

Autodesk NavisWorks 2009 Solutions

This document details support provided by the current release of Autodesk NavisWorks 2009 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 2009 solutions in this document this does NOT include Autodesk NavisWorks Freedom 2009, which only reads NWD or 3D DWF files.

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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 2009 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	RVM	.rvm
ACIS SAT	.sat	SketchUp	.skp
DWF	.dwf	STEP	.stp .step
PDS Design Review	.dri	STL	.stl
IFC	.ifc	VRML	.wrl .wrz

Supported Laser Scan Formats
The following table lists the laser scan formats currently supported by Autodesk NavisWorks 2009 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 2009 solutions, along with any additional information that may be necessary to review your project files in NavisWorks software.

Native Other Properties Exporter **Format Format** Autodesk AutoCAD R14 to 2009 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.
- 64-bit AutoCAD is supported by Exporter only.
- 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.

ADT 3.3 to 2007, AutoCAD Architecture 2008-2009 AutoCAD Architecture Details Other Formats DXF, 3DS

• In order to read an ADT 2007 or later .dwg file into NavisWorks, you will need to install the corresponding Object Enabler, regardless of whether you have the application installed.

NOTE: This relates to all AutoCAD 2007/later-based products.

 In order to read an ADT 3.3 to 2006 .dwg file into NavisWorks, you need the ADT2007 (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.
- For versions pre-2007, the Exporter is the preferred route to NavisWorks.
- NavisWorks supports ADT 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.

Native Other **Exporter Properties** Format Format

Building Systems, AutoCAD MEP 2008-2009 AutoCAD MEP Details

Other Formats DXF, 3DS

 In order to read a Building Systems 2007 or AutoCAD MEP.dwg file into NavisWorks, you will need to install the corresponding Object Enabler, regardless of whether you have the application installed.

NOTE: This relates to all AutoCAD 2007/later-based products.

 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.

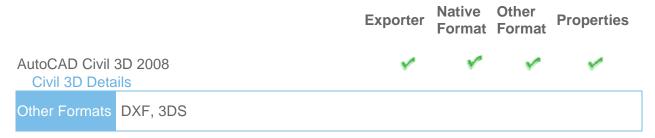
- From Building Systems/AutoCAD MEP software you can export to .nwc or .nwd.
- For versions pre-2007, the Exporter is the preferred route to NavisWorks.
- NavisWorks supports Building Systems/AutoCAD MEP object properties and these can be viewed in the 'Properties' window. To open the Properties window, go to View > Control Bars > Properties.

Autodesk Inventor 5 to 11, 2009

Inventor Details

Other Formats IGES, STEP

- 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.



- The Civil 3D native .dwg file can be read directly into 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.
- 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.

MDT 6 to 2008 **MDT** Details

Other Formats DXF, 3DS, VRML

- The MDT native .dwg file can be read directly into 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.
- For versions pre-2007, the Exporter is the preferred route to NavisWorks.
- 64-bit AutoCAD Mechanical is supported by Exporter only.
- 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.

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.

Native Other Exporter **Properties** Format Format

Revit Building 8.1 to 9.1, Revit Architecture 2008-2009

Revit Building Details

Other Formats DWG, DXF, DGN

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

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.

Revit Structure 2 to 4, 2008-2009

Revit Structure Details

Other Formats DWG, DXF, DGN

- 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 2008-2009

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 2009

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.
- 64-bit 3ds Max is also supported via an Exporter.
- 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.

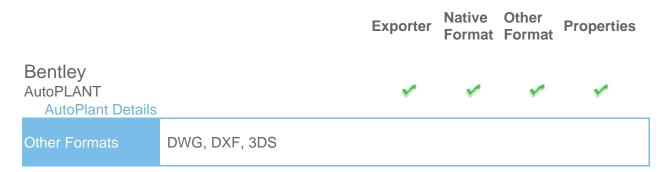
		Exporter	Native Format	Other Format	Properties
Autodesk VIZ 3 Viz Details	to 2008	1		✓	
Other Formats	DWG, DXF, 3DS				

- 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.



• NavisWorks has file readers for .dxf, .igs .iges and .wrl .wrz.



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.

Currently, object property information is unavailable. This is due to changes in AutoPLANT that prevent the Component ID from being obtained, which is required to address the AutoPLANT MDB file.

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.

Native Other Exporter Properties Format Format MicroStation J MicroStation J Details DWG, DXF, DGN, IGES, STEP, VRML Other Formats

- 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] 2009\Tools).

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] 2009\Tools).

	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 suported. 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 C:\Program Files\Autodesk\NavisWorks [Review/Simulate/Manage] 2009\Tools).

Triforma v8 to 8.9 Triforma v8 Details

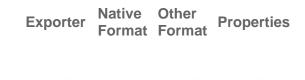
Other Formats

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] 2009\Tools).



Graphisoft

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.

