Bearing AT
Installation Guide

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Adams Specification

The MSC Bearing AT toolkit is installed as an Adams plugin to Adams/View. This toolkit is designed for Adams 2019.0 down to Adams 2017.0 (x64) releases. It is compatible with Windows 7 64-bit and Windows10 64-bit. Pictures in this guide might not reflect the most current release of the software.

Installing Bearing AT

Following section explain how to install Bearing AT:

1. **Bearing_AT_2019.0_win64.exe**

Open Windows Explorer, browse to your Bearing AT file location and run (double click) the executable file Bearing_AT_2019.0_win64.exe.

2. **Updating**

If an instance of current Bearing AT version is already installed, remove the old instance first. This installation does not touch previous versions of Bearing AT.

Select **Finish** to complete the process and run the Bearin**g_AT_2019.0_win64.exe** again.
3 Administrator

To install Bearing AT you need to have administrator rights.

4 Welcome page

Next screen shows the Welcome page. Select **I Accept** > button to continue, or **Cancel** button to exit without installing.
5  Customer info

In the Customer Information window, enter your user and company name, and then select one of the following:
- **Anyone who uses this computer (all users)** - Anyone logged on to this machine can run Bearing AT
- **Only for me** - A user must be logged on using the user name and password that was used at the time of installation.

6  Adams Version

In this step you choose one of the valid Adams versions, the list is based by the installed ones. If the list is empty, please cancel the installation of Bearing AT and install the most recent Adams version first. Make sure you select the same Adams version during Gear AT installation in case you plan to use both toolkits. The list of currently supported Adams versions is shown on the figure below.
7 Nastran version

Next step is to agree to the selected Nastran version if it is installed. Nastran is used in the preprocessing. You need Nastran or Adams ViewFlex to to create the punch files for contact processing. In case you do not have Nastran installation, make sure you have valid Adams ViewFlex license available. Please note that currently there are supported i8 versions of Nastran only, limited to the list shown on the figure below.

You can proceed with the installation of Bearing AT without Nastran and install it later on but you have to set up NASTRAN_TOP_DIR environment variable manually. This variable should point to the Nastran installation directory, e.g. `c:\MSC.Software\MSC_Nastran\2018\`

Bearing AT cannot run Nastran on remote machine but can export all Nastran input files along with batch file so you can submit Nastran job on a different machine. You need Nastran punch files (*.pch) to be placed back in the working directory to submit Bearing AT contact analysis.


8 Installation Folder

In the install location window select the destination folder. This folder is referred to as Bearing_AT_Install_Dir throughout this manual.

9 Review Settings

Confirm the installation settings and then select Next to begin the installation.
10 Completion

Before the Setup is complete you are prompted to create a desktop icon.

Setup completion window appears as shown below. Click Finish.
11 Licensing

Please copy the license features of Bearing AT in your overall MSC license file.
Loading MSC Bearing AT

Following section explains how to load the Bearing AT plugin with example start menu:

1. Launch A/View

Go to the Windows Start menu and Select All Programs. Go to Bearing AT 2019.0 folder and select Bearing AT icon; this will launch Adam/View.

You can use the desktop icon

Or you can launch Bearing AT via the context menu of the explorer in the working directory
2 Plugin

After Start Up from Adams/View open the plugin ribbon or go to Tools -> Plugin Manager. In the ribbon click on the Bearing AT Button in the Bearing AT tab.

This opens the Plugin Manager if the plugin is not loaded so far. Check the plugin checkbox Bearing AT. Specify if you want it to start every time you start ADAMS/View or just for a single session by clicking on Load at Startup. The Bearing AT menu will be available in the Adams toolbar and in the ribbon plugin tab.
3 Getting Started with Bearing AT

To help you get familiar with Bearing AT plugin we provide the Getting Started document along with example model and files in the installation folder. You can access Getting started document either from windows Start menu

![Getting Started Document]

or from Bearing AT menu in Adams.

4 Bearing AT initialization

If you load the plugin the Bearing_AT_ini.cmd file is automatically imported from the Bearing_AT_Install_Dir/bearing_at_plg directory. You can use this file to set your personal preferences like background color, solver settings, relative paths for property files or any other of your choice.
The file could be located in the:

- Plugin installation directory - *Bearing_AT_Install_DIR/bearing_at_plg*,
- Home directory,
- Working directory,

and is read in following that order.
5 Release Notes

Before you start using Bearing AT 2019.0 release, please take your time to get familiar with the latest changes, fixes and new features included to make sure your models built with previous Bearing AT releases will be not affected. You can access Release notes document from windows Start menu.
Uninstalling the toolkit:

To uninstall the toolkit, go to **Start > Control Panel > Programs and Features** select Bearing_AT 2019 and **Uninstall**.

![Image of the Uninstall window](image)

Confirm the removal operation to finish the process.

![Image of the confirmation window](image)

Select **Finish** to complete installation.

![Image of the completion window](image)

Please note you have to remove NASTRAN_TOP_DIR environment variable manually after uninstalling Bearing AT. Be aware that this variable is shared with the Gear AT installation.
After uninstall the installation folder is cleaned up but left for previously installed versions of Bearing AT. For instance, if the Bearing_AT_Install_Dir was c:\MSC.Software\BEARING_AT\2019_0 there will remain following empty folder c:\MSC.Software\BEARING_AT after uninstallation.

**Special hints:**

1. **Previous installed versions of Bearing AT**

   It is recommend to uninstall previous versions of Bearing AT but not mandatory. You can handle multiple versions of Bearing AT with the environment variable MSC_USER_PLUGIN_DIR.

   Just set the path to the Bearing AT installation of your choice. Be aware that you can set this environment as USER or as SYSTEM variable. Make sure that a path to a Bearing AT Plugin is only set once.