

App Bundle:

cross-distribution for Autodesk products,
App Store and Forge

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Sergio Leon

Developer Advocate

Forge developer advocate with big interest in bringing 3D content to the browser, helping to develop the future cloud services and its use in products that will define the Future. Specialized in the Media & Entertainment industry, he supports partners working with Autodesk M&E product APIs. He has long experience in the production of tools for 3D content visualization, computer graphics, and the VFX industry. He has worked for studios, and innovative companies in the 3D field area, appearing in the credits of worldwide known films. He is focused on 3D graphics, media content generation and complex production workflows, with special care about support and user experience.



Nachikethan S

Software QA Engineer

Helping developers to host their apps in Autodesk App Store. He also works in Forge sales, helping customers to purchase Forge subscription / Renewal, Purchase order, and usage analytics. He loves to use automation technology in his work to reduce repetitive tasks and ease the process, he comes from a Multimedia and Animation background.



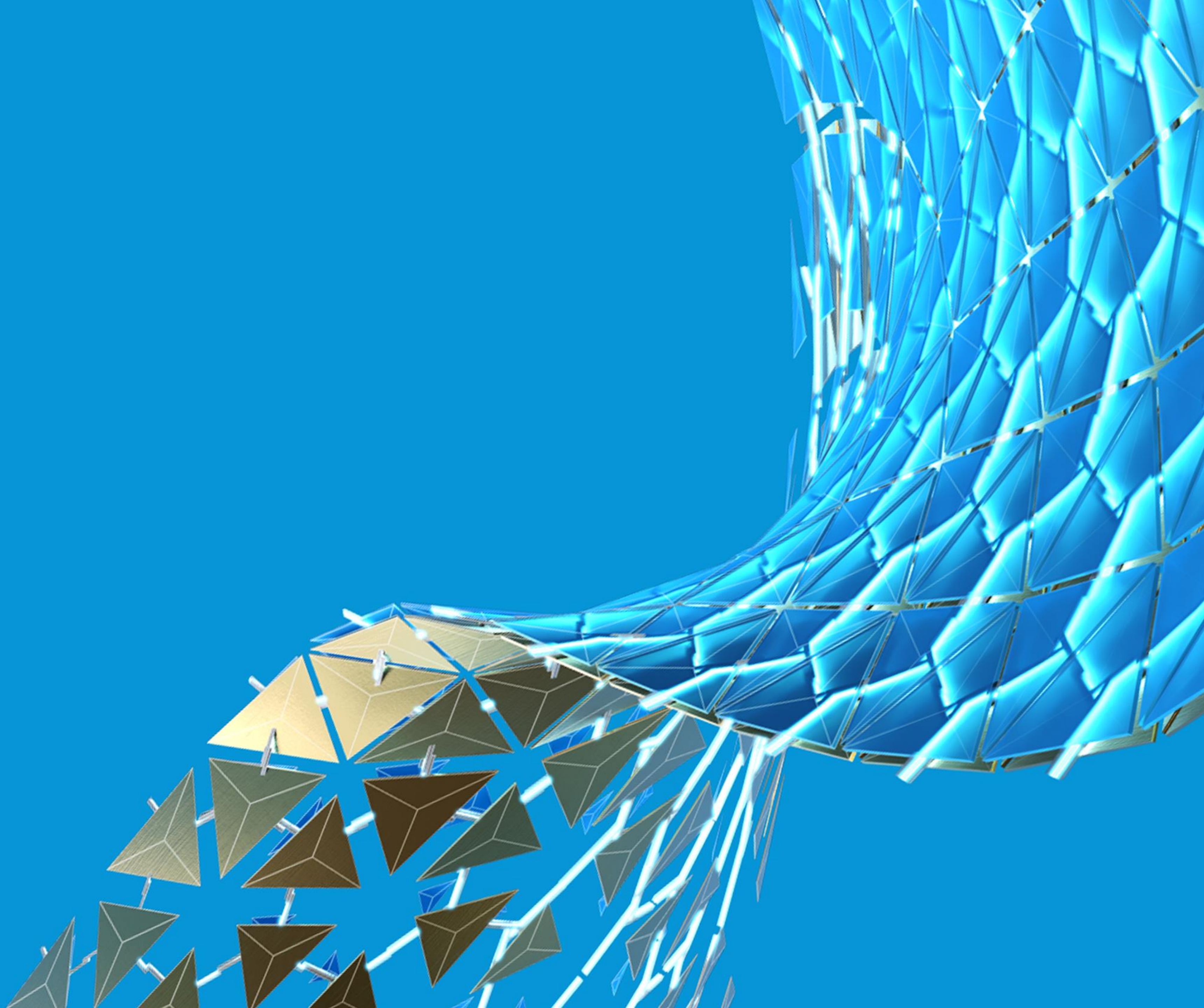
About the speaker

Kevin Vandecar – Developer Advocate

A Forge developer advocate and also the manager for the Media & Entertainment and Manufacturing Autodesk Developer Network Workgroups. His specialty is 3ds Max software customization and programming areas, including the Forge Design Automation for 3ds Max service.

App Bundle

- ❖ Definition
- ❖ Structure (1/2)

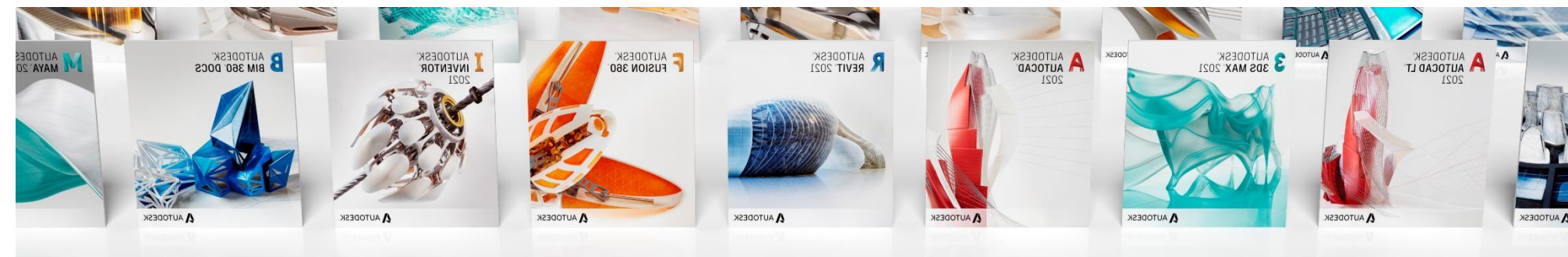


App Bundle

Simplify deployment with a common base Design for all Autodesk products

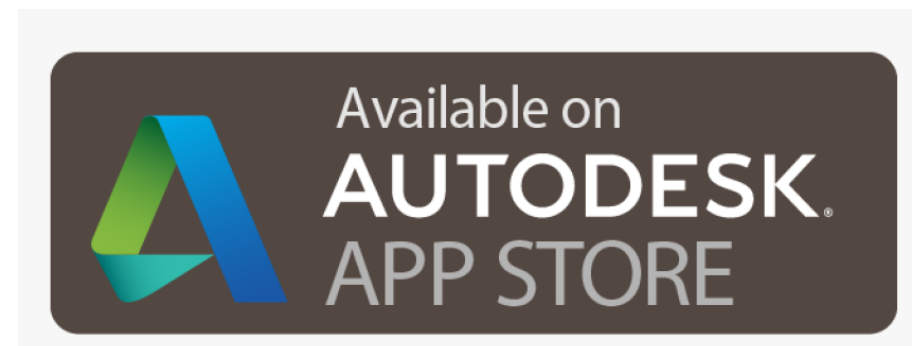
Used by

- ✓ Autodesk products



AutoCAD, Revit, 3ds MAX, Maya, Inventor, Navisworks, Vault, Fusion 360

- ✓ App Store



- ✓ Forge Design Automation



App Bundle

MyApplication.bundle (AutoCAD)

- | - PackageContents.xml
- | - **Contents**
 - | - OfficeSymbolsUtilities.lsp
 - | - **Resources**
 - | - OfficeSymbols.dwg
 - | - OfficeSymbols.ico
 - | - OfficeSymbols.htm



MyApplication (Maya)

- | - PackageContents.xml
- | - **Contents**
 - | - **docs**
 - | - index.html
 - | - **icons**
 - | - MathNode.ico
 - | - MathNode.png
 - | - **plug-ins**
 - | - asdkMathNode.py
 - | - **scripts**
 - | - AEasdkMathNodeTemplate.mel
 - | - MathNode_load.mel
 - | - **shelves**
 - | - MathNode_shelf.mel



App Bundle Manifest

```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage SchemaVersion="1.0"
    ProductType="Application"
    AutodeskProduct="Maya"
    Name="MathNode"
    Description="Autodesk Maya MathNode"
    AppVersion="1.0.0"
    Author="Autodesk"
    AppNameSpace="com.autodesk.exchange.maya.mathnode"
    HelpFile="./Contents/docs/index.html"
    OnlineDocumentation="http://www.autodesk.com/maya"
    ProductCode="{789b6b40-455a-11p2-a891-00wsdf5c40c6}"
    UpgradeCode="{52c87085-07d5-4cfa-b76e-e348553c30ac}"
    Icon="./Contents/icons/logo.png"

    <CompanyDetails ... />
    <RuntimeRequirements ... />
    <Components ... />

</ApplicationPackage>
```



