

User Reference

Navisworks Integration - R12

By CMiC



Proprietary Notice

The contents of the CMiC software product, including both this reference guide and the program components, are proprietary to Computer Methods International Corp. (CMiC), are copyright protected and are considered Confidential Information by CMiC. All rights are reserved by CMiC. A copy of the reference guide and the program has been provided to the original licensee under license with CMiC strictly for their own use under the terms of the license. All copies of this reference guide whether in print or electronic format must contain a copy of this Proprietary Notice. Any selling, licensing or other distribution of the contents of either this reference guide or the program components, whether for profit or not, is unlawful and may subject the violator and the original licensee to termination of license, criminal charges, civil action, or any combination of these.

Copyright © 2020

Computer Methods International Corp.
4850 Keele Street
Toronto, Ontario M3J 3K1
Canada

Risk of Use Notice

The CMiC software product, including both this reference guide and the program components, is licensed on an “AS IS” basis. The entire risk as to the results of its use is with the licensee. Except for with respect to warranties in certain jurisdictions that are imposed by statute and that may not be waived by one or more of the parties, and only to the extent of such warranties in such jurisdictions, Computer Methods International Corp. (CMiC) makes no warranties whatsoever, either expressed or implied, with respect to the quality, performance, merchantability or fitness for any particular purpose of any or all components of this software product, except as provided in the licensee’s license agreement. Except as provided in the licensee’s license agreement, the licensee (and not CMiC or its agents) will be solely responsible for the costs of all service, of any defect in this software product, and of any incidental or consequential damages, including, but not limited to, any interruption of service or loss of business or anticipatory profits, caused or alleged to be caused either directly or indirectly by the software product to the licensee or any other person, even if CMiC has been advised of the possibility of such damages.

“Computer Methods International Corp” and the CMiC logo are registered or unregistered trademarks of Computer Methods International Corp.

Oracle, Oracle9i™, Oracle Application Server11g™, Oracle Database 11g™, Oracle® Discoverer™ are trademarks or registered trademarks of Oracle Corporation.

Contents

NAVISWORKS INTEGRATION – R12	1
OVERVIEW	1
<i>Pre-Requisites</i>	1
INSTALLING THE NAVISWORKS PLUG-IN	1
USING THE NAVISWORKS PLUG-IN	5
<i>[Authenticate] – Button</i>	6
<i>[Add Issues] – Button</i>	7
<i>[Add RFIs] – Button</i>	9
<i>[View] – Button</i>	14
<i>[Version] – Button</i>	16
INDEX.....	17

Navisworks Integration – R12

Overview

The CMiC BIM plug-in for Navisworks will significantly enhance 3D coordination workflows. The current process of tracking and resolving clashes and model detection is time-consuming and disconnected. Currently, the clashes are managed in Navisworks, while communications - such as RFIs and Issues are managed in CMiC. The remedy is the CMiC – Navisworks Plug-In which shares data between Navisworks and CMiC to eliminate the current siloed approach.

The Navisworks Plug-In uses web services to:

- Authenticate CMiC users from within Navisworks.
- Provide actions to create Issues and RFIs within Navisworks.
- Update the CMiC object status in Navisworks Viewpoint panel.

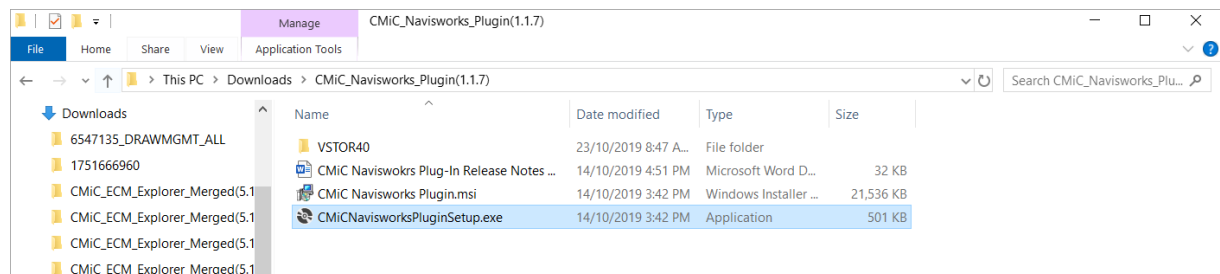
Pre-Requisites

The following pre-requisite is required prior to installing CMiC Navisworks Plug-In:

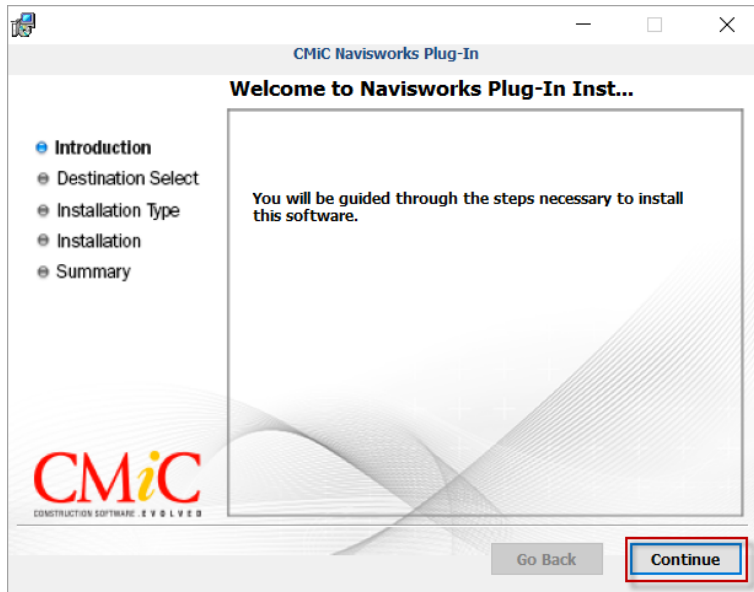
- Navisworks Manage 2019 must be installed on the local machine.

NOTE: An error message will be displayed if an attempt is made to install the Navisworks CMiC Plug-In and Navisworks Manage 2019 is missing.

Installing the Navisworks Plug-In

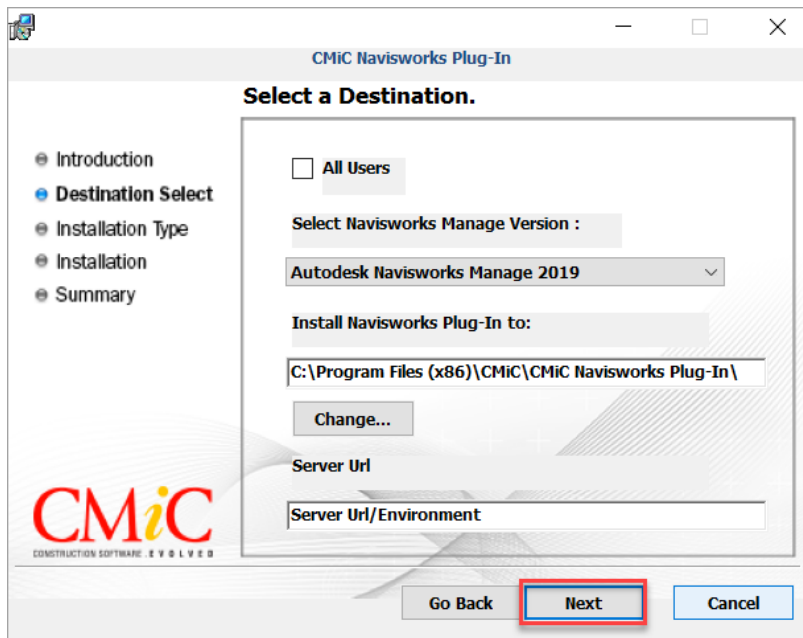


Users must first download CMiCNavisworksPlugin and run CMiCNavisworksPluginSetup.exe file by double-clicking it to run the installer.



