Autodesk®
Navisworks® 2010

Supported Applications

Autodesk®

Autodesk Navisworks 2010 Solutions

This document details support provided by the current release of Autodesk Navisworks 2010 solutions (including Autodesk Navisworks Review, Autodesk Navisworks Simulate and Autodesk Navisworks Manage) for:

- CAD file formats.
- Laser scan formats.
- CAD applications.
- Scheduling software.

NOTE: When referring to Navisworks or Autodesk Navisworks 2010 solutions in this document this does NOT include Autodesk Navisworks Freedom 2010, which only reads NWD or 3D DWF files.

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Contents

Supported CAD File Formats

Navisworks has its own native file formats (.nwd, .nwf, .nwc); however Autodesk Navisworks solutions can additionally read a combination of many popular 3D CAD formats. The following table lists the CAD file formats currently supported by Autodesk Navisworks 2010 solutions.

Format	Extension	Format	Extension
Navisworks	.nwd .nwf .nwc	IGES	.igs .iges
AutoCAD	.dwg, .dxf	Inventor	.ipt .iam. ipj
MicroStation (SE, J, V8 & XM)	.dgn .prp .prw	Informatix MicroGDS	.man .cv7
3D Studio	.3ds .prj	JT Open[1]	.jt
ACIS SAT	.sat	RVM	.rvm
CIS/2	.stp	SketchUp	.skp
DWF	.dwf	STEP	.stp .step
PDS Design Review	.dri	STL	.stl
IFC	.ifc	VRML	.wrl .wrz

[1] JT Open support to JT Open specification v8i rev B.

Supported Laser Scan Formats

The following table lists the laser scan formats currently supported by Autodesk Navisworks 2010 solutions.

Format	Extension
ASCII Laser File	.asc .txt
Faro	.fls .fws .iQscan .iQmod .iQwsp
Leica	.pts .ptx
Riegl	.3dd
Trimble	Native file NOT supported. Convert to ASCII laser file
Z+F	.zfc .zfs

Supported Applications

The following table is a non-exhaustive list of CAD applications and properties currently supported by Autodesk Navisworks 2010 solutions, along with any additional information that may be necessary to review your project files in Navisworks software.

	Exporter	Native Format	Other Format	Properties
Autodesk				
AutoCAD 2004 to 2010	✓	✓	✓	✓

AutoCAD Details

Other Formats	DXF, 3DS

- Models can be exported from AutoCAD software as either .nwc or .nwd format.
- Navisworks also supports the native AutoCAD .dwg file format, which can be read directly into Navisworks.
- Object properties, (such as Material Colors and Entity Handles) are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
ADT 3.3 to 2007, AutoCAD Architecture 2008-2010	✓	✓	✓	✓

AutoCAD Architecture Details

Other Formats	DXF, 3DS

- Navisworks can read AutoCAD Architecture 2010 .dwg files, without the necessity to install an Object Enabler.
- In order to read an ADT 2004 to 2007 or AutoCAD Architecture 2008 to 2009 .dwg file into Navisworks, you will need to install the corresponding Object Enabler. For ADT 2007 and AutoCAD Architecture 2008 to 2009 this applies even if you have the application installed.
- In order to read an ADT 3.3.dwg file into Navisworks, you need the ADT2004 (or later) object enabler installed on the same machine.

NOTE: When using an object enabler, ensure the corresponding loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.

- From ADT/AutoCAD Architecture software you can export to .nwc or .nwd.
- Navisworks supports AutoCAD Architecture object properties and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**. Automatic Properties are also supported for AutoCAD Architecture.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage software support ADT/AutoCAD Architecture textures.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
Building Systems, AutoCAD MEP 2008-2010	✓	✓	✓	✓

AutoCAD MEP Details

Other Formats	DXF, 3DS

- Navisworks can read AutoCAD MEP 2010 .dwg files, without the necessity to install an Object Enabler.
- In order to read a Building Systems 2007 or AutoCAD MEP 2008 to 2009 .dwg file into Navisworks, you will need to install the corresponding Object Enabler.
- In order to read an earlier version (pre-2007) Building Systems .dwg file into Navisworks, you need the Building Systems 2007 (or later) object enabler installed on the same machine.

NOTE: When using an object enabler, ensure the corresponding loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.

