

ADAPT 5 - Installation and Validation

1. System Requirements

ADAPT 5 is supported for the following platforms:

HARDWARE	COMPILER	OPERATING SYSTEM
PC	<u>Intel Parallel Studio XE 2017</u> Distribution <u>will</u> automatically install MVS ¹ 2013 Shell & Libraries when MVS 2017, '15, '13, or '12 <u>not</u> already installed. Only Composer Edition w/Fortran needed.	Windows 7/8/10
PC	<u>Intel Parallel Studio XE 2016</u> Distribution <u>will</u> automatically install MVS ¹ 2013 Shell & Libraries when MVS 2015,2013,2012 <u>not</u> already installed. Only Composer Edition w/Fortran needed.	Windows 7/8/10
PC	<u>Intel Visual Fortran Composer XE 2015</u> Distribution <u>includes</u> version with MVS ¹ 2010 Shell & Libraries integrated and the version that requires MVS 2015,2013,2012, 2010 be installed separately.	Windows 7/8
PC	<u>Intel Visual Fortran Composer XE 2013 SP1</u> Distribution <u>includes</u> version with MVS ¹ 2010 Shell & Libraries integrated and the version that requires MVS 2012, 2010 or 2008 to be installed separately.	Windows 7/8
PC	<u>Intel Visual Fortran 11.1</u> Distribution <u>includes</u> version with MVS ¹ 2008 Shell & Libraries integrated and the version for MVS 2008 or 2005 installed separately.	Windows XP/Vista/7
PC	<u>Compaq 6.6c</u>	Windows XP/Vista/7

¹Microsoft Visual Studio. Previous versions of Intel Fortran (XE2011, 11.x, 10.x) also supported.

The platforms listed in the above table are the only environments on which ADAPT 5 has been tested and validated. For more information on Intel Visual Fortran Compilers visit Intel at the following link (select Composer Edition w/ Fortran alone):

<https://softwarestore.ispfulfillment.com/>

Note on Intel evaluation licenses or the "free tools" license obtained through the free software program for students and educators: For these versions, Microsoft Visual Studio is not included with the Intel Fortran as it is with the paid version. Therefore, you must have Microsoft Visual Studio installed separately (MVS 2017, 2015, 2013 or 2012). The order of the installation is: Microsoft Visual Studio, Intel Fortran Compiler, ADAPT 5.

Update: August 1, 2017

2. Installing ADAPT

Prior to installing ADAPT, you must install a version of the Intel Fortran compiler noted previously.

ADAPT 5 can be downloaded from the BMSR the web site bmsr.usc.edu and installed by clicking on the installation icon (one of the above listed compilers must be installed first). The installation can be validated by running the Validation program in the ADAPT Program Group.

The pdf file for the [ADAPT User's Guide](#) can be accessed via the ADAPT Program Group after installation. The default path for installation of ADAPT on 32 bit machines is C:\Program Files (x86)\BMSR\ADAPT 5 and C:\Program Files\BMSR\ADAPT 5 on 64 bit machines. The installation folder also includes the subfolders:

\Validation, that contains all the model, data, parameter and control input files used to validate the ADAPT 5 installation

\Example, that includes the files used for the examples in this User's Guide

\Library, contains all the model files that are available in the ADAPT Library

2.1 Installing Intel Fortran and ADAPT on Machines Without MVS Installed Previously

For the commercial or academic version of Intel Fortran, it is not necessary to separately install MVS. The Intel Fortran download will include a version of MVS (MVS 2013 Shell - see above Table).

2.1.1 Installing Intel Fortran:

For Intel Visual Fortran Compiler XE 2017 & 2016 it will be necessary to first Install Microsoft Windows SDK for Windows 8.0, 8.1 before installing the Intel Visual Fortran Compiler. To do so, visit Intel windows SDK for VS2013 Shell (<https://software.intel.com/en-us/vs2013shell-windowssdk>) for detailed instructions.

If you install Intel Fortran before installing Microsoft Windows SDK, you will see the message:

"Intel® Visual Fortran Compiler will not work because none of the supported environments is found on your computer". Etc..

Note: You only need to install Microsoft Windows SDK for Windows 8.0, 8.1, **not** the complete Microsoft Visual Studio.

2.1.2 Installing ADAPT:

On Windows 10 systems: Because of the protections of the \Program Files folders, it is recommended that the location of the installation of ADAPT be changed from its default to: C:\BMSR\ADAPT5.