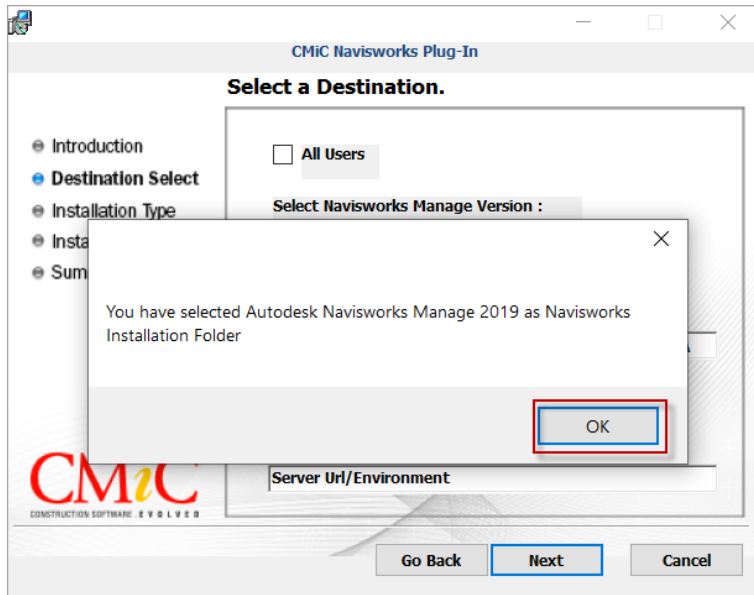
Click **[Continue]** to proceed with the installation process.

The path where the plug-in will be placed is displayed but this path can be updated if required.

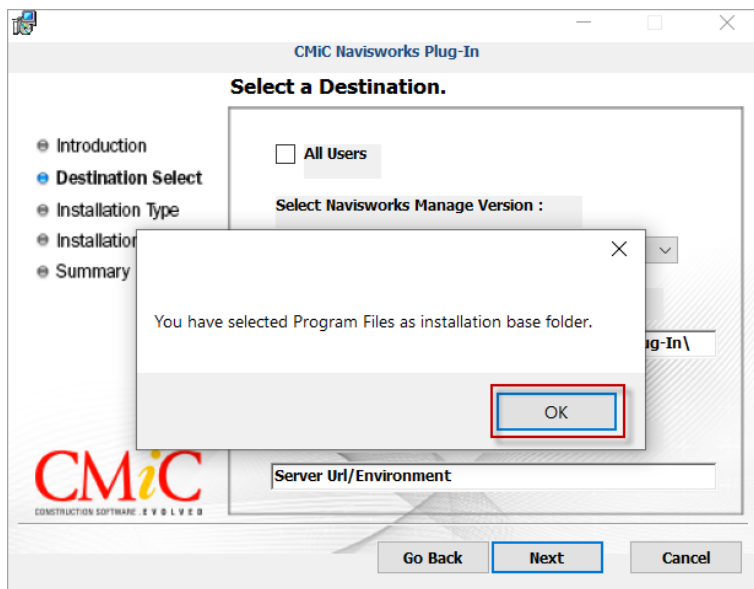


Click on **[Next]** to continue the installation.

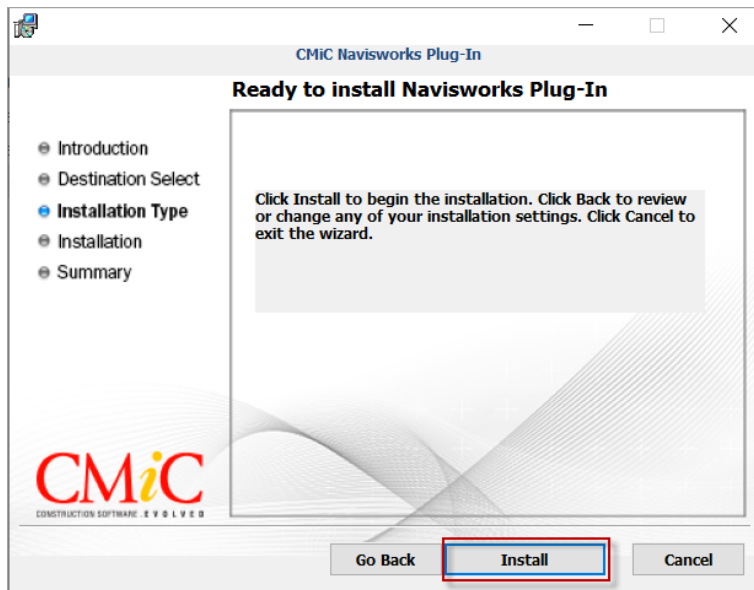
Two confirmation dialog boxes will be displayed for the user to confirm the destination of the Navisworks Installation folder and base installation folder.



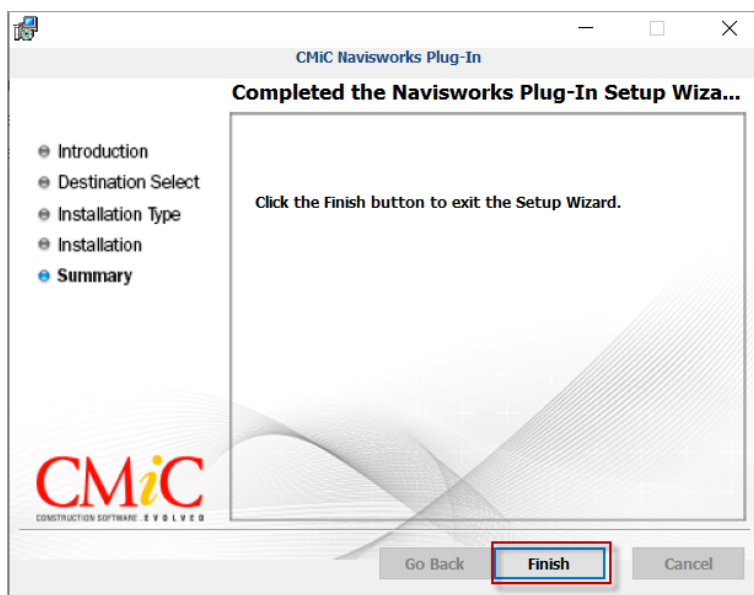
Click **[OK]** to continue.



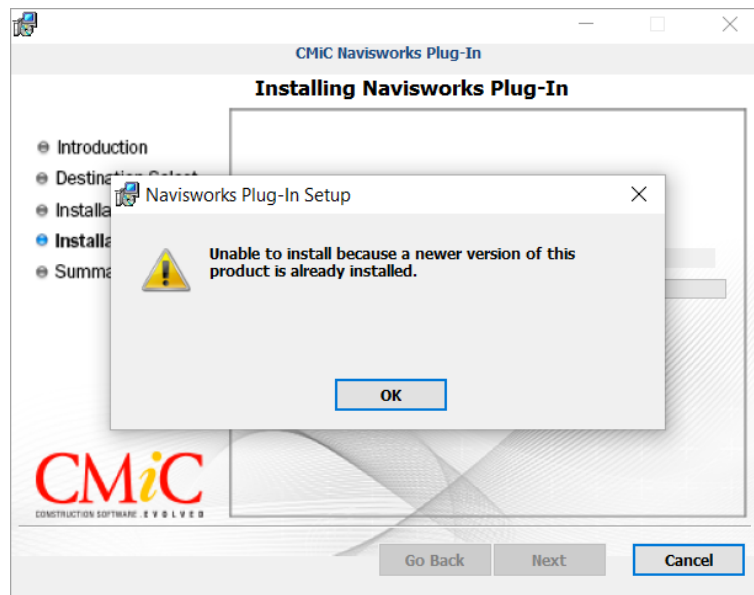
Click **[OK]** to continue.



Click on **[Install]** and when the installation is complete, click on the **[Finish]** button.