- From Building Systems/AutoCAD MEP software you can export to .nwc or .nwd.
- Navisworks supports Building Systems/AutoCAD MEP object properties and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
Autodesk Inventor 5 to 11, 2009-2010	✓	✓		

Inventor Details

Other Formats	IGES, STEP, JT

- Navisworks 2010 now supports Inventor properties and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
- In order to read an Inventor software file into Navisworks, you either need Inventor 5 (or higher), Inventor Design Tracking 5 (or higher), or Inventor View installed on the same machine as Navisworks (you'll need to install either the same or later version relevant to the file you wish to read). Inventor View can be downloaded from support.autodesk.com.
- If you are using an Inventor Project file, (*.ipj) you will need to set this as the Active Project in Navisworks, prior to opening your assembly drawings (*.iam). You can set the Active Project either by opening your *.ipj file in Navisworks, or by going to **Tools > Global Options > File Formats > Inventor**, then enter the full path and file name of your *.ipj file (e.g. C:\my Inventor projects\project 1.ipj). Once loaded, you can then Open the corresponding assembly drawing(s) as usual.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
AutoCAD Civil 3D 2004-2010	✔	✔	✔	✔

Civil 3D Details

Other Formats	DXF, 3DS

- The Civil 3D native .dwg file can be read directly into ~~Navisworks,~~Navisworks; however you will need to install the Civil 3D Object Enabler (available to download from the Autodesk website).
- You can export a file from Civil 3D software to .nwc or .nwd.
- For Civil 3D 2010 object properties (such as Material Colors and Entity Handles) are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
MDT 6 to 2009	✔	✔	✔	✔

MDT Details

Other Formats	DXF, 3DS, VRML

- The MDT native .dwg file can be read directly into ~~Navisworks,~~Navisworks; however you will need to install the MDT Object Enabler (available to download from the Autodesk website).
- You can export a file from MDT software to .nwc or .nwd. This is the preferred route to Navisworks due to the extra properties that are now supported.
- Object properties, (such as Material Colors and Entity Handles) are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
Revit 4 to 7			✔	✔

Revit Details

Other Formats	DWG, DXF, DGN

- Revit platform files can be viewed in Navisworks if they have been saved as either a .dwg, .dxf, or .dgn file format.
- If you use the .dwg Export out of Revit 6 and 7, then object properties such as Element ID, Type and Category are supported.

	Exporter	Native Format	Other Format	Properties
Revit Building 8.1 to 9.1, Revit Architecture 2008-2010	✔		✔	✔

Revit Architecture Details

Other Formats	DWG, DXF, DGN

- Navisworks can export .nwc files directly from Revit Building/Revit Architecture software.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

You will need to install Navisworks on the same machine as Revit Building/Revit Architecture.
- Revit properties are supported. These can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage software support the export of textures and materials from Revit Architecture.

Revit Structure 2 to 4, 2008-2010	✓		✓	✓

Revit Structure Details

Other Formats	DWG, DXF, DGN, CIS/2

- Navisworks can export .nwc files directly from Revit Structure software.
  You will need to install Navisworks on the same machine as Revit Structure.
- Revit properties are supported. These can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

Revit Systems, MEP 2008-2010	✓		✓	✓

Revit MEP Details

Other Formats	DWG, DXF, DGN

- Navisworks can export .nwc files directly from Revit Systems/Revit MEP software. You will need to install Navisworks on the same machine as Revit Systems/Revit MEP.
- Revit properties are supported. These can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

Autodesk 3ds Max 3 to 2010	✓		✓	

3ds Max Details

Other Formats	DWG, DXF, 3DS, IGES

- To view your 3ds Max model in Navisworks, you will need to have 3ds Max software installed on the same machine. Then, simply export to .nwc for use in Navisworks.
- Navisworks does not support .max files, so you cannot read the native file format directly into Navisworks.

NOTE: Navisworks Simulate and Manage both support the export of textures and materials from 3ds Max.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
Autodesk VIZ 4 to 2008	✓		✓	

Viz Details

Other Formats	DWG, DXF, 3DS

- To view your VIZ model in Navisworks, you will need to have VIZ software installed on the same machine. Then, simply export to .nwc for use in Navisworks.
- Navisworks does not support .max files, so you cannot read the native file format directly into Navisworks.

NOTE: Autodesk Navisworks Simulate and Autodesk Navisworks Manage both support the export of textures and materials from Autodesk 3ds Max.