PackageContents.xml

App Bundle Manifest

```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage SchemaVersion="1.0"
  ...
  <CompanyDetails
    Name="Autodesk"
    Phone="123-456-789"
    Url="http://www.autodesk.com"
    Email="labs.plugins@autodesk.com" />

  <RuntimeRequirements
    SupportPath="./Contents/docs"
    OS="win64|macOS|linux"
    Platform="Maya"
    SeriesMin="2018"
    SeriesMax="2020" />

  <Components>
    ...
  </Components>
</ApplicationPackage>
```



PackageContents.xml

App Bundle Manifest

```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage SchemaVersion="1.0"
  ...
  <CompanyDetails ... />
  <RuntimeRequirements />

  <Components>
    <RuntimeRequirements
      SupportPath="./Contents/docs"
      OS="win64|macOS|linux"
      Platform="Maya"
      SeriesMin="2018" SeriesMax="2020" />

    <ComponentEntry ModuleName="./Contents/plugin-ins/asdkMathNode.py" />
    <ComponentEntry ModuleName="./Contents/scripts/AEasdkMathNodeTemplate.mel"/>
    <ComponentEntry ModuleName="./Contents/icons/MathNode.png" />
  </Components>

</ApplicationPackage>
```



PackageContents.xml

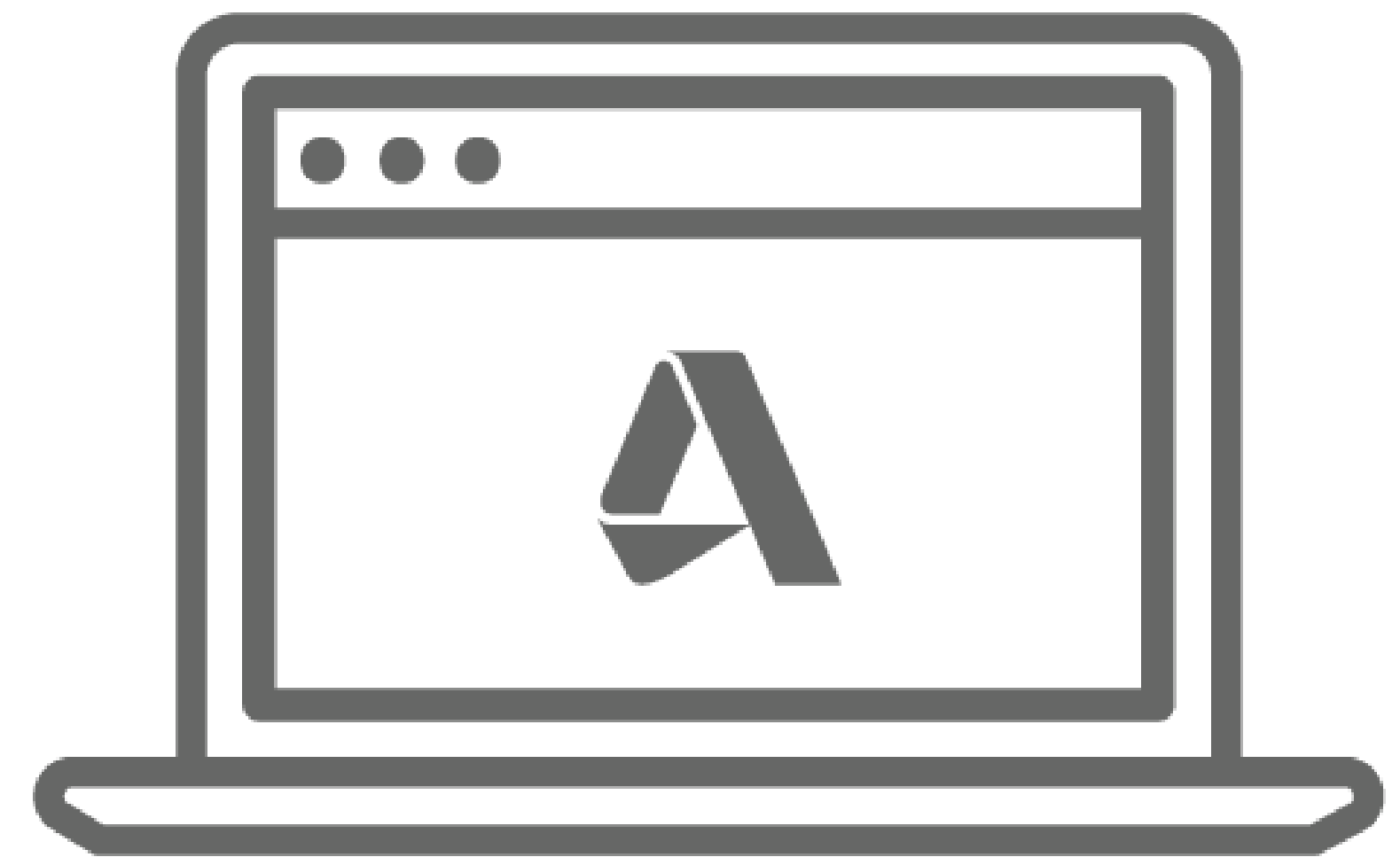


Deployment

- ✓ Manual Deployment `%programData%/Autodesk/ApplicationPlugins`
- ✓ Installer
- ✓ System or per User



- ✓ Load on startup or on request
- ✓ Contents loaded from bottom -> up (dependencies!!)



Autodesk App Store



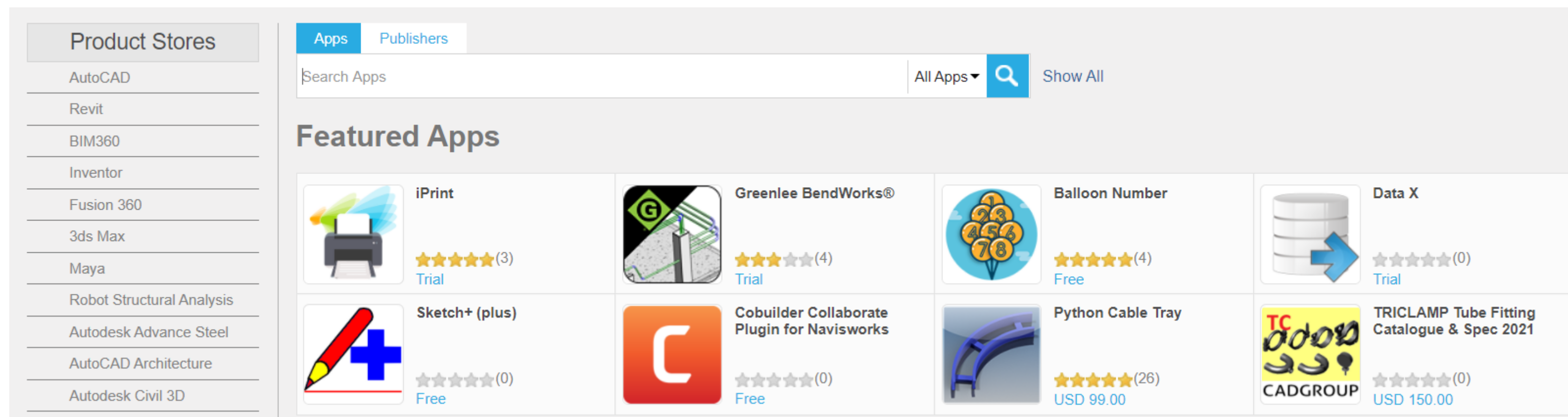
What is Autodesk App Store?

Marketplace and a web service provided by Autodesk

<https://apps.autodesk.com/en>

Apps are easily accessible and installed

Customer experience should be seamless



Submission and Review Process

STAGE A

SUBMISSION FORM

Key marketing and technical information fields.

What your App does and how it can help users

STAGE B

INITIAL REVIEW

App Store QA team will review the submission.

Missing requirements will be reported to the publisher.

STAGE C

FUNCTIONALITY TEST AND INSTALLER

Installer will be created and sent to the publisher for verification and approval. Functionality Test is performed.

STAGE D

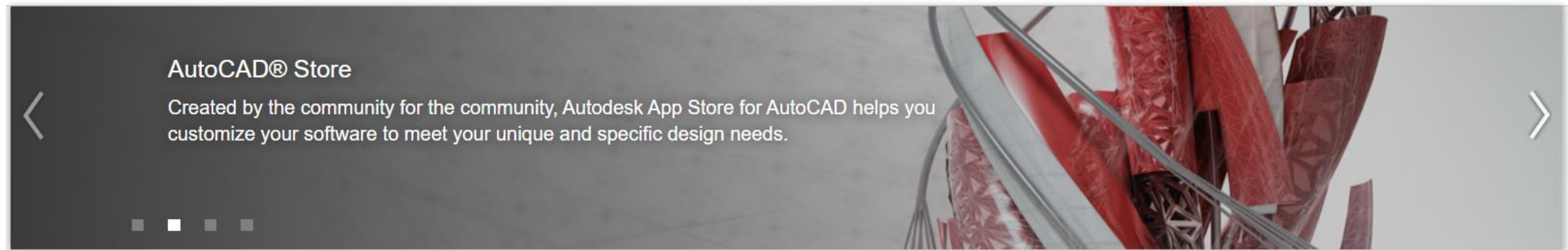
PUBLISH

App goes live in the store

Featured App Banner

The App Store can help to promote the company.

Used by publishers on a rotational basis.