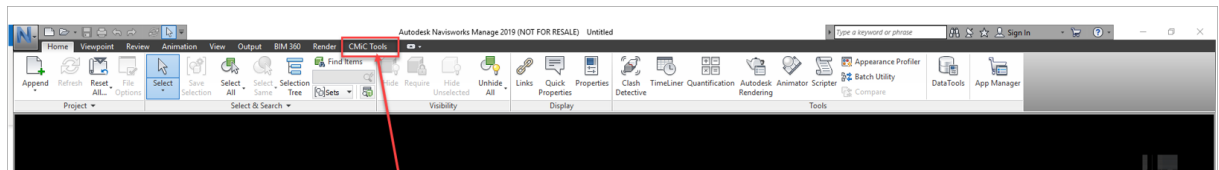


NOTE: If an attempt is made to install a lower (older) version of CMiC Navisworks Plug-In over a higher (newer) version, a message will be issued to indicate that a lower version of the plug-in can't be installed without first uninstalling the higher version.

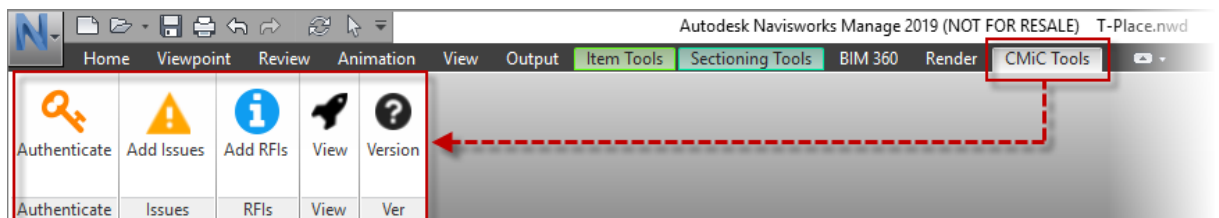


After the installation is successfully completed, CMiC Navisworks Plug-In will be loaded automatically on launching Navisworks Manage 2019 and will appear in the Navisworks application menu as a tab labelled “CMiC Tools”.

Using the Navisworks Plug-In

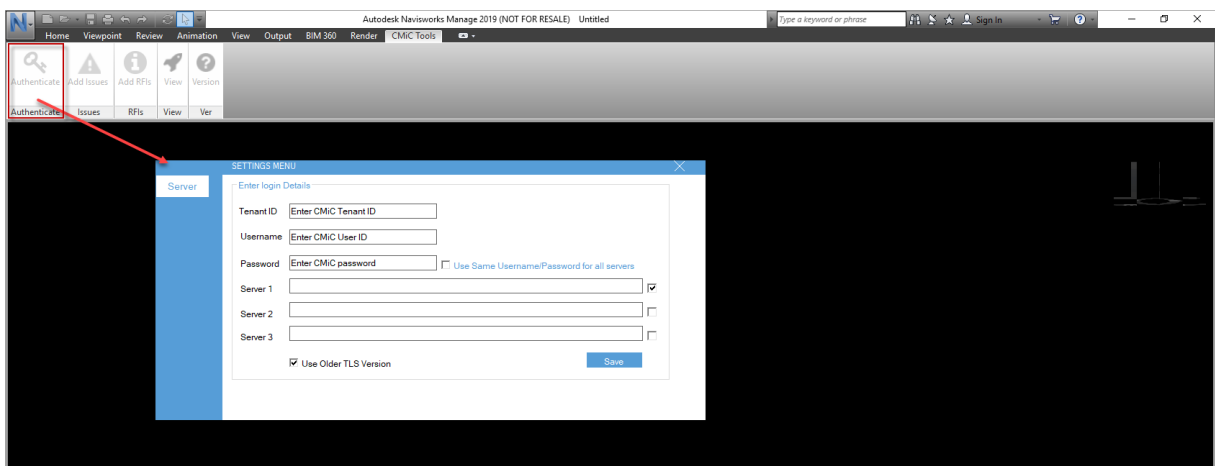


The plug-in is accessed by clicking on the CMiC Tools tab in the Navisworks application menu. Clicking on this tab opens a toolbar containing additional buttons which are described in the following subsections.

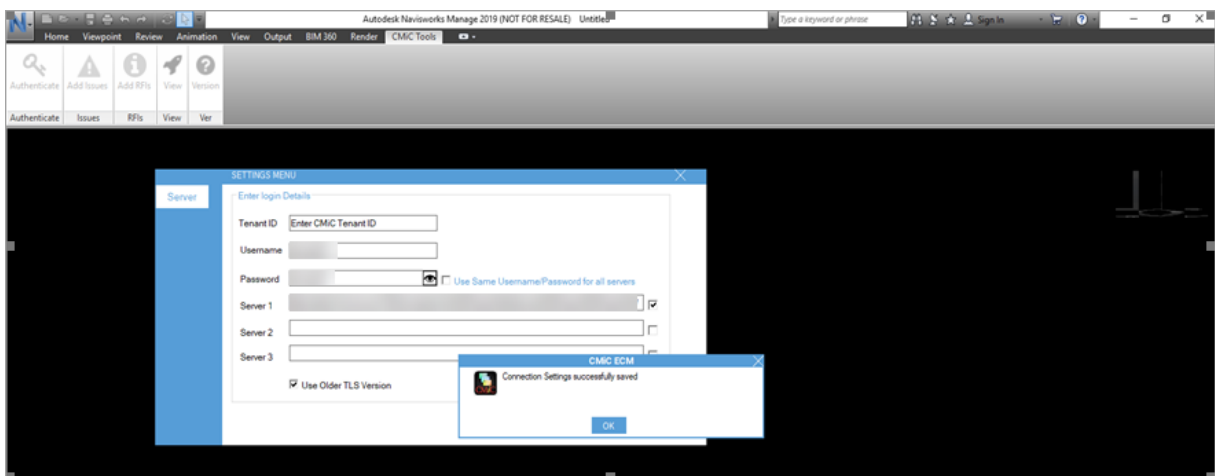


NOTE: Users won't be able to create Issues and RFIs without first having a Navisworks model loaded.

[Authenticate] – Button



The **[Authenticate]** button is used to launch the Settings Menu pop-up window, where user credentials and connection settings are entered and saved (e.g. username, password, and server URL) to connect with the CMiC Server.



Server URLs

The server URLs for Cloud and Enterprise clients are as follows:

V10X Cloud

<https://cmiccloud.com/cmiproduct/MSPluginWebService/MSPlugin/MSPluginWS/>

Enterprise Clients

V10X:

<https://<server>/<environment>/MSPluginWebService/MSPlugin/MSPluginWS/>

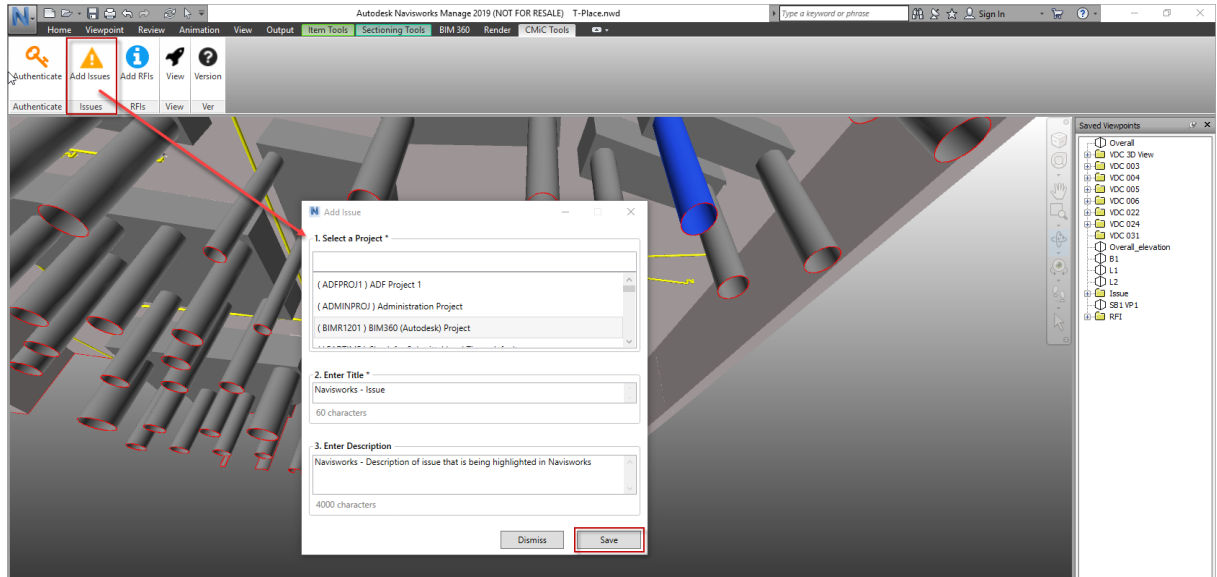
R12:

