProcess 10s



# Sneak peak at AL Go for GitHub

- Deploy your apps to a your Quality Assurance environment

The screenshot displays a GitHub Actions workflow run interface. At the top, a green bar indicates the workflow is successful. The main header shows 'Publish To Environment #2' with a green checkmark. Below this, a summary section provides details: 'Manually triggered 2 years ago' by user 'freddydk' (ID: 4d64103), with a status of 'Success' and a total duration of '2m 0s'. The workflow is titled 'PublishToEnvironment.yaml' and is triggered by 'on: workflow\_dispatch'. A job list on the left shows four steps: 'Initialization', 'Analyze', 'Deploy to QA', and 'PostProcess', all marked as successful. The main area shows a visual representation of the workflow steps: 'Initialization' (9s), 'Analyze' (2s), 'Deploy to QA' (56s), and 'PostProcess' (8s). The 'Deploy to QA' step is highlighted with a 'Matrix: Deploy' label. The interface includes navigation links for 'Summary', 'Jobs', 'Run details', 'Usage', and 'Workflow file'.

← Publish To Environment

✓ Publish To Environment #2

Summary

Jobs

- ✓ Initialization
- ✓ Analyze
- ✓ Deploy to QA
- ✓ PostProcess

Run details

- Usage
- Workflow file

Manually triggered 2 years ago

freddydk 4d64103

Status

Success

Total duration

2m 0s

Artifacts

—

PublishToEnvironment.yaml

on: workflow\_dispatch

Matrix: Deploy

Initialization 9s

Analyze 2s

Deploy to QA 56s

PostProcess 8s



# Sneak peak at AL Go for GitHub

- Upload your app to Partner Center automatically and deliver it to AppSource

The screenshot displays the GitHub Actions interface for a workflow named 'Publish To AppSource'. The workflow is shown as a successful run, triggered manually 4 days ago by user 'freddydk' with ID 'f8f3a65'. The total duration of the run is 1m 43s. The workflow consists of three steps: 'Initialization' (14s), 'Deliver to AppSource' (50s), and 'PostProcess' (17s). The left sidebar shows the workflow file 'PublishToAppSource.yaml' and the run details, including usage and workflow file information.

← Publish To AppSource

✓ Publish To AppSource #32

Summary

Jobs

- ✓ Initialization
- ✓ Deliver to AppSource
- ✓ PostProcess

Run details

- Usage
- Workflow file

Manually triggered 4 days ago	Status	Total duration	Artifacts
freddydk f8f3a65	Success	1m 43s	—

PublishToAppSource.yaml  
on: workflow\_dispatch

✓ Initialization 14s — ✓ Deliver to AppSource 50s — ✓ PostProcess 17s



# ...and so much more!

Check out this presentation tomorrow at 11:00, Room 5!

@bctechdays.com

Fri 23 Jun, 11:00 - 12:30

**Microsoft Presents:**  
**Using AL-Go for GitHub**

Freddy Kristiansen

Krzysztof Bialowas

BC/NAV  
TECH  
DAYS  
2023  
mibuso.com



# Conclusion





# Where to ask questions or report issues?

Channel	Scope
Partner Center customer support	Issues related to the submission of an app to the AppSource marketplace (failed validation, issue with offer listing, etc).
Business Central customer support	Issues related to the usage of apps in Business Central (extension installation, runtime issue, etc.)
<a href="mailto:d365val@microsoft.com">d365val@microsoft.com</a>	Registration of affixes
AppSource yammer group	Questions on developing and maintaining AppSource apps
<a href="https://github.com/microsoft/navcontainerhelper">microsoft/navcontainerhelper (github.com)</a>	Questions or issues regarding the Self-Validation script.
<a href="https://github.com/microsoft/AL">microsoft/AL (github.com)</a>	Questions or issues regarding the AppSourceCop.

For more information, see <https://docs.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-checklist-submission-faq#channels-to-ask-questions-or-report-issues>





# Q&A

Any Questions?





Thank  
You!

