



# ANARK NX ADAPTER

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## SUPPORTED FEATURES WITHIN THE ANARK NX ADAPTER

| Anark Advanced MBD CAD Adapter Feature Support for NX Files |   |           |  |
|---|---|-----------|--|
| Last Date Validated:  | 9/26/2024   |           |  |
| File Types Supported:                                       | .prt  |           |  |
| Multi-CAD Supported Features                                |   |           |  |
| Category  | Feature Name  | Supported | Notes  |
| Product Geometry  | Part Geometry   | YES       |  |
| Product Geometry  | Part Bodies   | YES       |  |
| CAD Entity Color  | Part Body Color (color per body)  | YES       |  |
| CAD Entity Color  | Part color  | YES       |  |
| CAD Entity Color  | Part Face color   | YES       |  |
| CAD Entity Color  | Assembly Occurrence face color (set at assembly level)                        | NO        |  |
| CAD Entity Color  | Assembly Occurrence part color (set at assembly level)                        | PARTIAL   | - NX Specific: Assembly occurrence part color partially supported when using "Synchronize Subassembly Properties -> Display" |
| CAD Entity Color  | Component Transparency/Opacity  | NO        |  |
| CAD Entity Color  | GDT Color   | YES       |  |
| CAD Entity Color  | Supplemental Geometry Color   | PARTIAL   | ANARK DOESN'T IMPORT DATUM PLANE COLOR   |
| Product Metadata  | Product Attributes (Custom Parameters, File Properties, etc)                  | YES       |  |
| Product Metadata  | Semantic Attributes for GD&T  | YES       |  |
| Supplemental Geometry                                       | Datum Planes  | YES       |  |
| Supplemental Geometry                                       | Fixed Size Datum Planes   | YES       |  |
| Supplemental Geometry                                       | Axis Systems  | YES       |  |
| Supplemental Geometry                                       | Fixed Size Axis Systems   | YES       |  |
| Supplemental Geometry                                       | Dashed lines: axes, witness lines, etc  | PARTIAL   |  |
| Supplemental Geometry                                       | Supp Geometry Surfaces  | YES       |  |
| GD&T  | Flat to screen notes  | YES       |  |
| GD&T  | Graphical GD&T (3D dimensions, tolerances, notes, tables, weld symbols, etc)  | YES       |  |
| GD&T  | GD&T->Part Associations   | YES       |  |
| GD&T  | GD&T->Occurrence Associations   | YES       |  |
| GD&T  | GD&T->Face Associations   | YES       |  |
| GD&T  | GD&T->Occurrence Face Associations  | YES       |  |
| GD&T  | GD&T->FEATURE CONTROL FRAMEGTOL Datum Reference Associations                  | YES       | Implicit associations; user not required to define in CAD  |
| GD&T  | GD&T->Datum Associations  | YES       |  |
| GD&T  | GD&T->Supp Geometry Associations  | YES       |  |
| GD&T  | GD&T->Edge Associations   | YES       |  |
| Views   | Views   | YES       |  |
| Views   | Entity visibility; ability to hide/show various entities in a view or capture | YES       |  |
| Views   | View Placement (ie. Exploded)   | YES       |  |
| Views   | Views with Folded and Flat Patterns (Supporting Sheet Metal)                  | NO        |  |
| Views   | Views with Complex Sections   | YES       |  |
| Views   | View-Specific Bodies  | YES       |  |
| Cross Sections  | Cross Sections: Single Plane  | YES       |  |
| Cross Sections  | Cross Sections: 2 Plane (NX + JT Only)  | YES       |  |
| Cross Sections  | Cross Sections: Box (NX + JT Only)  | YES       |  |
| Cross Sections  | Cross Sections: Selective Sections  | NO        |  |
| NX/JT Specific Supported Features                           |   |           |  |
| NX  | Apply Reference Sets to All Assembly Levels                                   | YES       |  |
| NX  | Import Scope, Tables and Legacy PMI   | YES       |  |
| NX  | Import Scope, Layers  | YES       |  |
| NX  | Import Scope, Reference Sets  | YES       |  |
| NX  | Import Scope, Section Views   | NO        |  |
| NX  | Merge Bodies  | YES       |  |
| NX  | Cross Section Specifics   | YES       |  |
| Import / Output and Other Options                           |   |           |  |
| Anark Collaborate   | Importable to Anark Collaborate without Desktop publishing                    | NO        |  |
| Output Option   | GD&T Show On Top  | NO        |  |
| Import Options  | Level Of Detail Settings  | YES       |  |
| Import Options  | Import Scope, GD&T  | NO        |  |
| Import Options  | Import Scope, Supplemental Geometry   | YES       |  |
| Import Options  | Import Scope, Attributes  | YES       |  |
| Import Options  | Import only Entities Shown in Views   | YES       |  |
| Import Options  | Ignore "Suppressed" Entities  | NO        |  |
| Import Options  | Combine Disjoint Bodies   | YES       |  |