<https://<server>/<environment>/MSPluginWebService/resources/MSPluginWS/>

[Add Issues] – Button

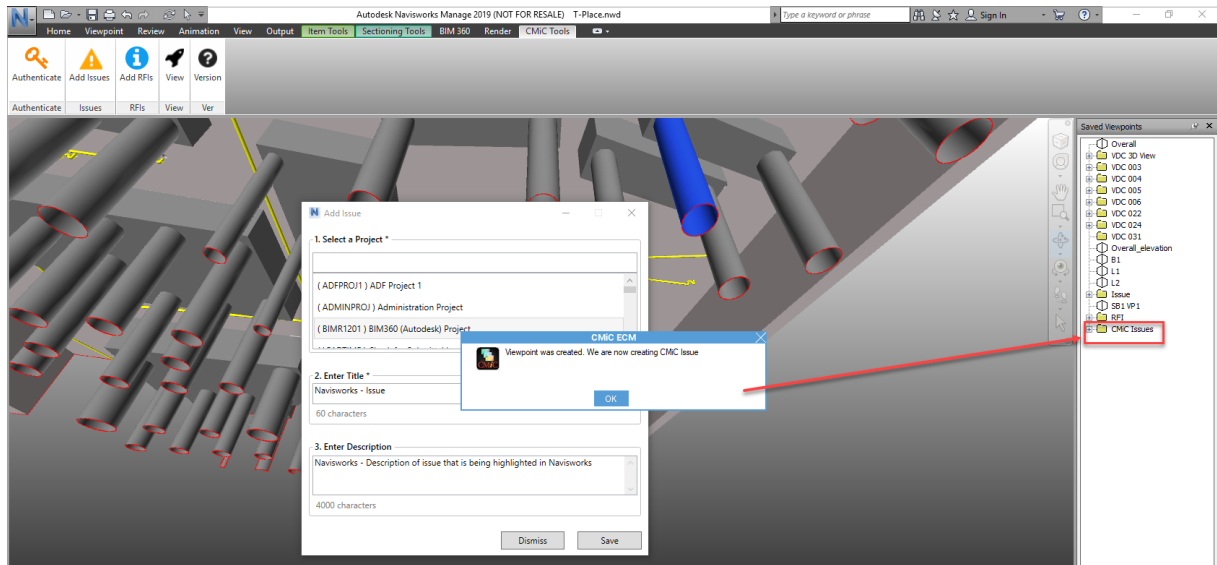
The **[Add Issues]** button is used to create issues. Users can create a Viewpoint and save it in the CMiC Issues folder in Navisworks Saved Viewpoint panel and create the corresponding Issue in CMiC Field.

A pre-requisite for creating issues is setting up issue auto-numbering in CMiC Field.

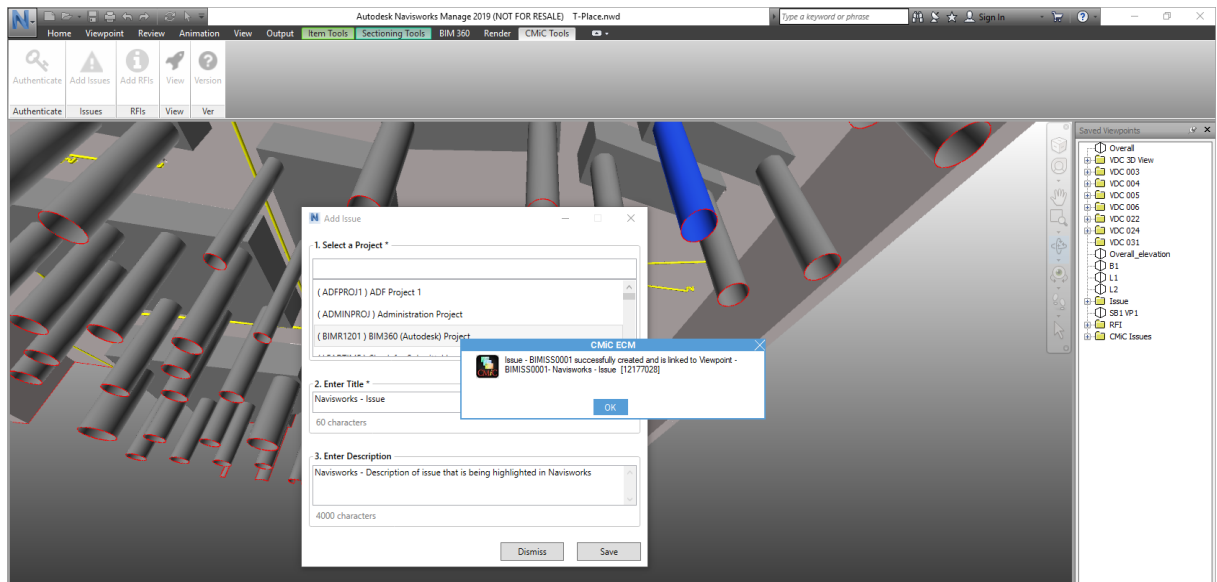


Click on the **[Add Issues]** button in the Navisworks toolbar to launch the Add Issue pop-up window. In the pop-up window, select a CMiC project, enter an Issue title and description, and then click on **[Save]**.

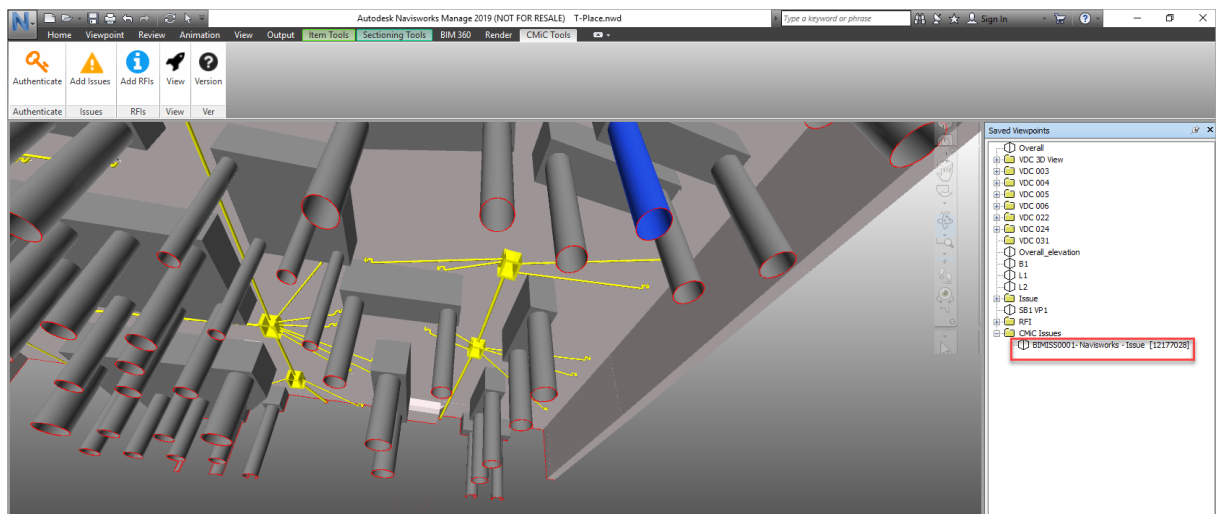
NOTE: Navisworks Manage 2019 saves the user details such as selected project, title and description locally and loads the details each time users start the application.