ArchiCAD 8 to 11

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.

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 StruCad

StruCad Details

Other Formats

DXF

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

auto.des.sys
form.z
form.z Details

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

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

AEC CADPIPE CADPIPE V V V 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 then click on the Advanced button 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 > (Hold down the Shift Key and click) 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).

AVEVA 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 'Datal' formats. These can be viewed in the 'Properties' window. To open the Properties window, go to View > Control Bars > Properties.

Native Other **Properties** Exporter Format Format

CADopia IntelliCAD

IntelliCAD Details

Other Formats

DWG, DXF

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

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.

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.

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 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.



- 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 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.

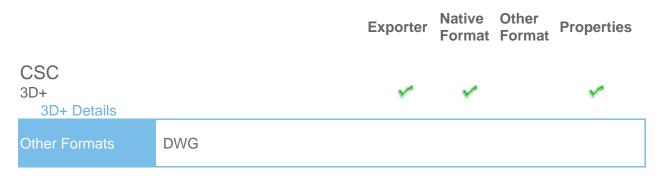
Framing

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.



- 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.

Dassault Systemes CATIA

CATIA Details

Other Formats

DXF, IGES, STEP

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

Google

SketchUp (upto v6)

SketchUp Details

Other Formats

DWG, 3DS

- SketchUp .skp files can 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.

Native Other **Exporter Properties** Format Format 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.

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.
- 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.

Exporter Native Other Format Properties

ITandFactory CADISON

CADISON Details

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.

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.

Native Other **Exporter Properties** Format Format

Kiwi Software GmbH

ProSteel 3D

ProSteel 3D Details

Other Formats

DWG, DXF, 3DS

- 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 AutoCAD/MDT/ADT installed complete with the relevant ProSteel 3D object enabler.
- If ProSteel is installed, the object enabler is not necessary. Simply export to .nwd or
- 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.

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.

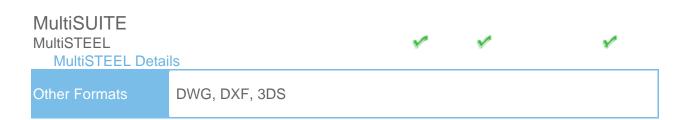
• To view your Rhino models in NavisWorks, you will have to export to one of the supported file formats (above). These can then be read directly into NavisWorks.

Mensch und Maschine RoCAD RoCAD V V V V 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.



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

		Exporter	Native Format	Other Format	Properties
Nemetschek Allplan Allplan Details				1	
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

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 an .nwc or .nwd file directly from 3DSMART.

PTC

Pro/ENGINEER

Pro/ENGINEER Details

Other Formats

IGES, STEP, VRML

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

CADDS 5

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.



- 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.
- 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.

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.
- 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

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.

SolidWorks
SolidWorks
SolidWorks Details

Other Formats

DWG, DXF, IGES, STEP, VRML

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

Tekla Structures Tekla Structures Details Other Formats DGN, VRML

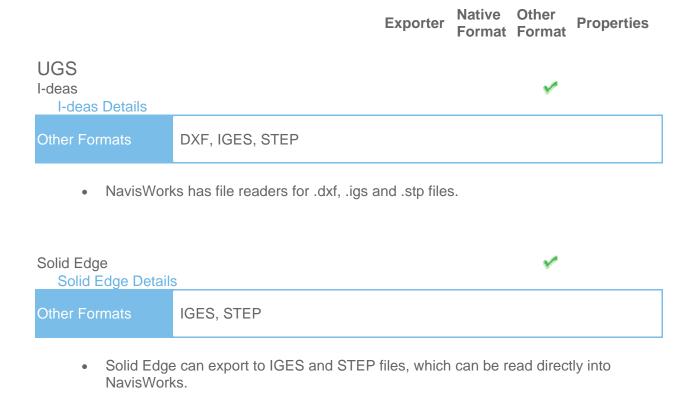
- Tekla Structures can export to the .dgn file format, which can be read directly into NavisWorks.
- Tekla Structures can additionally output to CIS/2. This may then be converted to VRML using the translator from the National Institute of Standards and Technology (see the NIST website for more information).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

Xsteel 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 thinkdesign Details Other Formats DWG, DXF, IGES, STEP

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





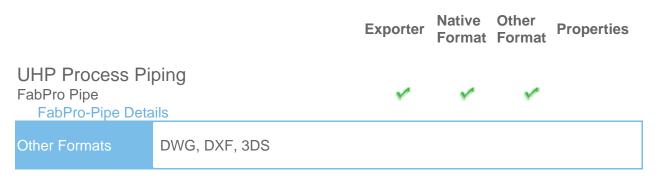
NavisWorks has file readers for .dxf, .igs and .stp files.



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.



- 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.



- 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 2009 and Autodesk NavisWorks Manage 2009.

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 Forma		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.