## SUPPORTED FEATURES WITHIN THE ANARK JT ADAPTER

| Anark Advanced MBD CAD Adapter Feature Support for JT Files |   |           |  |
|---|---|-----------|--|
| Last Date Validated:  | 9/26/2024   |           |  |
| File Types Supported:                                       | .jt   |           |  |
| Multi-CAD Supported Features                                |   |           |  |
| Category  | Feature Name  | Supported | Notes  |
| Product Geometry  | Part Geometry   | YES       |  |
| Product Geometry  | Part Bodies   | YES       |  |
| CAD Entity Color  | Part Body Color (color per body)  | YES       |  |
| CAD Entity Color  | Part color  | YES       |  |
| CAD Entity Color  | Part Face color   | YES       |  |
| CAD Entity Color  | Assembly Occurrence face color (set at assembly level)                        | NO        |  |
| CAD Entity Color  | Assembly Occurrence part color (set at assembly level)                        | PARTIAL   | - JT Specific: Assembly occurrence part color partially supported when using "Synchronize Subassembly Properties -> Display" |
| CAD Entity Color  | Component Transparency/Opacity  | NO        |  |
| CAD Entity Color  | GDT Color   | YES       |  |
| CAD Entity Color  | Supplemental Geometry Color   | PARTIAL   | ANARK DOESN'T IMPORT DATUM PLANE COLOR   |
| Product Metadata  | Product Attributes (Custom Parameters, File Properties, etc)                  | YES       |  |
| Product Metadata  | Semantic Attributes for GD&T  | YES       |  |
| Supplemental Geometry                                       | Datum Planes  | YES       |  |
| Supplemental Geometry                                       | Fixed Size Datum Planes   | YES       |  |
| Supplemental Geometry                                       | Axis Systems  | YES       |  |
| Supplemental Geometry                                       | Fixed Size Axis Systems   | YES       |  |
| Supplemental Geometry                                       | Dashed lines: axes, witness lines, etc  | NO        |  |
| Supplemental Geometry                                       | Supp Geometry Surfaces  | YES       |  |
| GD&T  | Flat to screen notes  | YES       |  |
| GD&T  | Graphical GD&T (3D dimensions, tolerances, notes, tables, weld symbols, etc)  | YES       |  |
| GD&T  | GD&T->Part Associations   | NO        |  |
| GD&T  | GD&T->Occurrence Associations   | NO        |  |
| GD&T  | GD&T->Face Associations   | NO        |  |
| GD&T  | GD&T->Occurrence Face Associations  | NO        |  |
| GD&T  | GD&T->FEATURE CONTROL FRAME/TOL Datum Reference Associations                  | NO        | Implicit associations; user not required to define in CAD  |
| GD&T  | GD&T->Datum Associations  | YES       |  |
| GD&T  | GD&T->Supp Geometry Associations  | NO        |  |
| GD&T  | GD&T->Edge Associations   | YES       |  |
| Views   | Views   | YES       |  |
| Views   | Entity visibility; ability to hide/show various entities in a view or capture | YES       |  |
| Views   | View Placement (ie. Exploded)   | YES       |  |
| Views   | Views with Folded and Flat Patterns (Supporting Sheet Metal)                  | NO        |  |
| Views   | Views with Complex Sections   | NO        |  |
| Views   | View-Specific Bodies  | NO        |  |
| Cross Sections  | Cross Sections: Single Plane  | YES       |  |
| Cross Sections  | Cross Sections: 2 Plane (NX + JT Only)  | NO        |  |
| Cross Sections  | Cross Sections: Box (NX + JT Only)  | NO        |  |
| Cross Sections  | Cross Sections: Selective Sections  | NO        |  |
| NX/JT Specific Supported Features                           |   |           |  |
| NX  | Merge Bodies  | NO        |  |
| NX  | Brep/precise or lightweight import options                                    | YES       |  |
| Import / Output and Other Options                           |   |           |  |
| Anark Collaborate   | Importable to Anark Collaborate without Desktop publishing                    | NO        |  |
| Output Option   | GD&T Show On Top  | NO        |  |
| Import Options  | Level Of Detail Settings  | YES       |  |
| Import Options  | Import Scope, GD&T  | NO        |  |
| Import Options  | Import Scope, Supplemental Geometry   | YES       |  |
| Import Options  | Ignore "Suppressed" Entities  | NO        |  |
| Import Options  | Combine Disjoint Bodies   | NO        |  |