A Viewpoint is added to the CMiC Issues folder in the Navisworks Saved Viewpoints panel.



The CMiC Issue is created and linked to the Viewpoint.



The following screenshots show the Issue created in CMiC Field.

CMiC FIELD

Project: BIM360 (Autodesk) Project (BIM)

Communication Management

Project Contact Directory

RFIs

Project Calendar

Issues

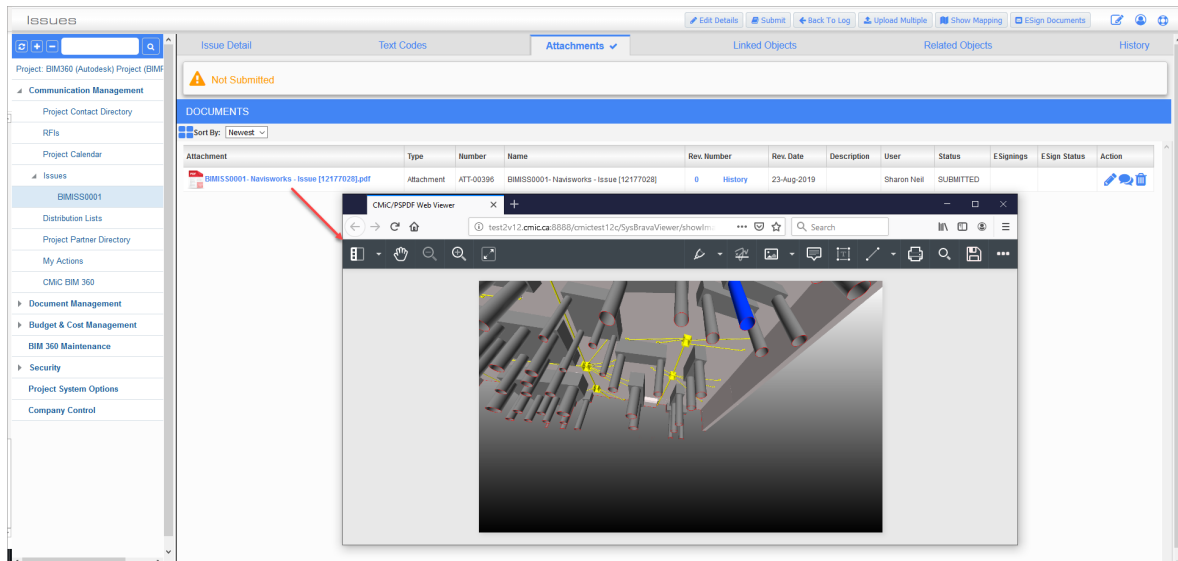
Distribution Lists

ISSUES (FILTERED)

Issue No.	Title	Date	From Contact	Priority	Status	Responsibility	Attachments
BIMSS0001	Navisworks - Issue	23-Aug-2019	Sharon Neil	3	New		1
Total: (1 row)							

With the creation of the Issue from Navisworks to CMiC, a snapshot of the Viewpoint (preferably in PDF format but could be PNG) is added as an attachment to the CMiC Issue. If a .pdf does not get created due to any exception, then the plug-in uploads the Viewpoint snapshot as a .png file to CMiC Field.

The following screenshot shows the Attachments tab of an Issue, which contains a snapshot of the associated Viewpoint in PDF.



[Add RFIs] – Button

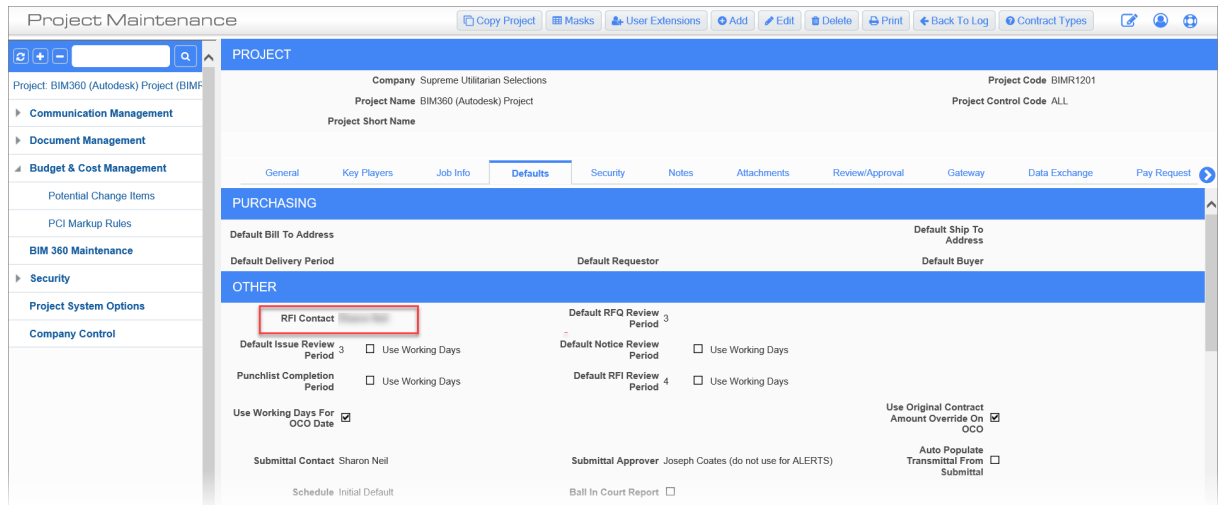
The **[Add RFIs]** button is used to create RFIs. Users can create a Viewpoint and save it in the CMiC RFIs folder in Navisworks Saved Viewpoint panel and create the corresponding RFI in CMiC Field.

Pre-requisites for creating RFIs are:

- Setting up RFI auto-numbering in CMiC Field.
- Setting up Default RFI Contact (detailed below).

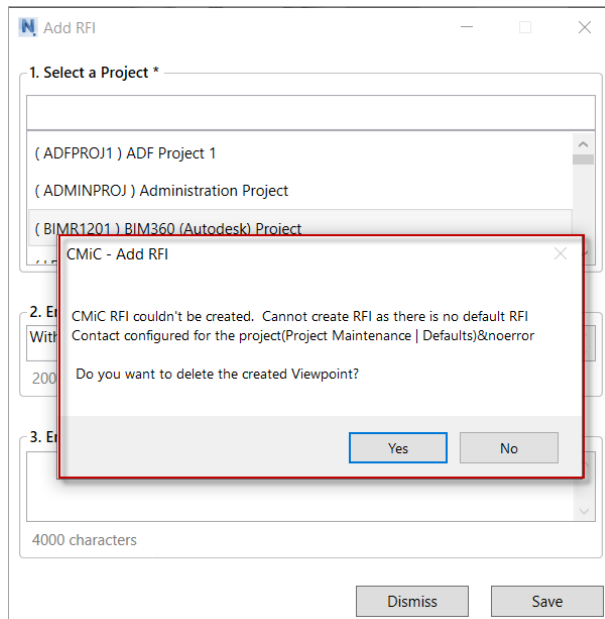
Before creating an RFI, an RFI Contact must be set in the Project Maintenance screen in CMiC Enterprise, as shown in the screenshot below.