App Store Banner

Types Of Revenue Stream

Free

APPS

Full Functionality with
No Limitations

Trial

APPS

Limited Features/
Time Limited

Paid

APPS

Perpetual license

Subscription

APPS

“Monthly/Yearly
recurring subscription”

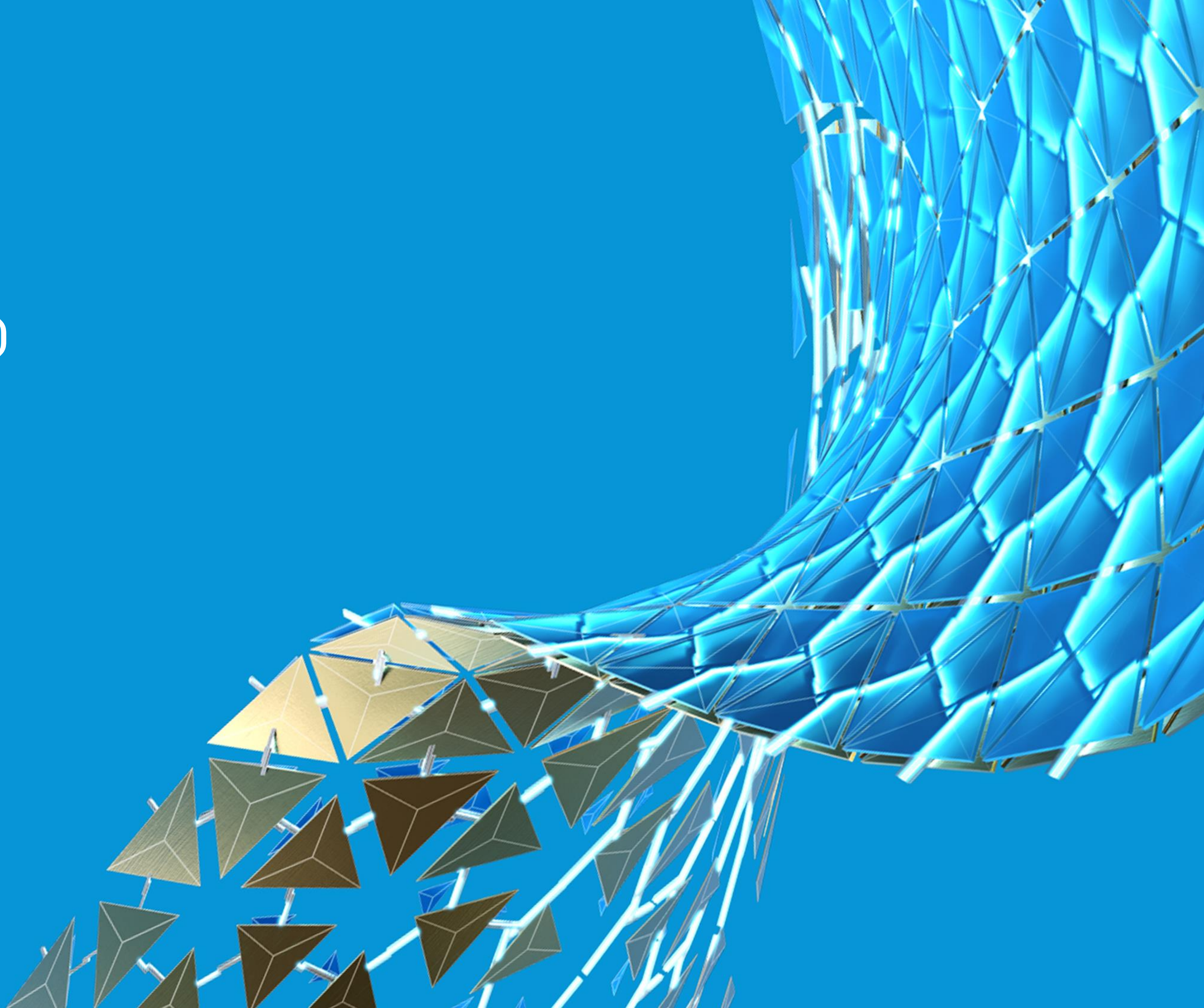
Product Life Cycle



Current and Previous three Versions

App Bundle

❖ Properties (2/2)



App Bundle Properties

APP VERSION



PRODUCT VERSION

Product	RuntimeRequirements::SeriesMin/SeriesMax	RuntimeRequirements::Platform
AutoCAD	R24.0 is version 2021 R23.1 is version 2020 R23.0 is version 2019 R22.0 is version 2018 R21.0 is version 2017 R20.1 is version 2016	"AutoCAD*"
Revit	R2021, R2020, R2019, R2018, R2017	"Revit"
Maya	2020, 2019, 2018, ...	"Maya"
3ds Max	2021, 2020, 2019, 2018, ...	"3ds Max 3ds Max Design"
Inventor	(version is taken from add-in manifest)	"Inventor"
Navisworks	Nw18 is version 2021 Nw17 is version 2020 Nw16 is version 2019	"NAVMAN NAVSIM"
Vault	V2020, V2019, ...	"Vault"
Fusion 360	(No version, leave empty)	



```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage SchemaVersion="1.0"
...
  AutodeskProduct="AutoCAD"
  Name="MyApp"
  NameEsp = "MiApp"
  NameDeu = "MeineApp"
  Description="App sample"
  AppVersion="2.1.0"
  ProductCode="{789b6b40-455a-11p2-a891-00wsdf5c40c6}"
  UpgradeCode="{52c87085-07d5-4cfa-b76e-e348553c}"
  SupportedLocales="Enu|Deu|Fra|Esp" >

  <RuntimeRequirements SupportPath="./Contents"
    OS="Win32|Win64" Platform="AutoCAD*"
    SeriesMin="R19.0" SeriesMax="R24.0" />

</Components>
  <RuntimeRequirements SupportPath="./Contents"
    OS="Win32|Win64" Platform="AutoCAD*"
    SeriesMin="R23.0" SeriesMax="R24.0" />
  <ComponentEntry AppName="TotalLength"
    Version="1.1.4"
    ModuleName="./Contents/TotalLength.lsp"
    AppDescription="Calculates the Total Length" />
</Components>
</Components> ...
...
```

App Bundle Properties

LOCALE CODES



- Chs - Chinese Simplified (PRC)
- Cht - Chinese Traditional (Taiwan)
- Csy - Czech
- Deu - German
- Enu - English
- Esp - Spanish
- Fra - French
- Hun - Hungarian
- Ita - Italian
- Jpn - Japanese
- Kor - Korean
- Plk - Polish
- Ptb - Portuguese
- Rus - Russian

CERTIFIED APPS



```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage SchemaVersion="1.0"

...
  AutodeskProduct="AutoCAD"
  Name="MyApp"
  NameEsp = "MiApp"
  NameDeu = "MeineApp"
  Description="App sample"
  AppVersion="2.1.0"
  ProductCode="{789b6b40-455a-11p2-a891-00wsdf5c40c6}"
  UpgradeCode="{52c87085-07d5-4cfa-b76e-e348553c}"
  SupportedLocales="Enu|Deu|Fra|Esp" >

  <RuntimeRequirements SupportPath="./Contents"
    OS="Win32|Win64" Platform="AutoCAD*"
    SeriesMin="R19.0" SeriesMax="R24.0" />

</Components>

  <RuntimeRequirements SupportPath="./Contents"
    OS="Win32|Win64" Platform="AutoCAD*"
    SeriesMin="R23.0" SeriesMax="R24.0" />

  <ComponentEntry AppName="TotalLength"
    Version="1.1.4"
    ModuleName="./Contents/TotalLength.lsp"
    AppDescription="Calculates the Total Length" />

</Components>
</Components> ...

...
```

App Bundle in Autodesk Products

❖ AutoCAD





AutoCAD

- **Online Documentation**

- <https://help.autodesk.com/view/ACD/2021/ENU/?guid=GUID-BC76355D-682B-46ED-B9B7-66C95EEF2BD0>

- **App Bundles / Autoloader**

- App Types: ARX, CRX, DBX, .NET DLL, FAS, LSP
- Other Modules: CUIX, Tool Palettes
- VBA projects DVB

- **App Store requires CUIX**

The screenshot shows the Autodesk AutoCAD 2021 help interface. The top header is black with the red 'A' logo and the text 'AUTODESK® AUTOCAD® 2021'. Below the header is a navigation pane on the left with a tree view containing the following items: 'Plug-In Applications', 'PackageContents.xml Format Reference' (which is expanded and highlighted with a minus sign), 'Supported Locale Codes Reference', 'ApplicationPackage Element Reference', 'CompanyDetails Element Reference', 'Components Element Reference', 'RuntimeRequirements Element Reference', 'Example: Basic .bundle Folder Structure for a Plug-in', and 'Example: Using Folders to Organize Components for a Plug-in'. At the bottom of the navigation pane is a plus sign icon followed by the text 'Platform Customization (Windows Only)'. The main content area on the right is titled 'PackageContents.xml Format Reference' and contains the following text: 'The *PackageContents.xml* file contains information about the application package.' followed by 'The information contained in the file can be used to specify which operating system, and how the application should be loaded, such as the following elements are used to define and describe the plug-in:' followed by a bulleted list: 'ApplicationPackage', 'CompanyDetails', and 'Components'. At the bottom of the main content area is a section titled 'PackageContents.xml for Download versus Local' followed by the text: 'How you plan to deploy your plug-in determines what should be used for plug-in for download versus a local deployment. The following deployment you want to use.'



AutoCAD

Components and extra features specific to AutoCAD

- **ModuleName**
- **AppName**
- **AppType**
- **AppDescription**
- **PerDocument**
- **LoadReasons**
 - LoadOnCommandInvocation
 - LoadOnAutoCADStartup
 - LoadOnProxyDetection
 - LoadOnAppearance

- **Use LoadOnCommandInvocation if your application defines commands**
- **Commands is required if LoadReason: LoadOnCommandInvocation is specified.**

Components Element Reference

[SHARE](#)

The Components element is used to specify the components that make up one version of the plug-in.