	Exporter	Native Format	Other Format	Properties
Autodesk Maya			✓	

Maya Details

Other Formats	DXF, IGES, VRML

- Navisworks has file readers for .dxf, .igs .iges and .wrl .wrz.

Bentley

	Exporter	Native Format	Other Format	Properties
AutoPLANT	✓	✓	✓	✓

AutoPlant Details

Other Formats	DWG, DXF, 3DS

- In order to read an AutoPLANT DWG file into Navisworks, you will first need to install the AutoPLANT Object Enabler.

NOTE: When using an object enabler, choose one of the same or later version as the authoring application, and then ensure the corresponding (Navisworks) loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.

- You can also export to .nwc or .nwd if you have Navisworks installed on the same machine as AutoPLANT.

NOTE: To ensure geometry is rendered correctly when reading a DWG file into Navisworks, or exporting from AutoPLANT, ensure the render type is set to Shaded in **Tools > Global Options > File Readers > DWG/DXF/SAT > Render Type**.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
MicroStation SE	✓	✓	✓	✓

MicroStation SE Details

Other Formats	DWG, DXF, DGN, IGES, VRML

- Models can be exported as NWC or NWD files from MicroStation SE if you have Navisworks installed on the same machine.
- Navisworks supports the native MicroStation .dgn file format, which can be read directly into Navisworks.
- Object properties, such as colors and ambient, diffuse and shininess properties of materials from .pal and .mat palette and material files are supported.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage support MicroStation materials and textures.

NOTE: For optimum file fidelity we recommend the NWC (or NWD) Exporter from within MicroStation whenever possible.

	Exporter	Native Format	Other Format	Properties
MicroStation J	✓	✓	✓	✓

MicroStation J Details

Other Formats	DWG, DXF, DGN, IGES, STEP, VRML

- Models can be exported as NWC or NWD files from MicroStation J if you have Navisworks installed on the same machine.
- Navisworks supports the native MicroStation .dgn file format, which can be read directly into Navisworks.
- Object properties, such as colors and ambient, diffuse and shininess properties of materials from .pal and .mat palette and material files are supported.
- Intergraph PDS object information can be read from .drv files and DMRS and database linkage and association ID's are also supported. These can be viewed in the Properties window. To open the Properties window, go to **View > Control Bars > Properties**.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage support MicroStation materials and textures.

NOTE: For optimum file fidelity we recommend the NWC (or NWD) Exporter from within MicroStation whenever possible.

NOTE: For exporting numerous files from MicroStation we recommend using the Perl script installed with Navisworks (by default in, C:\Program Files\Autodesk\Navisworks [Review/Simulate/Manage] 2010\Tools).

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
MicroStation v8 to 8.5, XM (8.9)	✓	✓	✓	✓

MicroStation v8 Details

Other Formats	DWG, DXF, DGN, IGES, STEP, VRML

- Models can be exported as NWC or NWD files from MicroStation V8 if you have Navisworks installed on the same machine.
- Navisworks supports the native MicroStation V8 dgn file format, which can be read directly into Navisworks.
- Object properties, such as colors and ambient, diffuse and shininess properties of materials from .pal and .mat palette and material files are supported.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage support MicroStation materials and textures.

NOTE: For optimum file fidelity we recommend the NWC (or NWD) Exporter from within MicroStation whenever possible.

NOTE: For exporting numerous files from MicroStation we recommend using the Perl script installed with Navisworks (by default in, C:\Program Files\Autodesk\Navisworks [Review/Simulate/Manage] 2010\Tools).

	Exporter	Native Format	Other Format	Properties
ProSteel 3D (formerly from Kiwi Software GmbH)	✓	✓	✓	

ProSteel 3D Details

Other Formats	DWG, DXF, 3DS, CIS/2

- This information relates to ProSteel 3D / ProStahl 3D / AutoPLANT Structural.
- In order to read ProSteel files into Navisworks, you either need ProSteel 3D installed on the same machine as Navisworks, or the relevant ProSteel 3D object enabler.
- Only basic AutoCAD properties are supported (such as Entity Handle and Material) and these can be viewed in the Properties window. This can be opened by going to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
TriForma J	✓	✓	✓	✓

TriForma J Details

Other Formats	DWG, DXF, DGN, IGES, STEP, VRML

- Models can be exported as NWC or NWD files from Triforma J if you have Navisworks installed on the same machine.
- Navisworks supports the native Triforma J .dgn file format, which can be read directly into Navisworks.
- Object properties, such as colors and ambient, diffuse and shininess properties of materials from .pal and .mat palette and material files are supported.
- Family and Part information from TriForma and PDS object information can be read from .drv files and DMRS and database linkage and association ID's are also

	Exporter	Native Format	Other Format	Properties

supported. These can be viewed in the Properties window. To open the Properties window, go to **View > Control Bars > Properties**.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage support TriForma materials and textures.