NOTE: The Project Maintenance screen can be accessed in CMiC Field (*standard Treeview path: CMiC Field > File Maintenance > Project Maintenance*) or the Job Costing module (*standard Treeview path: Job Costing > Job > Enter Project – Defaults tab*).

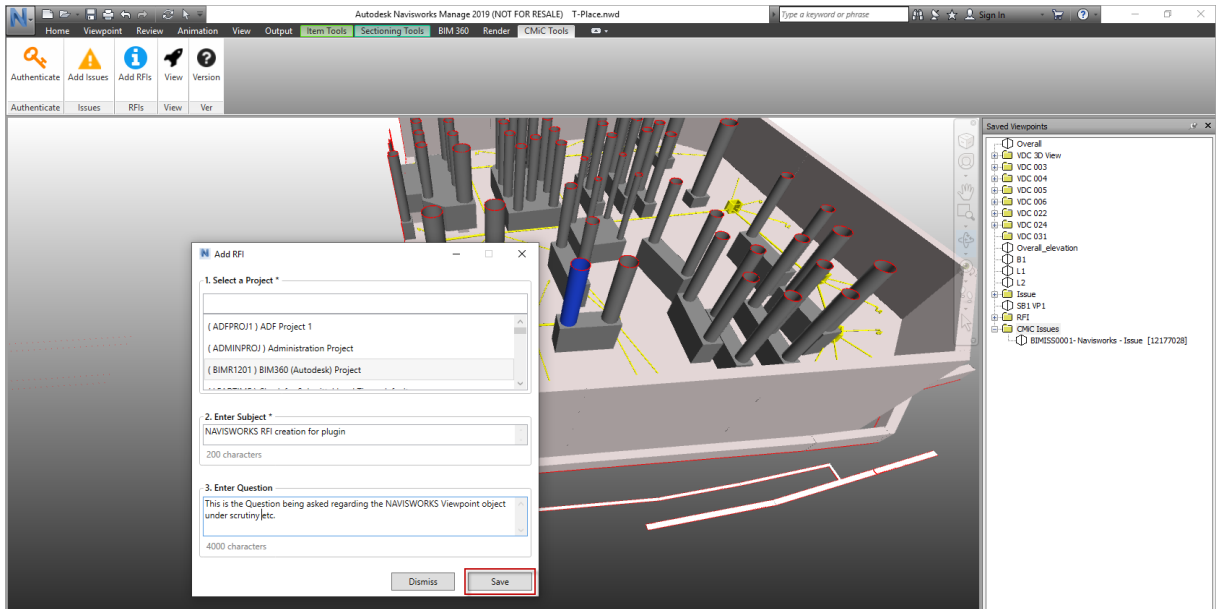


Example of Project Maintenance screen in CMiC Field

If the Default Contact is not set, users will be unable to create an RFI and the following message will be issued:

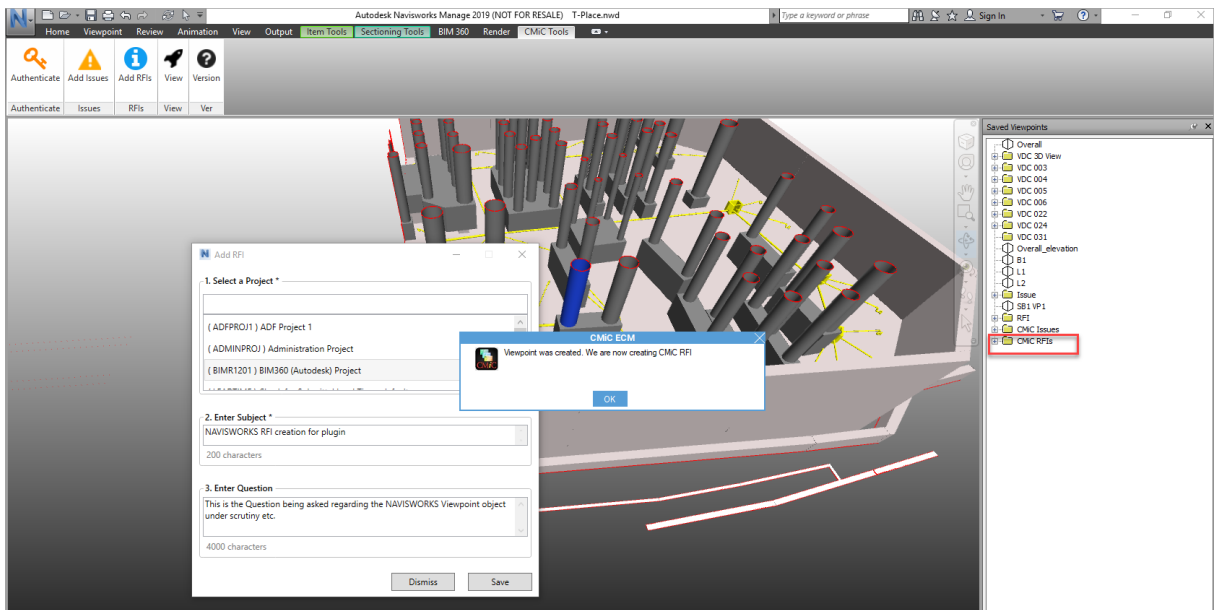


Once RFI autonumbering and a Default Contact is set, to create an RFI, click on the **[Add RFIs]** button in the Navisworks toolbar to launch the Add RFI pop-up window.

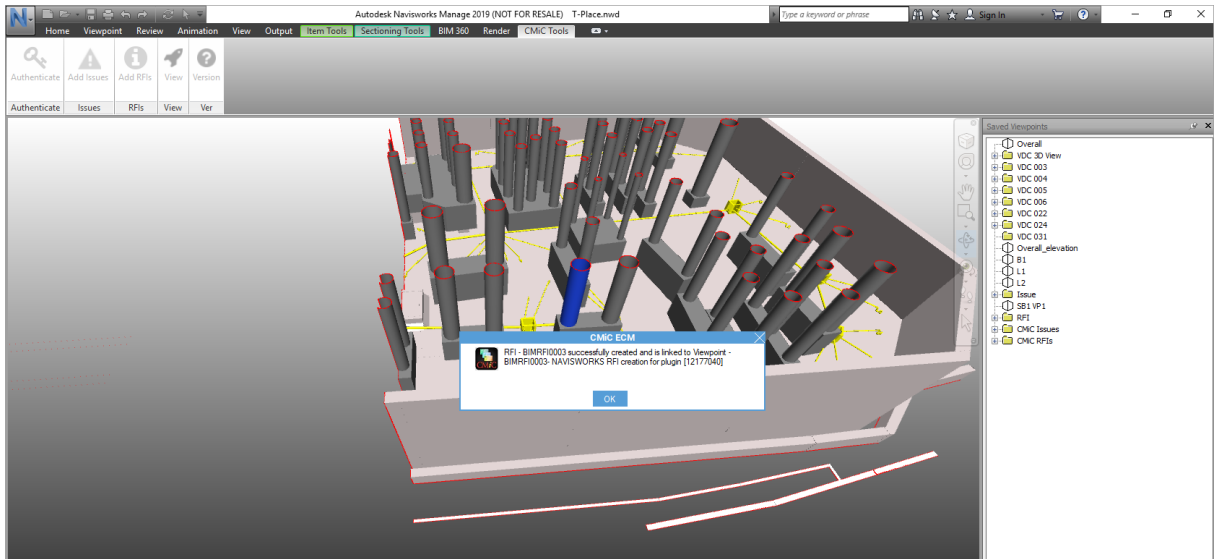


In the pop-up window, select a CMiC project, enter a subject and question, and then click on **[Save]**.