More than one Components element can be used to identify the components for a plug-in; each Components element can identify one or more components. Platform and product information for a Components element is defined with the RuntimeRequirements element.

If all the components defined within a Components element apply to the same platform, you do not need to add a RuntimeRequirements element to each individual ComponentEntry element.

Along with the RuntimeRequirements element, the Components element can contain one or more of the following elements

- ComponentEntry
- RegistryEntries
- SystemVariables
- EnvironmentVariables



AutoCAD

<components> example

```
<Components>
  <RuntimeRequirements OS="Mac" Platform="AutoCAD"SeriesMin="R18" SeriesMax="R18.2" />
  <ComponentEntry
    AppName="AsdkPolyCAD"
    ModuleName="asdkpolyui.bundle"
    AppDescription="Mac polysamp UI AR"
    LoadOnCommandInvocation="True">
    <Commands GroupName="ASDK_POLYGON">
      <CommandLocal="POLY"Global="ASDK_POLY" />
      <CommandLocal="PPOLY"Global="PPOLY" />
      <CommandLocal="DRAGPOLY"Global="ASDK_DRAGPOLY" />
    ...
    </Commands>
  </ComponentEntry>
  <ComponentEntry
    AppName="AsdkPolyCAD_DBX_MANAGED"
    ModuleName="./Contents/Win32/asdkmgPoly.dll"
    AppDescription="Custom Poly Mixed Mode .NET Wrapper"
    AppType="Dependency"/>
  <ComponentEntry
    AppName="AsdkPolyCAD_DBX"
    ModuleName="./Contents/Win32/asdkpolyobj.dbx"
    AppDescription="Custom Poly DBX Object"
    LoadOnProxyDetection="True"
    LoadOnAutoCADStartup="False"
    LoadOnAppearance="False"/>
</Components>
```



AutoCAD <components> example

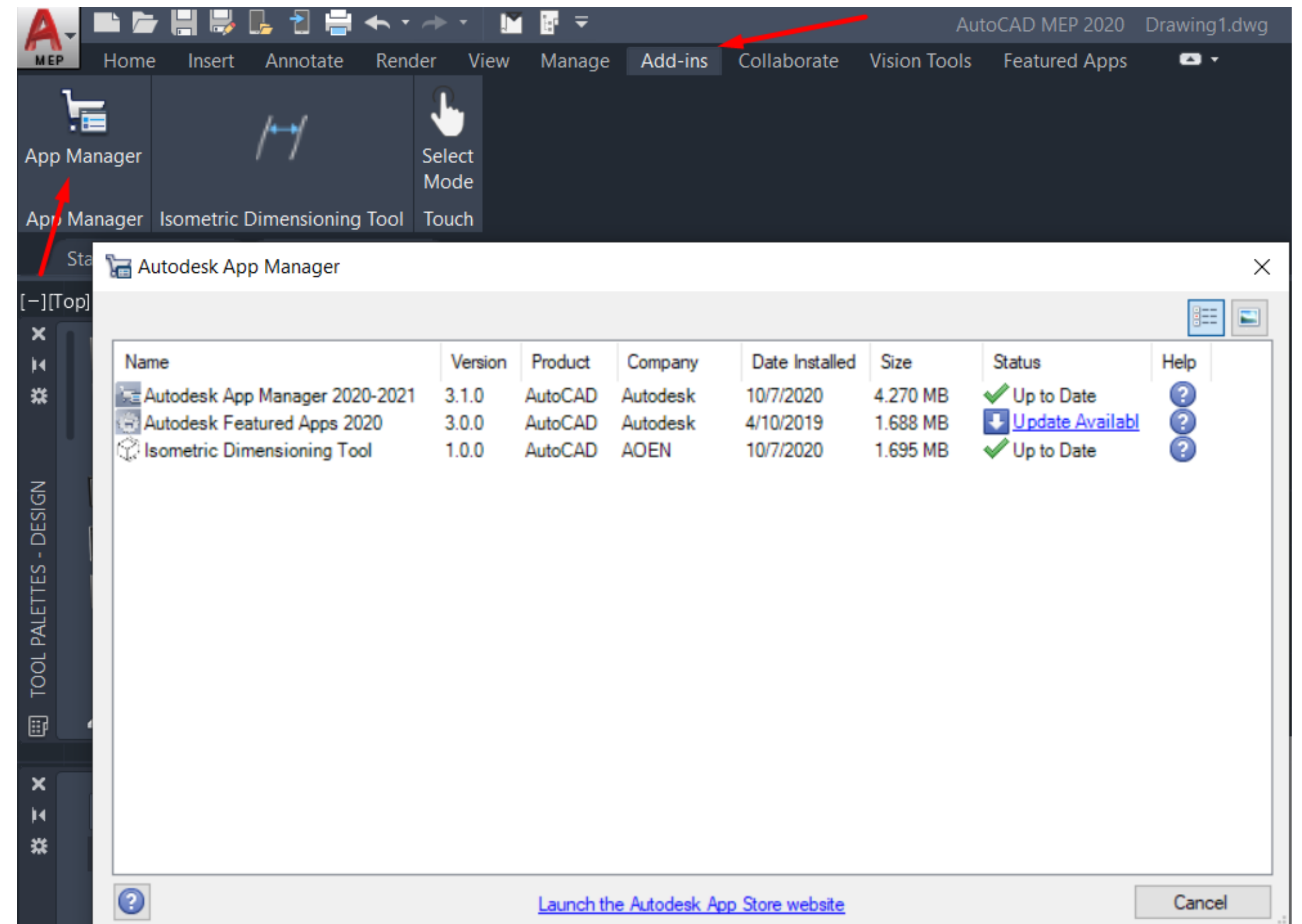
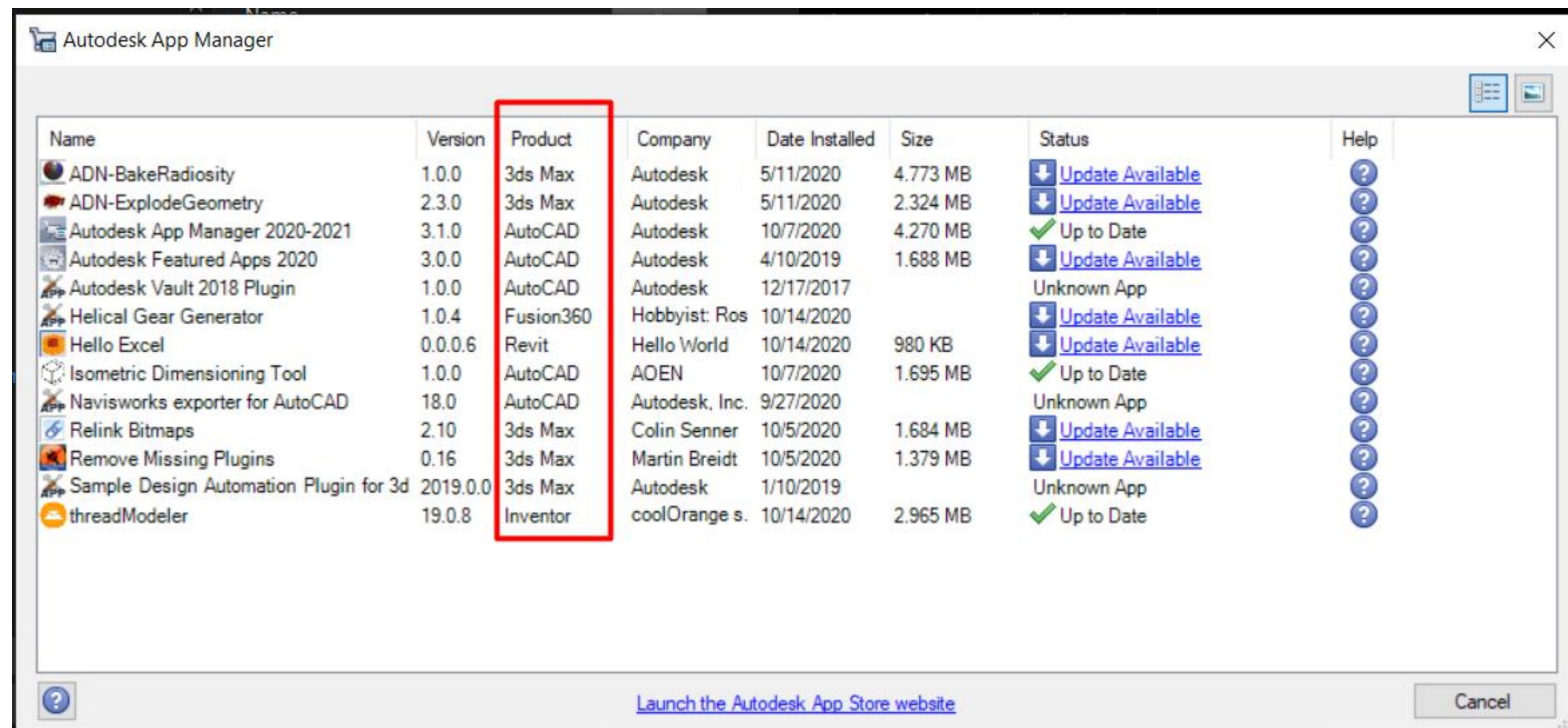
defining variables

```
<Components>
  <RuntimeRequirements ...>
  <ComponentEntry ...>
  <ComponentEntry ...>
  <SystemVariable Name="MYVARIABLE" PrimaryType="String" StorageType="User"
    Value="Example" Owner="" Flags="Create|DotIsEmpty|SpacesAllowed"/>
<EnvironmentVariables>
  <EnvironmentVariable Name="MYNUMVAR" Value="123" />
  <EnvironmentVariable Name="MYSTRVAR" Value="Example" />
</EnvironmentVariables>
</Components>
```