NOTE: For optimum file fidelity we recommend the NWC (or NWD) Exporter from within TriForma whenever possible.

NOTE: For exporting numerous files from TriForma we recommend using the Perl script installed with Navisworks (by default in, C:\Program Files\Autodesk\Navisworks [Review/Simulate/Manage] 2010\Tools).

	Exporter	Native Format	Other Format	Properties
TriForma v8 to 8.9	✓		✓	✓

TriForma v8 Details

Other Formats	DWG, DXF, DGN, IGES, STEP, VRML

- Models can be exported as NWC or NWD files from TriForma V8 if you have Navisworks installed on the same machine.
- Navisworks supports the native TriForma V8 dgn file format, which can be read directly into Navisworks.
- Object properties, such as colors and ambient, diffuse and shininess properties of materials from .pal and .mat palette and material files are supported.
- Autodesk Navisworks Simulate and Autodesk Navisworks Manage support TriForma materials and textures.

NOTE: For optimum file fidelity we recommend the NWC (or NWD) Exporter from within TriForma whenever possible.
NOTE: For exporting numerous files from TriForma we recommend using the Perl script installed with Navisworks (by default in, C:\Program Files\Autodesk\Navisworks [Review/Simulate/Manage] 2010\Tools).

Graphisoft

	Exporter	Native Format	Other Format	Properties
ArchiCAD 6.5 to 7	✓		✓	✓

ArchiCAD 6.5 to 7 Details

Other Formats	DWG, DXF, DGN

- ArchiCAD can export to the Navisworks .nwc file format. Navisworks does NOT have a direct reader for ArchiCAD files.
- ArchiCAD can also save files as .dwg, .dxf and .dgn formats. These can be read directly by Navisworks.
- Object properties, such as GUIDS and Library Part Parameters can optionally be exported with the Navisworks file.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
ArchiCAD 8 to 12	✔		✔	✔

ArchiCAD 8 to 11 Details

Other Formats	DWG, DXF, DGN, IFC

- ArchiCAD can export to Navisworks .nwc file format. Navisworks does NOT have a direct reader for ArchiCAD files.
- ArchiCAD can also save files as .dwg, .dxf, .dgn and .ifc formats. These can be read directly by Navisworks.
- Object properties, such as GUIDS and Library Part Parameters can optionally be exported with the Navisworks file.

	Exporter	Native Format	Other Format	Properties
Constructor 2005 to 2007	✔		✔	✔

Constructor Details

Other Formats	DWG, DXF, DGN

- Constructor 2005 can export to the Navisworks .nwc file format. Navisworks does NOT have a direct reader for Constructor 2005 files.
- Object properties, such as GUIDS and Library Part Parameters can optionally be exported with the Navisworks file.

AceCad

	Exporter	Native Format	Other Format	Properties
StruCad			✔	

StruCad Details

Other Formats	DXF, CIS/2

- StruCad files can be viewed in Navisworks, if they have been saved as .dxf or .stp format.
- Object properties are not supported.

auto.des.sys

	Exporter	Native Format	Other Format	Properties
form.z			✔	

form.z Details

Other Formats	DWG, DXF, 3DS, IGES, STL, VRML

- Navisworks supports all of the above file formats, which form.z can export to.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
AEC				
CADPIPE	✓	✓	✓	✓

CADPIPE Details

Other Formats	DWG, DXF, 3DS

- To view CADPIPE object properties in Navisworks, you may need to turn on the Convert Object Properties option. To do this, go to **Tools > Global Options > File Readers > DWG/DXF/SAT > Advanced** and select the CADPIPE option. Any CADPIPE properties can then be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

- CADPIPE 'Industrial' and 'Commercial' cannot be used at the same time. If both are installed, then industrial is used. You can disable either or both by going to **Tools > Global Options > Registry > Current User > CADPIPE**. Change the version you require to one (1) and disable the other version by changing that value to zero (0).