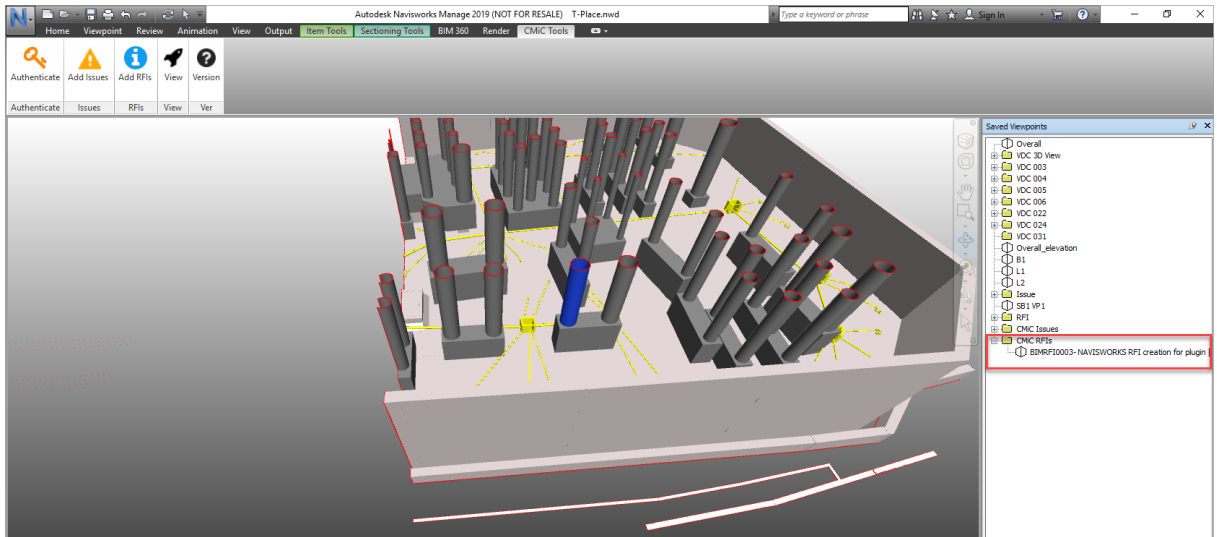
NOTE: Navisworks Manage 2019 saves the user details such as selected project, subject and question locally and loads the details each time users start the application.



A Viewpoint is added to the CMiC RFIs folder in the Navisworks Saved Viewpoints panel.



The CMiC RFI is created and linked to the Viewpoint.



The following screenshots show the RFI created in CMiC Field.

CMiC FIELD												
REQUEST FOR INFORMATION												
RFI No.	Forwarded as	Subject	Question	Date Created	Date Required	Date Answered	Status	Record Status	Delivery Status	Attachments	Days to Resolution	Update Date
BIMRF0003		NAVISWORKS RFI creation for plugin	This is the Question being asked regarding the NAVISWORKS Viewpoint object under scrutiny etc.	23-Aug-2019	27-Aug-2019		PENDING	PENDING	My RFI's	1 - 4		23-Aug-2019
BIMRF0002		test	test	13-Aug-2019	17-Aug-2019		OPEN	SUBMITTED	My RFI's	6		13-Aug-2019
BIMRF0001		R12 Autodesk RFI - 1		31-Jul-2019			PENDING	PENDING	My RFI's	3		31-Jul-2019
Total (3 rows)												

Request for Information

Project: BIM360 (Autodesk) Project (BIM)

Communication Management

Project Contact Directory

RFIs

NAVISWORKS RFI creation for plugin

Project Calendar

Issues

Distribution Lists

Project Partner Directory

My Actions

CMC BIM 360

Document Management

Budget & Cost Management

BIM 360 Maintenance

Security

Project System Options

Company Control

RFI Detail

Attachments

Related Objects

History

Not Submitted

BIMRFI0003

Subject: NAVISWORKS RFI creation for plugin

Status: Pending

Change #

Created: 23-Aug-2019

Required: 27-Aug-2019

Sender

From: Sharon Neil

Co-Author

Co-Author RFI

Receiver

To: Sharon Neil

Received

CC:

Last Update: 23-Aug-2019 03:06 PM

Request

Question: This is the Question being asked regarding the NAVISWORKS Viewpoint object under scrutiny etc.

Suggestion

Schedule Impact: Potentially

Days

Cost Impact: Potentially

Cost Amount

With the creation of the RFI from Navisworks to CMiC, a snapshot of the Viewpoint (preferably in PDF format but could be PNG) is added as an attachment to the CMiC RFI. If a .pdf does not get created due to any exception, then the plug-in uploads the Viewpoint snapshot as a .png file to CMiC Field.

The following screenshot shows the Attachments tab of an RFI, which contains a snapshot of the associated Viewpoint in PDF.

Request for Information

Project: BIM360 (Autodesk) Project (BIM)

Communication Management

Project Contact Directory

RFIs

NAVISWORKS RFI creation for plugin

Project Calendar

Issues

Distribution Lists

Project Partner Directory

My Actions

CMC BIM 360

Document Management

Budget & Cost Management

BIM 360 Maintenance

Security

Project System Options

Company Control

RFI Detail

Attachments

Related Objects

History

Not Submitted

DOCUMENTS

Sort By: Newest

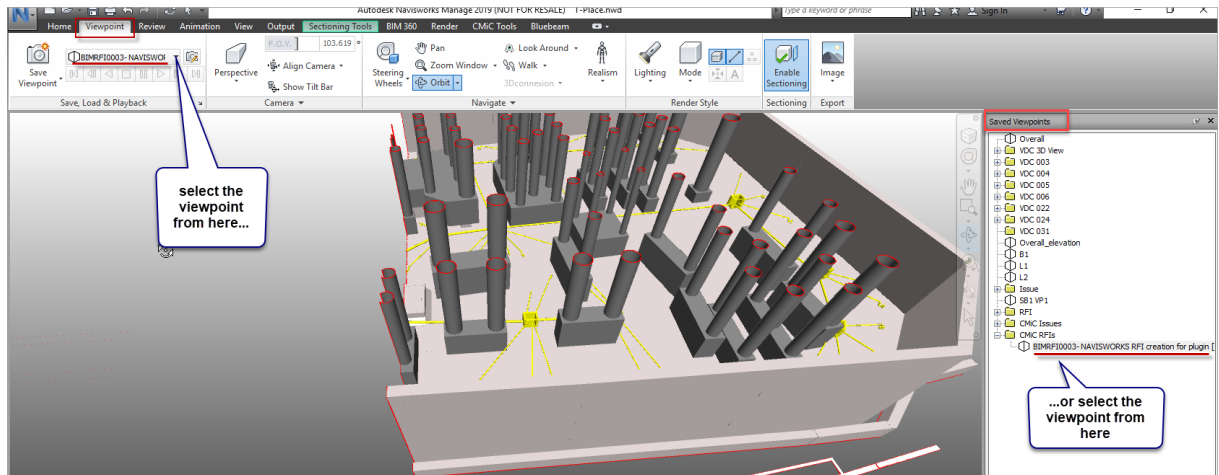
Attachment	Type	Number	Name	Rev. Number	Rev. Date	Description	User	Status	E Signings	E Sign Status	Action
BIMRFI0003 - NAVISWORKS RFI creation for plugin [12].pdf	Attachment	ATT-00397	BIMRFI0003 - NAVISWORKS RFI creation for plugin [12]77040	0	History	23-Aug-2019	Sharon Neil	SUBMITTED			

CMC/PSPDF Web Viewer

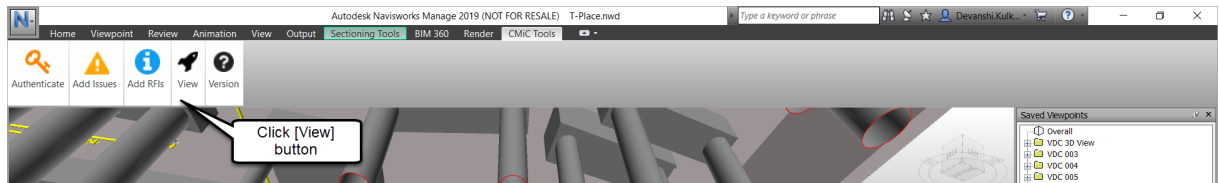
test2v12.cmic.ca:8888/cmictest12c/SysBravaViewer/showImage.do?fileName=BIMRFI0003

[View] – Button

The [View] button is used to display a Viewpoint's corresponding saved Issue or RFI in a web browser in CMiC Field. However, before using the [View] button, the Viewpoint must first be selected.