AutoCAD

- Autodesk App Manager
 - <https://apps.autodesk.com/ACD/en/Detail/Index?id=8410250632962132687&appLang=en&os=Win64>
- TIP: This is specified for AutoCAD but works for all app bundles
 - Has command-line for specific products
 - Can run EXE directly from App Bundle location





AutoCAD Plant 3D

- Pay attention to special requirements for AutoCAD Plant 3D
 - Uses the same attributes as AutoCAD
 - But has special content pack location:
 - For example, in 2021 it is: “C:\AutoCAD Plant 3D 2021 Content\CPak Common



The Plant 3D toolset is included with AutoCAD

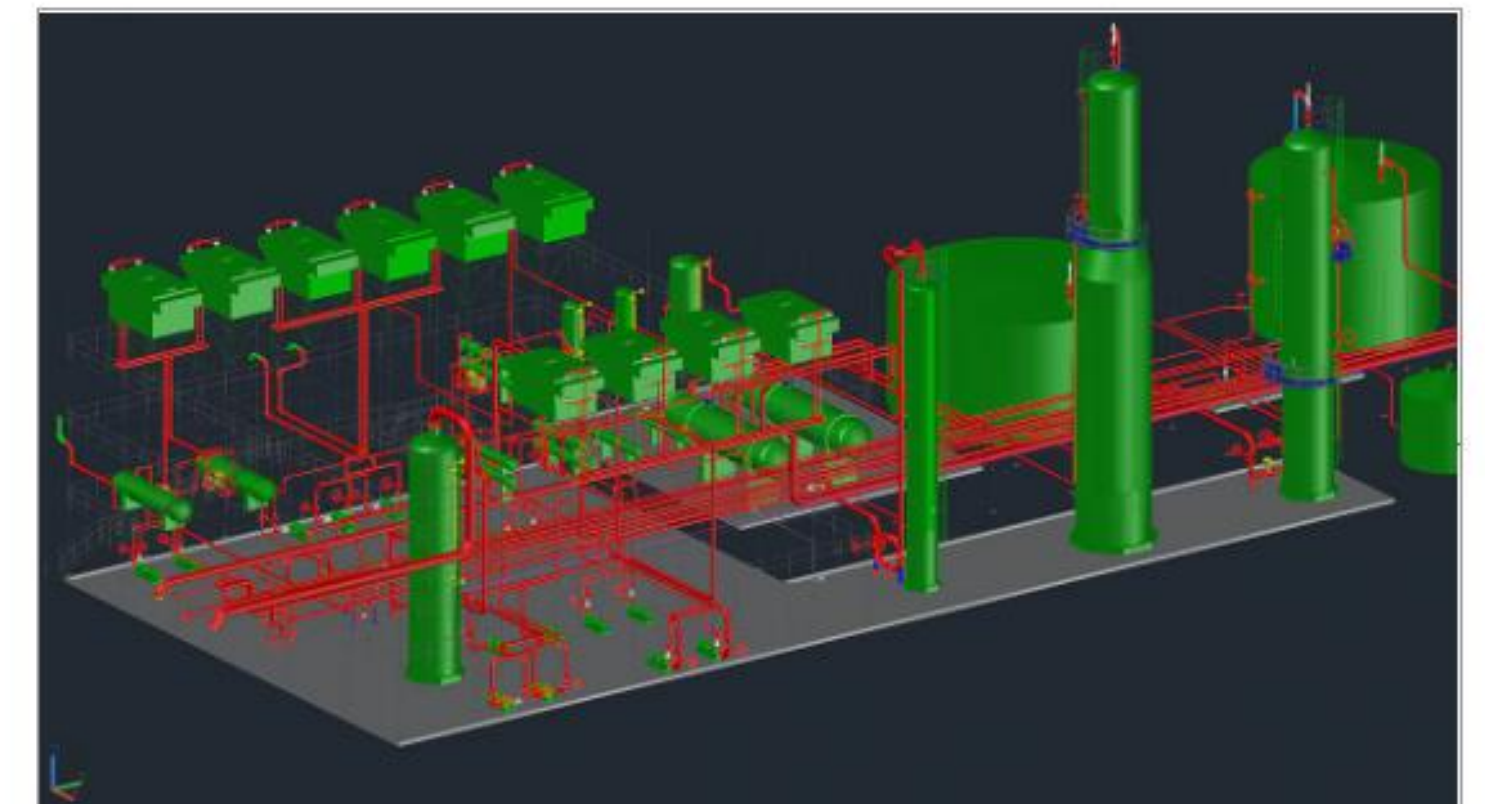
Create and edit P&ID's, 3D models, and extract piping orthographics and isometrics with industry-specific toolset for plant design.

 [Download free trial](#)

 [Get support](#)

System requirements: 

Student or educator? [Get it for free](#)



2021 Plant 3D toolset

App Bundle in Autodesk Products

❖ Revit



Revit Addin (Plugin)



DEFAULT LOCATION TO READ THE .ADDIN FILE

NON-USER-SPECIFIC

C:\PROGRAMDATA\AUTODESK\REVIT\ADDINS\

USER-SPECIFIC

C:\USERS\APPDATA\ROAMING\AUTODESK\REVIT\ADDINS\

AUTODESK APP STORE DEFAULT LOCATION

NON-USER-SPECIFIC

C:\PROGRAMDATA\AUTODESK\APPLICATIONPLUGINS\

USER-SPECIFIC

C:\USERS\APPDATA\ROAMING\AUTODESK\APPLICATIONPLUGINS\

Revit Addin (Plugin)

MINIMUM PACKAGECONTENTS.XML TO LOAD THE PLUGIN IN REVIT.



```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage>
  <Components Description="2021 parts">
    <RuntimeRequirements OS="Win64"
      Platform="Revit"
      SeriesMin="R2021" SeriesMax="R2021" />
    <ComponentEntry AppName="Test" Version="1.0.0"
      ModuleName="./Contents/Test.addin"
      AppDescription="Testing" />
  </Components>
</ApplicationPackage/>
```



Revit Addin (Plugin)

EACH COMPONENT VERSION WILL HAVE ITS OWN ENTRY TO LOAD THE MODULE.



```
<?xml version="1.0" encoding="utf-8"?>
</ApplicationPackage>
<Components Description="2020 Parts">
  <RuntimeRequirements OS="Win64" Platform="Revit"
    SeriesMin="R2020" SeriesMax="R2020" />
  <ComponentEntry AppName="Manager" Version="1.0.0"
    ModuleName="./Contents/loadtheapp.addin" AppDescription="Manager" />
</Components>
<Components Description="2021 Parts">
  <RuntimeRequirements OS="Win64" Platform="Revit"
    SeriesMin="R2021" SeriesMax="R2021" />
  <ComponentEntry AppName="Manager" Version="1.0.0"
    ModuleName="./Contents/loadtheapp.addin" AppDescription="Manager" />
</Components>
</ApplicationPackage>
```