AEVA

	Exporter	Native Format	Other Format	Properties
PDMS			✓	✓

PDMS Details

Other Formats	RVM

- Navisworks can read .rvm files exported from PDMS.
- AVEVA Review .rvs files are also supported. These require the same filename as the .rvm file.
- PDMS attribute files are supported, output using either the 'Dump Attributes' or 'DataIData' formats. These can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

CADopia

	Exporter	Native Format	Other Format	Properties
IntelliCAD			✓	✓

IntelliCAD Details

Other Formats	DWG, DXF

- Navisworks supports the native IntelliCAD .dwg file format, which can be read directly into Navisworks.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
CEA Technology				
Plant-4D			✓	

Plant-4D Details

Other Formats	DWG, DGN

- Navisworks has file readers for .dwg and .dgn files, both of which are supported by Plant-4D.

COADE, Inc.

	Exporter	Native Format	Other Format	Properties
CADWorx Plant	✓	✓	✓	✓

CADWorx Plant Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from CADWorx as either .nwc or .nwd format, if you have Navisworks installed on the same machine.
- Navisworks also provides support for .dwg files enabling native CADWorx models to be read directly into Navisworks.
- CADWorx object properties are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
- CADWorx piping, steel, and equipment data is fully supported by Navisworks.

	Exporter	Native Format	Other Format	Properties
CADWorx Pipe	✓	✓	✓	✓

CADWorx Pipe Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from CADWorx as either .nwc or .nwd format, if you have Navisworks installed on the same machine.
- Navisworks also provides support for .dwg files enabling native CADWorx models to be read directly into Navisworks.
- CADWorx object properties are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
- The legacy product, CADWorx Pipe, is fully supported by Navisworks.

	Exporter	Native Format	Other Format	Properties
CADWorx Steel	✓	✓	✓	✓

CADWorx Steel Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from CADWorx as either .nwc or .nwd format, if you have Navisworks installed on the same machine.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

- Navisworks also provides support for .dwg files enabling native CADWorx models to be read directly into Navisworks.
- CADWorx object properties are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
- CADWorx Steel is fully supported by Navisworks.

COINS

BSLink	✓	✓	✓	✓

BSLink Details

Other Formats	DWG, DXF, 3DS

- In order to read a BSLink file into Navisworks, you either need BSLink installed on the same machine as Navisworks, or AutoCAD installed complete with the BSLink object enabler.
- If BSLink is installed, the object enabler is not necessary. With Navisworks installed on the same machine, simply export to .nwc or .nwd.
- In Navisworks, object properties can be viewed in the 'BSLink' tab in the 'Properties' window. To open the properties window, go to **View > Control Bars > Properties**.

Framing	✓	✓	✓	✓

Framing Details

Other Formats	DWG, DXF, 3DS

- In order to read a Framing file into Navisworks, you either need COINS Framing installed on the same machine as Navisworks, or ADT installed complete with the Framing object enabler.
- If COINS Framing is installed, the object enabler is not necessary. If Navisworks is installed on the same machine, simply export to .nwc or .nwd.
- In Navisworks, object properties can be viewed in the Framing tab in the Properties window. To open the properties window, go to **View > Control Bars > Properties**.

CSC

3D+	✓	✓		✓

3D+ Details

Other Formats	DWG, CIS/2

- 3D+ has a Navisworks Exporter, enabling you to export a Navisworks file out of 3D+.
- Also see the 3D+ website for information on their 3D+ Navisworks Reader. This is a plug-in to Navisworks, enabling you to read the native .3nwc file format in Navisworks.
- 3D+ object properties are supported by Navisworks via either of the above routes.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
Dassault Systemes				
CATIA			✔	

CATIA Details

Other Formats	DXF, IGES, STEP, JT

- Navisworks has file readers for .dxf, .igs, .stp and .jt files, all of which can be exported from CATIA.
- STEP is the preferred exchange format.