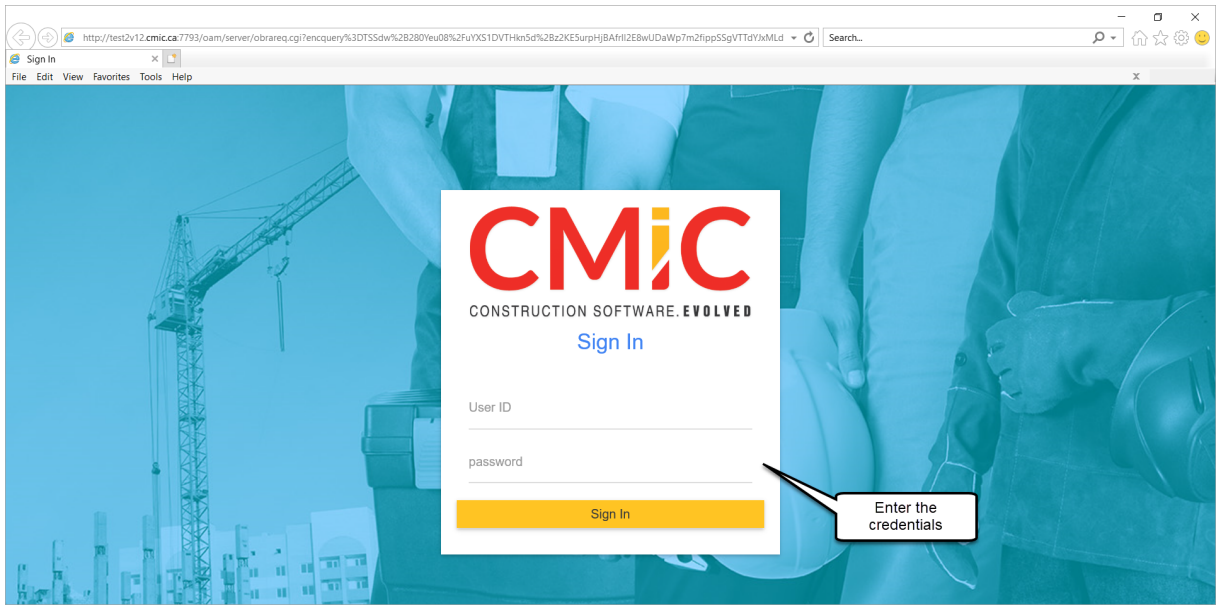


To select a Viewpoint, users must first click on the Viewpoint tab in the Navisworks application menu. From this tab, there are two ways to select the Viewpoint. The user can choose to either select the Viewpoint from the drop-down menu directly below the Viewpoint tab, or select it from the Saved Viewpoints panel, as shown in the screenshot above.

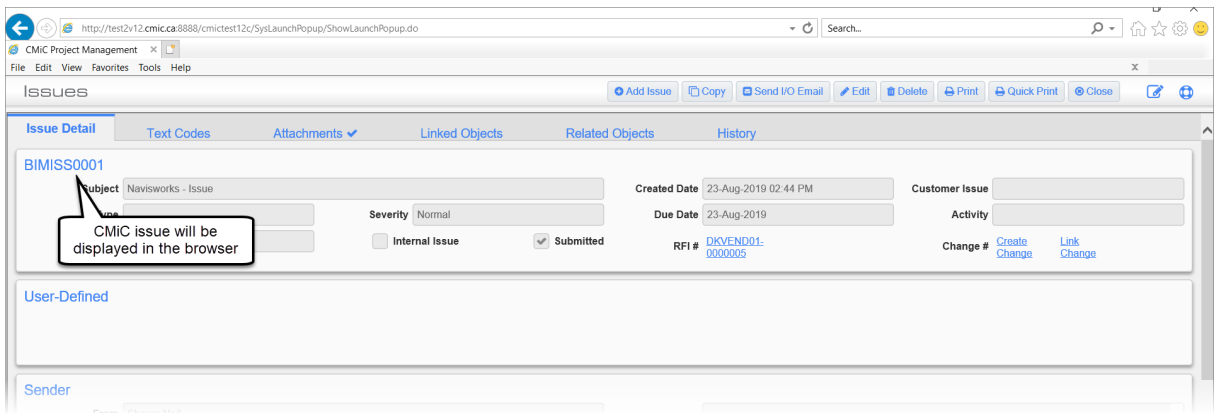


Once the Viewpoint is selected, click on the CMiC Tools tab in the Navisworks application menu and then click on the [View] button in the toolbar, as shown in the screenshot above.

NOTE: The web browser that opens to view saved Issues or RFIs is the default browser set in the user's system. Currently, supported default browsers are Chrome, Internet Explorer, Firefox, and Microsoft Edge. For any other browser (excluding above), CMiC Navisworks Plug-In opens the Viewpoint in Internet Explorer by default.

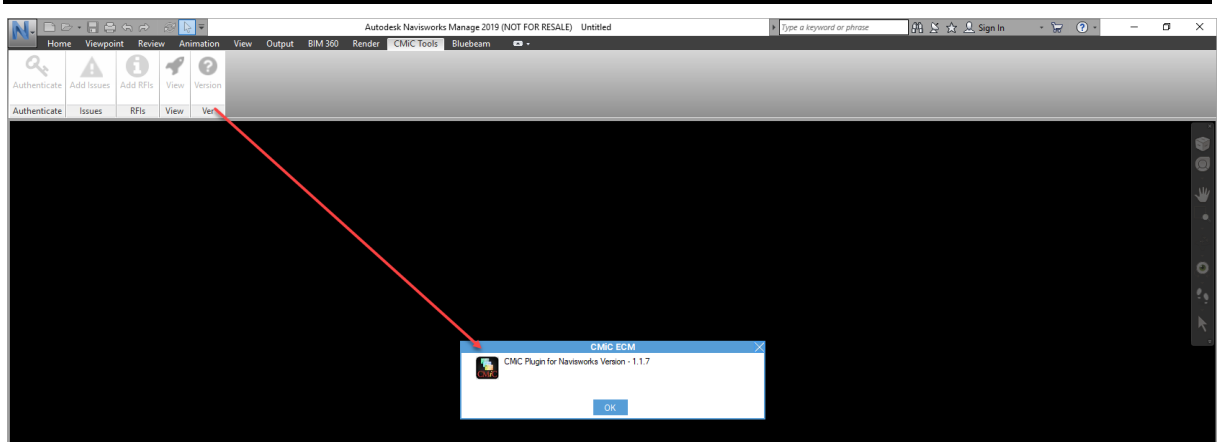


The user will be prompted to enter their credentials to log into CMiC.



The Viewpoint's corresponding saved Issue or RFI will be displayed in a web browser in CMiC Field.

[Version] – Button



The [Version] button displays the version information for the CMiC Navisworks Plug-In.

Index

I

[Add Issues] - Button	7
[Add RFIs] - Button	9
[Authenticate] - Button	6
[Version] - Button	16
[View] - Button	14

I

Installing the Navisworks Plug-In	1
---	---

N

Navisworks Integration - R12	1
------------------------------------	---

O

Overview	1
----------------	---

P

Pre-Requisites	1
----------------------	---

U

Using the Navisworks Plug-In	5
------------------------------------	---