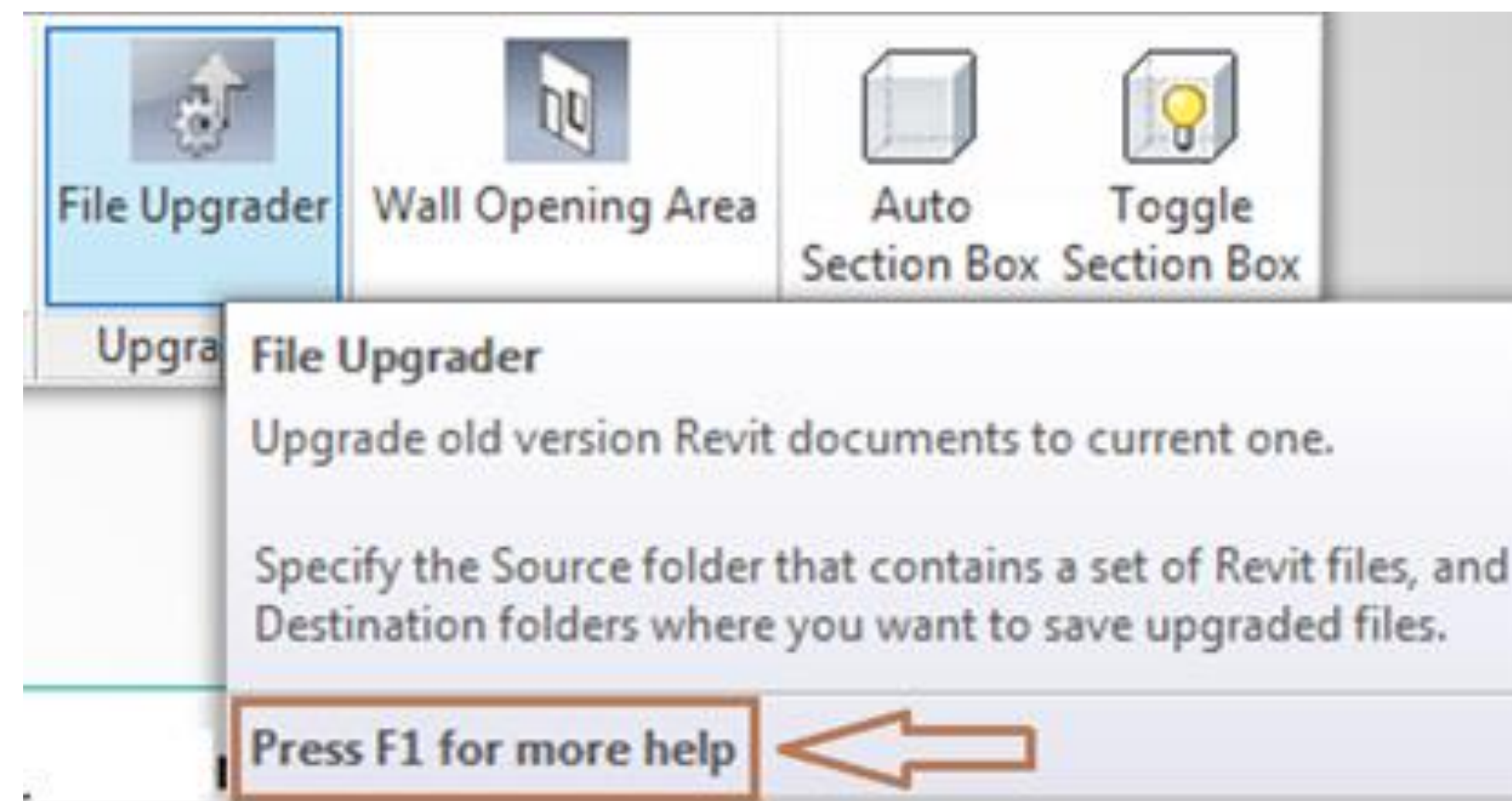


Revit Addin (Plugin)

You can use **setContextualHelp** method to implement the **F1** Help



- External help page
- Local help file
- Autodesk help documentation



Revit is one of the available remote engines in Forge Design Automation

Design Automation API for Revit



Build cloud-native apps and services that create, extract, and modify Revit data

The Design Automation API for Revit imposes few restrictions on your AppBundles, Activities and Workitems

App Bundle in Autodesk Products

❖ 3ds Max





3ds Max

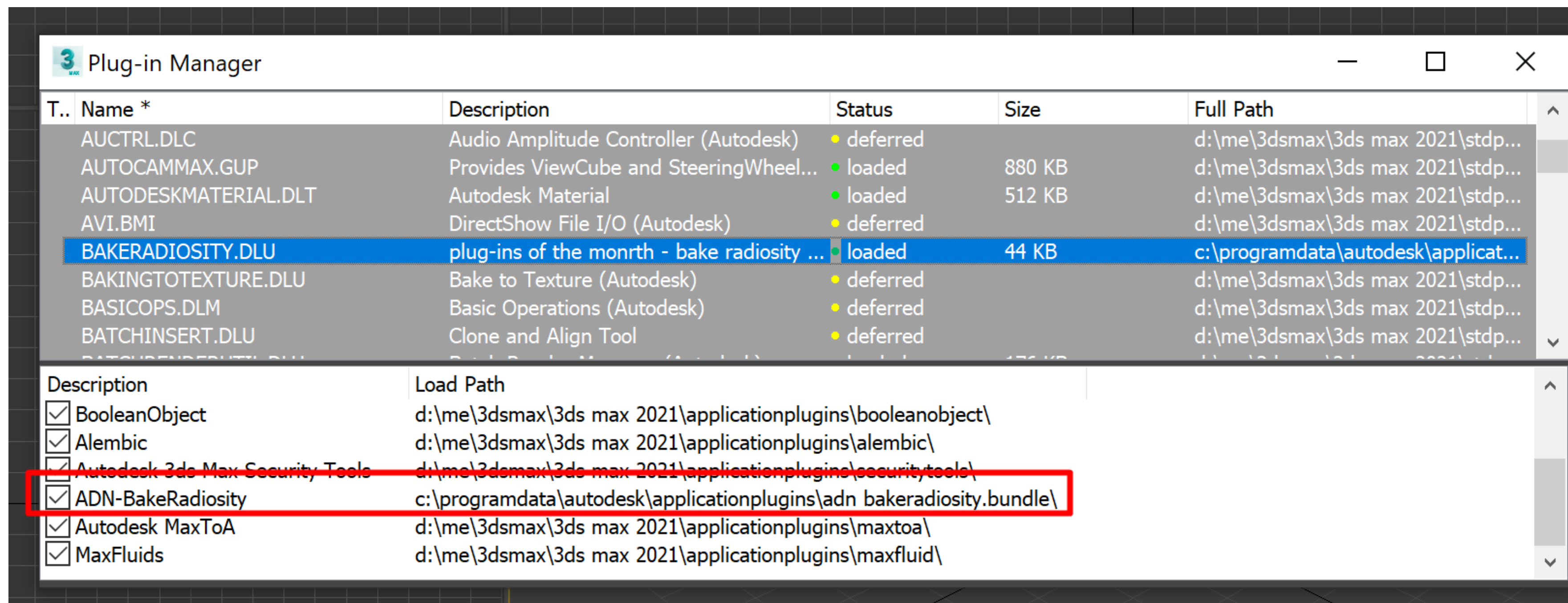
- **Online Documentation**
 - http://help.autodesk.com/view/MAXDEV/2021/ENU/?guid=__developer_writing_plug_ins_packaging_plugins_html
 - 3ds Max refers to the “App Bundle” format as “Autodesk Application Plug-in Package Format Specification”
- **Components section has many 3ds Max specific tags**
 - Plugins and more can be specified here:
 - MAXScript, Python, .NET, C++)
 - OSL and AMG shaders
 - Scene Converter
- **Make sure to specify Product and Upgrade codes**
- **In the future, 3ds Max will support updates versions in the SeriesMin and SeriesMax specifiers**





3ds Max

- **Plugin Manager includes app bundle loaded plugins**
 - Supports mainly C++ plugins
 - Does not show .NET, or scripts
 - Has a programming interface for both scripting and API access



App Bundle in Autodesk Products

❖ Maya





Maya

Since Maya 204

AUTOLOAD

```
<Components>
...
  <ComponentEntry ModuleName="./Contents/plugin-ins/myNode.py" AutoLoad="True" />
...
```

AUTOLOAD ONCE

```
<Components>
...
  <ComponentEntry ModuleName="./Contents/plugin-ins/myNode.py" AutoLoadOnce="True"
/>
...
```

PRODUCT CODE

```
...
  ProductCode="*"
...
```





Maya

ENVIRONMENT VARIABLES

```
...
<Components>
  <RuntimeRequirements SupportPath="./Contents/docs" OS="win64|macOS|linux" Platform="Maya" SeriesMin="2018" SeriesMax="2020"
  ToolPalettePath="..." />
  <MayaEnv expr="MAYA_SCRIPT_PATH+=shelves" />
  <ComponentEntry .../>
...<Components>
  <RuntimeRequirements SupportPath="./Contents/docs" OS="win64" Platform="Maya" SeriesMin="2020" SeriesMax="2020" />
  <MayaEnv expr="MAYA_PLUG_IN_PATH+=plug-ins/win64-2020" />
  <ComponentEntry ModuleName="./Contents/plug-ins/win64-2020/3dsImport.mll"/>
  <ComponentEntry ModuleName="./Contents/plug-ins/win64-2020/audioWave.mll"/>
  <ComponentEntry ModuleName="./Contents/plug-ins/win64-2020/closestPointOnCurve.mll"/>
  ...
...<Components>
  <RuntimeRequirements SupportPath="./Contents/docs" OS="win64|macOS|linux" Platform="Maya" SeriesMin="2020" SeriesMax="2020" />
  <MayaEnv expr="MAYA_SCRIPT_PATH+=scripts-2020" />
  <ComponentEntry ModuleName="./Contents/scripts-2020/bonusToolsMenu.mel" />
  <ComponentEntry ModuleName="./Contents/scripts-2020/MayaBonusTools_load.mel" />
  <ComponentEntry ModuleName="./Contents/scripts-2020/bonusToolsHelp.mel" />
</Components>
...
```

App Bundle in Autodesk Products

❖ Inventor





Inventor

ADDINS ARCHITECTURE

```
<?xml version="1.0" encoding="utf-8"?>
<Addin Type="Standard">
<!--Created for Autodesk Inventor Version 17.0-->
<ClassId>{51e6ad8e-5eaa-42a1-b845-a68802a26231}</ClassId>
<ClientId>{51e6ad8e-5eaa-42a1-b845-a68802a26231}</ClientId>
<DisplayName>MySampleAddIn</DisplayName>
<Description>My favorite addin for Inventor that helps a lot</Description>
<Assembly>SampleAddIn.dll</Assembly>
<OSType>Win64</OSType>
<LoadAutomatically>1</LoadAutomatically>
<UserUnloadable>1</UserUnloadable>
<Hidden>0</Hidden>
<SupportedSoftwareVersionGreaterThan>20..</SupportedSoftwareVersionGreaterThan>
<SupportedSoftwareVersionLessThan>25..</SupportedSoftwareVersionLessThan>
<DataVersion>1</DataVersion>
<LoadBehavior>2</LoadBehavior>
<UserInterfaceVersion>1</UserInterfaceVersion>
</Addin>
```