	Exporter	Native Format	Other Format	Properties
Google				
SketchUp (up to v6)		✔	✔	

SketchUp Details

Other Formats	DWG, 3DS

- SketchUp .skp files can be read directly into Navisworks.
- Texture materials are supported in Navisworks Simulate and Manage.
- Grouping objects in SketchUp will make it easier to use the model in Navisworks, for example applying Presenter materials, or attaching objects to TimeLiner tasks.
- Google SketchUp 7 files can be saved as an earlier version (e.g. version 6 SKP file), which can then be read into Navisworks.

	Exporter	Native Format	Other Format	Properties
Hannappel SOFTWARE GmbH				
elcoCAD R4	✔	✔	✔	✔

elcoCAD R4 Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from elcoCAD as either .nwc or .nwd format.
- Navisworks also supports the native elcoCAD .dwg file format, which can be read directly into Navisworks.
- Object properties are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
Intergraph				
PDS	✔	✔	✔	✔

PDS Details

Other Formats	DWG, DXF, DGN, IGES, STEP

- Intergraph PDS will save the model geometry in a .dgn file and the property information in a .drv file. Both files are required by Navisworks to read the model with object properties.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

- In Navisworks, go to **Tools > Global Options > DGN**, scroll down and check the 'Convert PDS Data' option. Ensure the .dgn and .drv files reside in the same directory. Navisworks will then import the model, along with its properties.
- PDS object properties can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
- If Navisworks has been installed onto the same machine as Intergraph PDS, you will be able to export from PDS as a Navisworks .nwc or .nwd file.

Informatix

MicroGDS   ✔

MicroGDS Details

Other Formats	MAN

- Navisworks supports the native MicroGDS .man file format, which can be read directly into Navisworks.
- Colors and Materials from the file are supported. The .man File Reader options can be found in **Tools > Global Options > File Readers > MAN**.

ITandFactory

CADISON   ✔   ✔   ✔   ✔

CADISON Details

Other Formats	DXF, 3DS

- Navisworks can directly read CADISON .dwg files, utilizing the .dwg file reader.
- In order to read a CADISON file into Navisworks, you either need CADISON installed on the same machine as Navisworks, or you will need to install the CADISON Object Enabler.
- If CADISON is installed, the object enabler is not necessary.

NOTE: When using an object enabler, ensure the corresponding loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.

- With either CADISON or the Object Enabler installed, simply open the CADISON .dwg file in Navisworks.
- If CADISON is installed on the same machine as Navisworks, then you can also export to .nwc or .nwd.
- Exporting a Navisworks file from CADISON also retains the models object properties that can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
TRICAD MS	✔		✔	✔

TRICAD Details

Other Formats	VRML

- If TriCAD MS is installed on the same machine as Navisworks, then you can also export to .nwc or .nwd.
- Exporting a Navisworks file from TRICAD MS also retains the models object properties that can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

Kubotek USA

CADKEY			✔

CADKEY Details

Other Formats	DWG, DXF, IGES, STEP

- Navisworks has file readers for .dwg files and also .dxf, .igs and .stp files, all of which are supported by CADKEY.

M.A.P.

CAD-Duct	✔	✔	✔	✔

CAD-Duct Details

Other Formats	DWG, DXF, 3DS

- In order to read a CAD-Duct file into Navisworks, you either need CAD-Duct installed on the same machine as Navisworks, or have the CAD-Duct Object Enabler installed. The CAD-Duct Object Enabler can be downloaded from the CAD-Duct website, found under Support > Additional Files.

NOTE: When using an object enabler, ensure the corresponding loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.
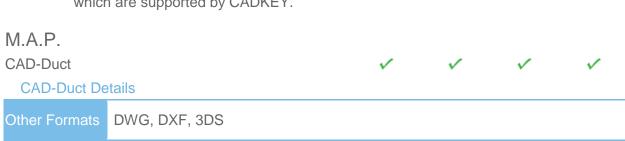
- If CAD-Duct is installed, the Object Enabler is not necessary. Simply export to .nwd or .nwc.
- In Navisworks, object properties can be viewed in the 'CAD-Duct' tab in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

McNeel North America

Rhino

		✓	

Rhino Details

Other Formats	DWG, DXF, 3DS, IGES, STEP

- To view your Rhino models in Navisworks, you will have to export to one of the supported file formats (above). These can then be read directly into Navisworks.

Mensch und Maschine

RoCAD   ✓   ✓   ✓   ✓

RoCAD Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from RoCAD as either .nwc or .nwd.
- Navisworks also supports the .dwg file format, which can be read directly into Navisworks.
- If you do not have RoCAD installed on the same machine as Navisworks, you will need to have AutoCAD installed, along with the RoCAD Object Enabler.