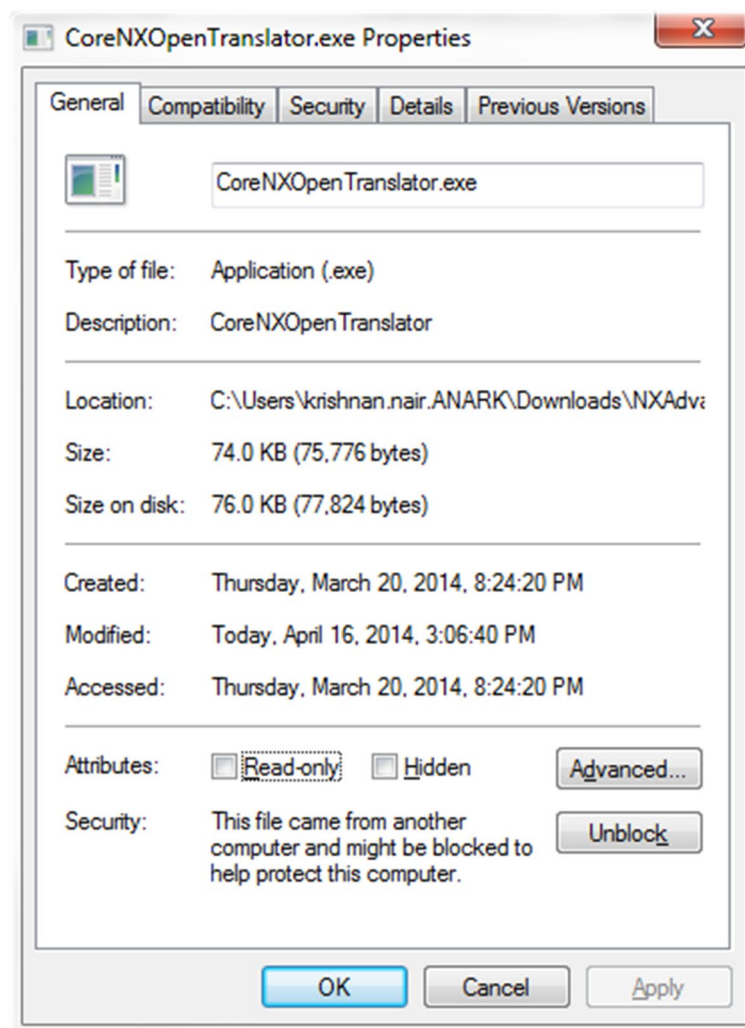


## SECURITY

After **CoreNXOpenTranslator.exe** is extracted from the zip file, right click on the file, select Properties, and check whether there is a security warning (“This file came from another computer and might be blocked to help protect this computer”) as shown below. If there is a warning, click on the “Unblock” button.

*This must be done at most once for each file and then the exe files can be copied to different machines.*

If you do not perform this step, a translator which is built on .NET will not run as a full trust application and the import will fail. The warning is created by the built-in Windows zip extractor tool, so this might not be an issue if you use another tool to extract the zip file.