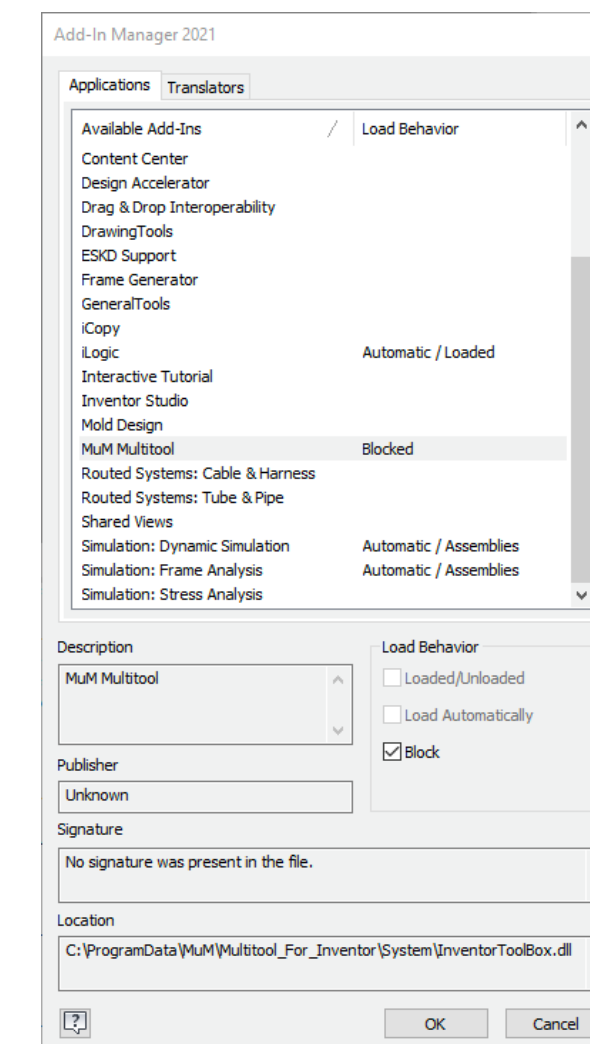


myAddin.addin

✓ Addin info: <http://help.autodesk.com/view/INVNTOR/2020/ENU/?guid=GUID-52422162-1784-4E8F-B495-CDB7BE9987AB>



ADDIN MANAGER



App Bundle in Autodesk Products

❖ Navisworks





Navisworks

APP BUNDLE MANIFEST

```
<?xml version="1.0" encoding="utf-8"?>
<ApplicationPackage SchemaVersion="1.0" AutodeskProduct="Navisworks" Name="Properties+"
  Description="Customisable properties window." AppVersion="2.2.1" FriendlyVersion="2.2.1"
  ProductType="Application" SupportedLocales="Enu" AppNameSpace="appstore.exchange.autodesk.com"
  OnlineDocumentation="http://www.autodesk.com" Author="Autodesk Inc."
  ProductCode="{CBE3D3EF-62A5-4616-AE7A-9307F73B81C9}" UpgradeCode="{CC21DB3A-A7D8-4893-81FB-48D1E3285579}"
  HelpFile="./Contents/Resources/en-US/help.html" Icon="./Contents/Resources/icon.png">
  <CompanyDetails Name="Autodesk, Inc." Url="http://www.autodesk.com" Email="navisworks.addins@autodesk.com" />
  <Components>
    <RuntimeRequirements OS="Win64" Platform="NAVMAN|NAVSIM" SeriesMin="Nw12" SeriesMax="Nw12" />
    <ComponentEntry AppName="Properties+" AppType="ManagedPlugin" Version="2.2.1"
      ModuleName="./Contents/v12/PropertiesPlus.ADSK.dll" AppDescription="Properties+" />q
  </Components>
  ...
  <RuntimeRequirements OS="Win64" Platform="NAVMAN|NAVSIM" SeriesMin="Nw18" SeriesMax="Nw18" />
  <ComponentEntry AppName="Properties+" AppType="ManagedPlugin" Version="2.2.1"
    ModuleName="./Contents/v18/PropertiesPlus.ADSK.dll" AppDescription="Properties+" />
  </Components>
</ApplicationPackage>
```

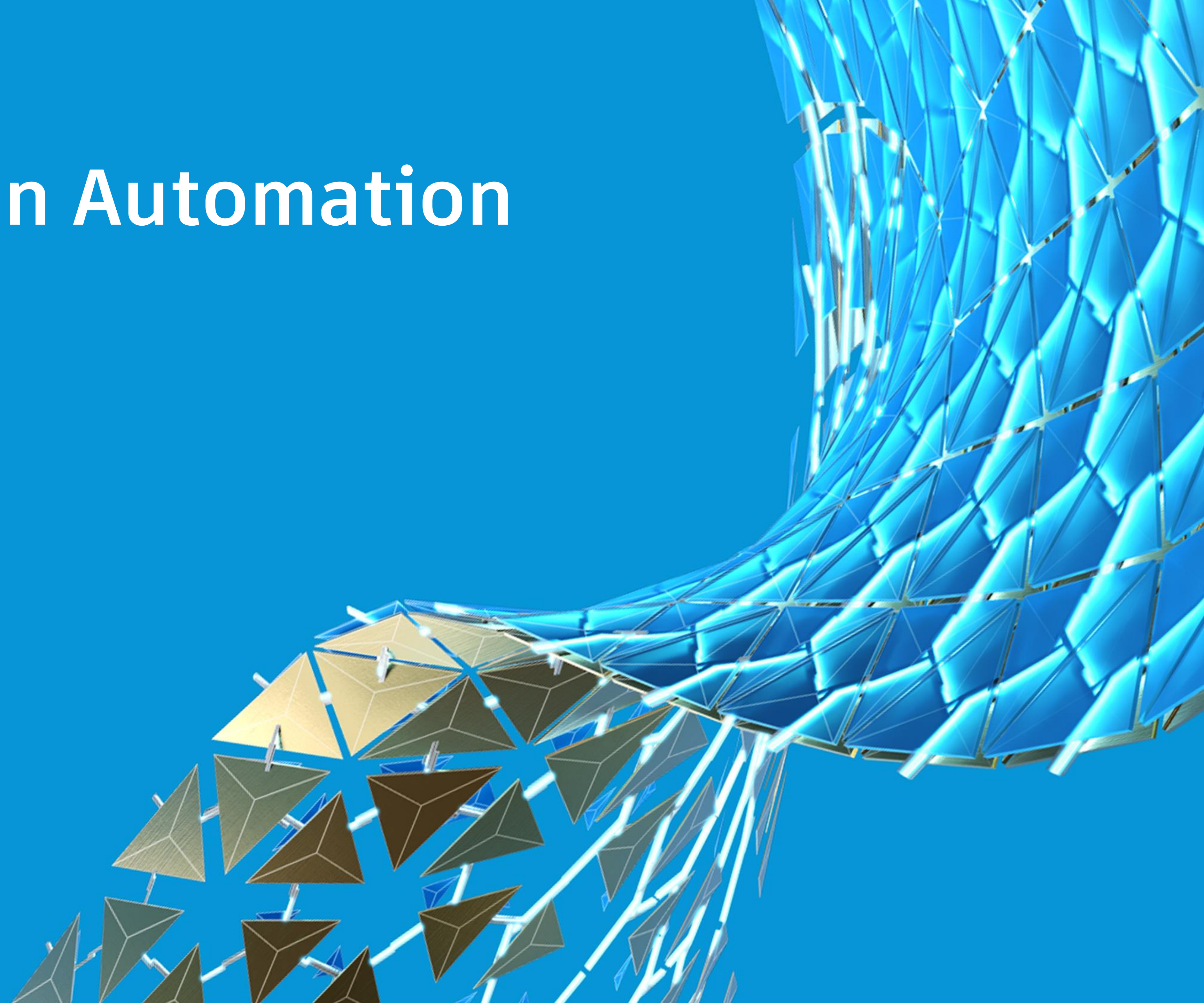


packageContents.xml

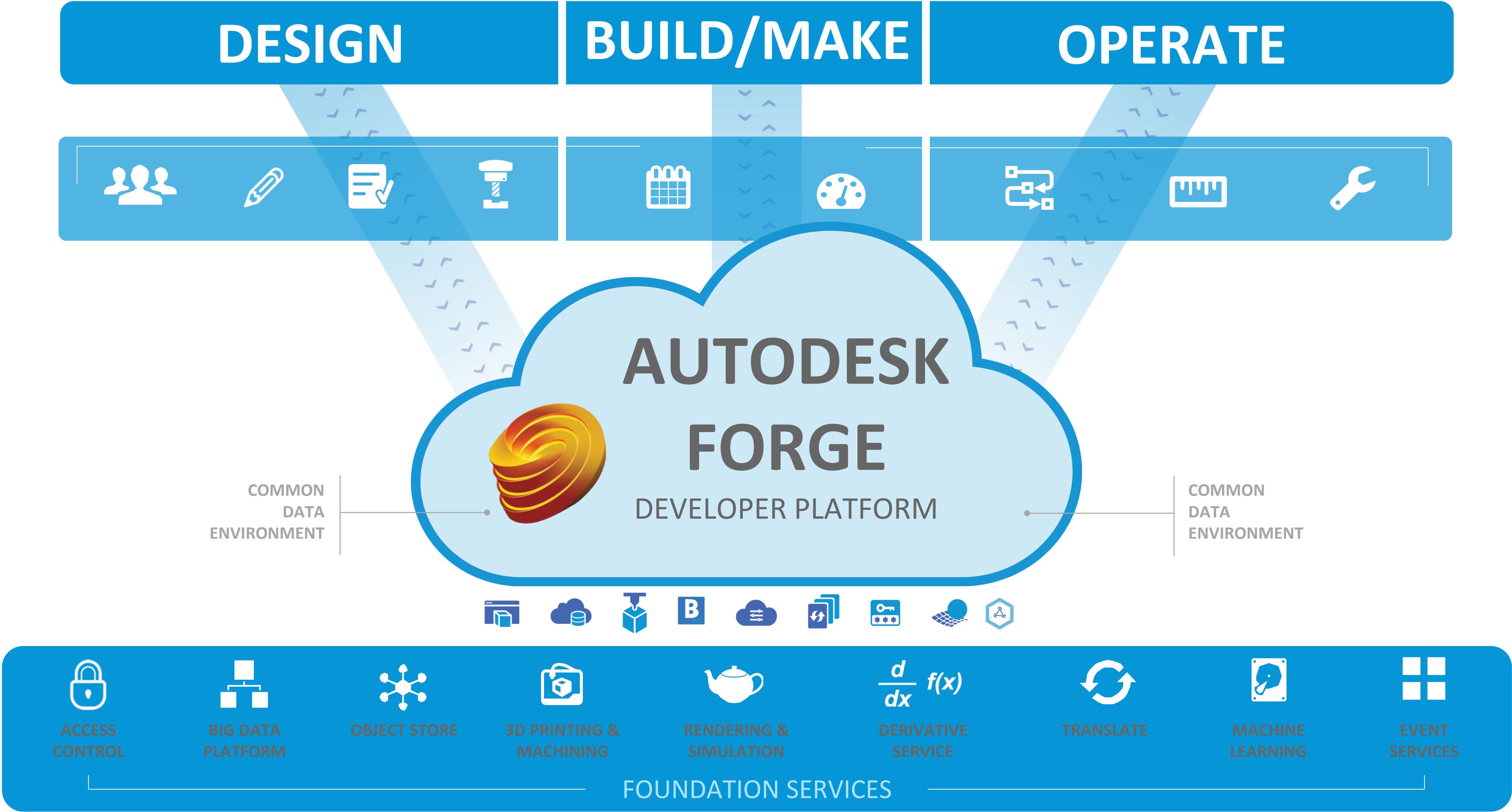
✓ More info: <https://www.autodesk.com/developer-network/app-store/navisworks>