NOTE: When using an object enabler, ensure the corresponding loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.

- Object properties, (such as Material Colors and Entity Handles) are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

MultiSUITE

MultiSTEEL   ✓   ✓   ✓

MultiSTEEL Details

Other Formats	DWG, DXF, 3DS

- .dwg files from ~~MultiSTEELMultiSTEEL~~MultiSTEEL can be read directly into Navisworks utilizing the .dwg file reader.
- Models can also be exported from MultiSTEEL ~~MultiSTEEL~~ as either .nwc or .nwd.
- MultiSTEEL~~MultiSTEEL~~ object properties can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

Nemetschek

Allplan — Other Format ✓

Allplan Details

Other Formats	DWG, DXF, DGN, IFC

- All Plan files can be viewed in Navisworks if they have been saved in one of the above formats.
- Object properties are not supported.

PROCAD

3DSMART — Native Format ✓ Other Format ✓

3DSMART Details

Other Formats	DWG, DXF, 3DS

- With 3DSMART installed on the same machine as Navisworks, you can read your DWG file directly into Navisworks, utilizing the DWG file reader.
- You can also export a .nwc or .nwd file directly from 3DSMART.

PTC

Pro/ENGINEER — Other Format ✓

Pro/ENGINEER Details

Other Formats	IGES, STEP, VRML, JT

- You can read your Pro/ENGINEER models into Navisworks via any of the above file formats.

CADDS 5 — Other Format ✓

CADDS 5 Details

Other Formats	IGES, STEP

- You can read CADDS 5 3D models into Navisworks, by exporting either an IGES or STEP file from CADDS 5 and then utilize either the Navisworks .igs, or .stp file readers.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties
QuickPen				
PipeDesigner 3D	✓	✓	✓	✓

PipeDesigner 3D Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from PipeDesigner 3D as either .nwc or .nwd format.
- Navisworks also supports the native .dwg file format, which can be read directly into Navisworks if the relevant Object Enabler is installed.
- Object properties, (such as Material Colors and Entity Handles) are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

	Exporter	Native Format	Other Format	Properties
DuctDesigner 3D	✓	✓	✓	✓

DuctDesigner 3D Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from DuctDesigner 3D as either .nwc or .nwd format.
- Navisworks also supports the native .dwg file format, which can be read directly into Navisworks if the relevant Object Enabler is installed.
- Object properties, (such as Material Colors and Entity Handles) are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.

RAM International

	Exporter	Native Format	Other Format	Properties
CADstudio	✓	✓	✓	✓

CADstudio Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from CADstudio as either .nwc or .nwd format.
- Navisworks also supports the native CADstudio .dwg file format, which can be read directly into Navisworks.
- Object properties are also supported by Navisworks and these can be viewed in the 'Properties' window. To open the Properties window, go to **View > Control Bars > Properties**.
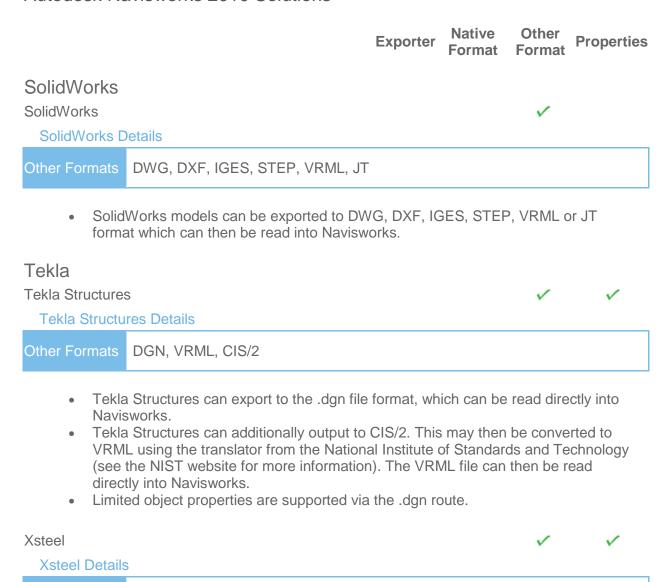
Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

SolidWorks

SolidWorks   ✔ (Other Format)

SolidWorks Details

Other Formats	DWG, DXF, IGES, STEP, VRML, JT

- SolidWorks models can be exported to DWG, DXF, IGES, STEP, VRML or JT format which can then be read into Navisworks.