## ANARK WORKSTATION INSTRUCTIONS

The Anark NX Adapter for Anark Workstation uses the NX Open API to translate NX files. Therefore, a working version of NX from one of the following released series: **NX2206 Series (NX2206.9220), NX2212 Series (NX2212.9140), NX2306 Series(NX2306.8900), NX2312 Series(NX2306.7022) , NX2406 (NX2406.6000), NX2412 (NX2412.1700)** must be installed on the same machine as Anark Workstation to use the adapter. Also, NX Open libraries require .NET Framework 4.7.2 (if it is not installed on the computer, it can be obtained from the Microsoft download center <https://www.microsoft.com/en-us/download/details.aspx?id=49981>).

**For the NX2306 Series, we do not recommend using versions earlier than NX2306.7002.**

NX license features that are required to run the Anark NX Adapter include:

- "gateway"
- "solid\_modeling"
- "geometric\_tol"
- "assemblies"

To install the Anark NX Adapter for Anark Workstation:

1. Copy the file **CoreNXOpenTranslator.exe** to the folder where Anark Workstation is installed.
2. This step is required the first time that the Anark NX Adapter is installed, and it is not necessary to perform this step when upgrading. If the file, **NXAdvancedFormat.dll.config**, does not already exist in the **[Anark Workstation installation path]\Formats** folder, copy it from the ZIP into the **[\*]\Formats** folder.
3. Verify that "NXBaseDirectory" in the file, **NXAdvancedFormat.dll.config** (XML file) -- (which is located in the **[Anark Workstation installation path]\Formats** folder), is set to the appropriate installed Version of NX ( *by default, it is set to:*  
*C:\Program Files\Siemens\NX2206* ).

*If NX is installed in a different folder, or if a different version of NX is installed, modify the value element in the XML file to represent the appropriate installed location/Version of NX:*

```
<NXAdvancedFormat.Settings1>
  <setting name="NXBaseDirectory" serializeAs="String">
    <value>C:\Program Files\Siemens\NX 2312</value>
  </setting>
</NXAdvancedFormat.Settings1>
```

4. To load the NX file, select the "NX Advanced MBD" format from Import file dialog before loading the file.



## ANARK PUBLISH INSTRUCTIONS

The Anark NX Adapter for Anark Publish uses the NX Open API to translate NX files.

A working version of NX from one of the following released series **NX2206 Series (NX2206.9220), NX2212 Series (NX2212.9140), NX2306 Series(NX2306.8900), NX2312 Series(NX2306.7022) , NX2406 (NX2406.6000), NX2412 (NX2412.1700)** must be installed on the same machine as Anark Workstation to use the adapter. Also, NX Open libraries require .NET Framework 4.7.2 (if it is not installed on the computer, it can be obtained from the Microsoft download center <https://www.microsoft.com/en-us/download/details.aspx?id=49981>).

**For the NX2306 Series, we do not recommend using versions earlier than NX2306.7002.**

NX license features that are required to run the Anark NX Adapter include:

- “gateway”
- “solid\_modeling”
- “geometric\_tol”
- “assemblies”

To install the Anark NX Adapter for Anark Publish:

1. Copy the file **CoreNXOpenTranslator** to the folder **[Anark Publish installation path]\CadTransformerWebInterface\bin\**.
2. This step is required the first time that the Anark NX Adapter is installed, and it is not necessary to perform this step when upgrading. If the file, **NXAdvancedFormat.dll.config**, does not already exist in the **[Anark Publish installation path]\CadTransformerWebInterface\bin\Formats** folder, copy it from the ZIP to the **[\*]\CadTransformerWebInterface\bin\Formats** folder.
3. Verify that “NXBaseDirectory” in the file, **NXAdvancedFormat.dll.config** (XML file) – (located in **[Anark Publish installation path]\CadTransformerWebInterface\bin\Formats** folder), is set to the appropriate installed Version of NX ( *by default, it is set to:*  
*C:\Program Files\Siemens\NX 1980* ).

*If NX is installed in a different folder, or if a different version of NX is installed, modify the value element in the XML file to represent the appropriate installed location/Version of NX:*

```
<NXAdvancedFormat.Settings1>
  <setting name="NXBaseDirectory" serializeAs="String">
    <value>C:\Program Files\Siemens\NX 2312</value>
  </setting>
</NXAdvancedFormat.Settings1>
```