Forge Design Automation

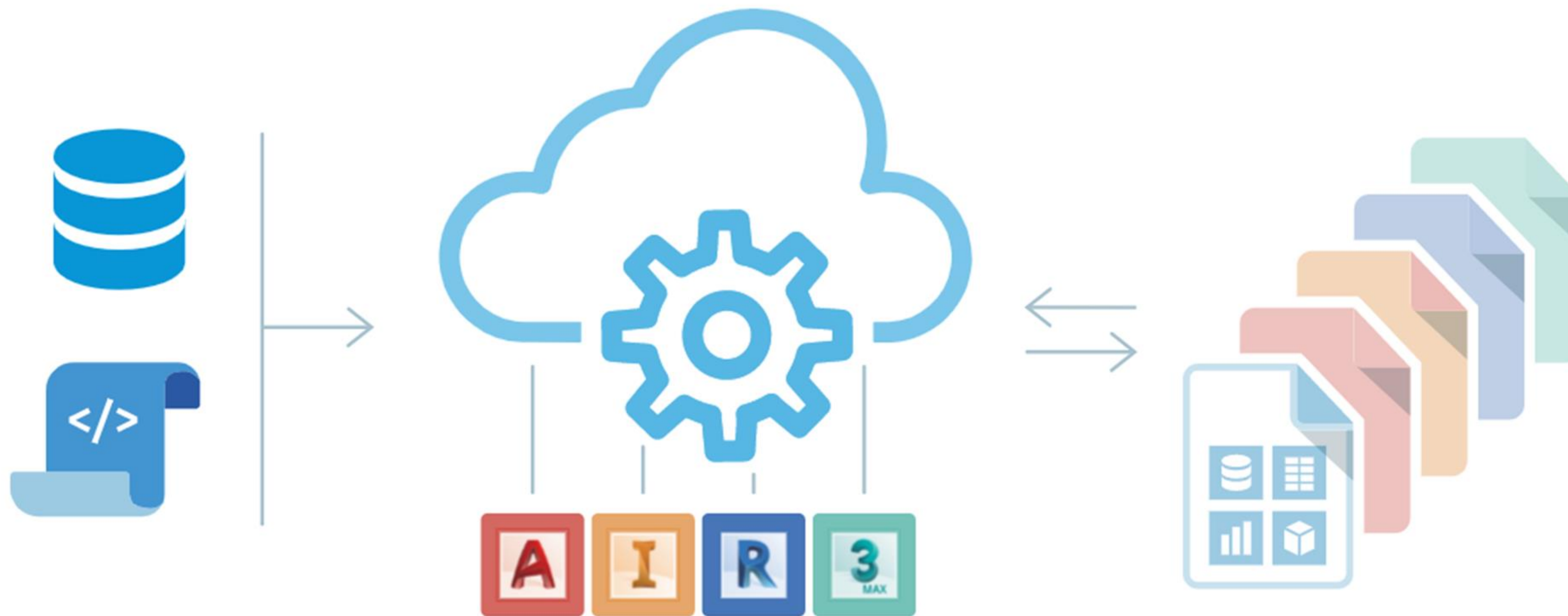
- ❖ Definition
- ❖ Samples
- ❖ Workflow



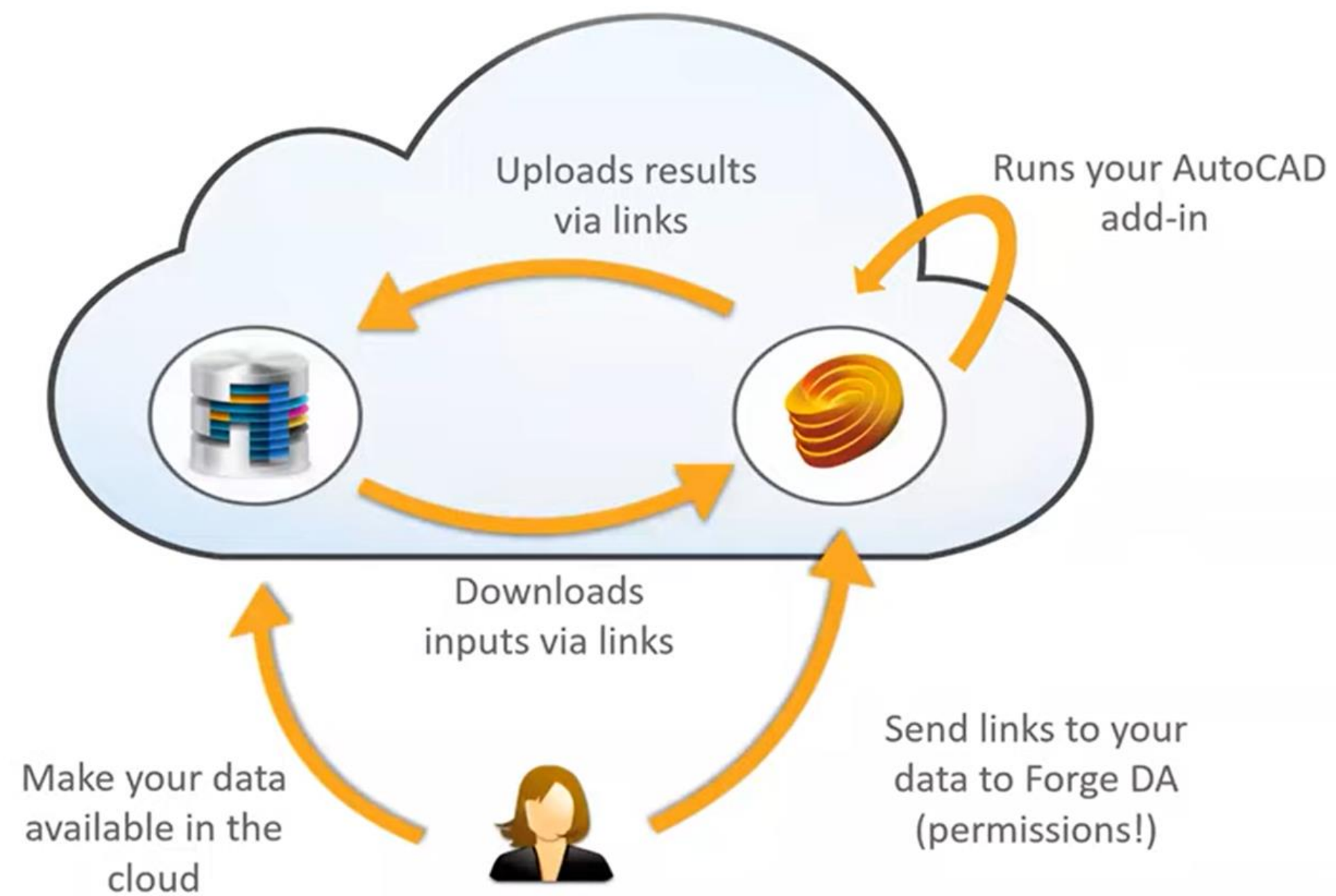
Forge Ecosystem



Forge Design Automation



Forge Design Automation Workflow



i Input/outputs are **NOT** stored, they are downloaded/processed and **DISCARDED**

APP BUNDLE

ACTIVITY

Specification of:

- input (number of files)
- App Bundle
- Engine
- output URL

WORKITEM

References one specific Activity



1.Upload App Bundle 2.Create Activity 3.Create Workitem 4. Wait for completion 5. Download results

Getting help



Don't hesitate to contact us! ✓

- Documentation:
 - www.autodesk.com/developapps
 - Autodesk product specific documentation: AutoCAD, 3ds Max, Revit,...
 - [ADN](#) Forums and Support
 - Blogs, articles and more links at the end of the [Hand-out](#)
- App Store Team - appsubmissions@autodesk.com
- Forge Team - forge.help@autodesk.com
and stay tuned to Forge events on the web!





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