Tekla

Tekla Structures   ✔ (Native Format)   ✔ (Other Format)

Tekla Structures Details

Other Formats	DGN, VRML, CIS/2

- Tekla Structures can export to the .dgn file format, which can be read directly into Navisworks.
- Tekla Structures can additionally output to CIS/2. This may then be converted to VRML using the translator from the National Institute of Standards and Technology (see the NIST website for more information). The VRML file can then be read directly into Navisworks.
- Limited object properties are supported via the .dgn route.

Xsteel   ✔ (Native Format)   ✔ (Other Format)

Xsteel Details

Other Formats	DGN

- Xsteel can export to the .dgn file format, which can be read directly into Navisworks.
- Limited object properties are supported via the .dgn route.

think3

thinkdesign   ✔ (Other Format)

thinkdesign Details

Other Formats	DWG, DXF, IGES, STEP

- Navisworks has file readers for .dwg/.dxf files and also .igs and .stp files.

Autodesk Navisworks 2010 Solutions

	Exporter	Native Format	Other Format	Properties

UGS

I-deas
| | | | ✔ | |

I-deas Details

Other Formats	DXF, IGES, STEP, JT

- Navisworks has file readers for .dxf, .igs .stp and .jt files.

Solid Edge
| | | | ✔ | |

Solid Edge Details

Other Formats	IGES, STEP, JT

- Solid Edge can export to IGES STEP and JT files, which can be read directly into Navisworks.

NX (Unigraphics)
| | | | ✔ | |

NX Details

Other Formats	DXF, IGES, STEP, JT

- Navisworks has file readers for .dxf, .igs .stp and .jt files.

FactoryCAD
| | ✔ | ✔ | ✔ | |

FactoryCAD Details

Other Formats	DWG, DXF, 3DS

- In order to read a FactoryCAD file into Navisworks, you either need FactoryCAD or the FactoryCAD object enabler installed on the same machine.

NOTE: When using an object enabler, ensure the corresponding loader version (year) is selected in **Tools > Global Options > File Readers > DWG/DXF/SAT > DWG Loader Version**.

- If FactoryCAD is installed, the object enabler is not necessary. Simply export to .nwc or .nwd.

	Exporter	Native Format	Other Format	Properties

UHP Process Piping

	Exporter	Native Format	Other Format	Properties
FabPro Pipe	✔	✔	✔	

FabPro-Pipe Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from FabPro Pipe as either .nwc or .nwd format.
- Navisworks also supports the native FabPro Pipe .dwg file format, which can be read directly into Navisworks.

x-plant

	Exporter	Native Format	Other Format	Properties
x-plant	✔	✔	✔	

x-plant Details

Other Formats	DWG, DXF, 3DS

- Models can be exported from x-plant as either .nwc or .nwd format.
- Navisworks also supports the native x-plant .dwg file format, which can be read directly into Navisworks.

Supported Scheduling Software

The following table contains a list of the project scheduling software and formats supported by Autodesk Navisworks Simulate 2010 and Autodesk Navisworks Manage 2010.

Developer	Product	File Format	Notes
Asta	Powerproject 8 to 10	.pp	Requires Asta Powerproject to be installed on same machine, to make link.
Microsoft	Project 2000 to 2007	.mpp	Requires Microsoft Project to be installed on same machine, to make link.
Primavera	ProjectPlanner (P3)	n/a	Requires P3 to be installed on same machine. The file format is not read directly. Instead, TimeLiner logs into P3 and retrieves project information.
Primavera	Primavera Engineering and Construction	n/a	Requires Primavera v4.1, 5 or 6 Engineering and Construction to be installed on same machine, along with the Primavera SDK. TimeLiner connects to the Primavera database via an ODBC data source link.
Microsoft	Microsoft Project Exchange Format	.mpx	Does not require any project software to be installed. This is the common project exchange format which can be exported to from a number of scheduling packages.
N/A	CSV Exchange Format	.csv	Does not require any project software to be installed. This is a common exchange format which can be exported from a number of applications including, Microsoft Excel. Navisworks Simulate and Manage can additionally export TimeLiner task information to this format.