On Windows 7/8/10 systems: It may be necessary to first change the Properties of the following files in the ADAPT 5 folder: ADAPT 5.exe and ValidateADAPT.exe.

Change the Compatibility Mode on each as follows: Privilege Level – Administrator.

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On Vista systems: It may be necessary to first change the Properties of the following files in the ADAPT 5 folder: ADAPT 5.exe and ValidateADAPT.exe.

Change the Compatibility Mode on each as follows:

Windows XP (Service Pack 2 or 3); Privilege Level – Administrator.

2.2 Installing Intel Fortran and ADAPT on Machines With MVS Installed Previously

2.2.1 Note on Microsoft Visual Studio Installation:

*** Note: When using MVS 2017, there is now a 15-20 sec delay to invoke the Intel Fortran compiler due to licensing check. This is a known problem and we hope that it will be addressed and corrected by Intel. If the “Link” button is selecting before compilation is complete, you will see the message “Error compiling Model File”.

Install the appropriate MVS for the version of Intel Fortran you are installing. If you are using MVS 2017 or 2015, check that 'Common Tools for Visual C++ 2015' component from Visual Studio is installed. This component is not installed by default in MVS 2015. (Previous versions MVS 2013, 2012 do include this component by default.) Please see one of the following links to install this component for MVS 2017 or MVS 2015:

<https://software.intel.com/en-us/articles/intel-c-fortran-compilers-for-windows-integration-into-microsoft-visual-studio-2017>

<https://software.intel.com/en-us/articles/intel-c-fortran-compilers-for-windows-integration-into-microsoft-visual-studio-2015>

2.2.3 Installing Intel Fortran:

Early in the installation process you will see the message, which should be ignored:

“Intel® Debugger Extension for Intel® MIC Architecutre cannot be installed”. Etc...

2.2.3 Installing ADAPT:

On Windows 10 systems: Because of the protections of the \Program Files folders, it is recommended that the location of the installation of ADAPT be changed from its default to: C:\BMSR\ADAPT5.

On Windows 7/8/10 systems: It may be necessary to first change the Properties of the following files in the ADAPT 5 folder: ADAPT 5.exe and ValidateADAPT.exe.

Change the Compatibility Mode on each as follows: Privilege Level – Administrator.

On Vista systems: It may be necessary to first change the Properties of the following files in the ADAPT 5 folder: ADAPT 5.exe and ValidateADAPT.exe.

Change the Compatibility Mode on each as follows:

Windows XP (Service Pack 2 or 3); Privilege Level – Administrator.

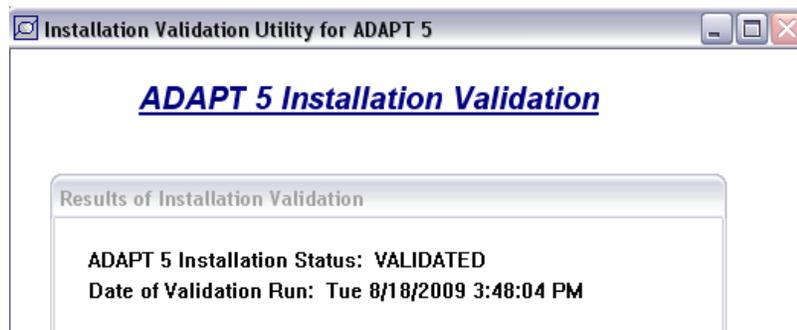
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3. Validating the Installation

After successful installation, the installation can be validated by running the Validation program in the ADAPT 5 Program Group as indicated shown below.



This process will run over 25 examples invoking various features of all of the ADAPT programs, and will compare the results obtain from the user's installation to the set of results distributed with ADAPT. If these two sets of results are in agreement the window shown below will be displayed. The full set of results from the validation (all files created by ADAPT) are archived in the validation folder. ADAPT 5 has been validated for all of the platforms listed in Chapter 1.4.



The file installSTATUS.txt in the top level of the ADAPT installation folder also indicates the Installation Status.

If ADAPT is uninstalled, all the files in the installation director will be removed, including those in the \Validation, \Example and \Library folders and any files created by the user. Thus the user should not place his or her project files in the ADAPT installation folder. The globals.inc file, however, with any changes made by the user will be retained and used on reinstallation of ADAPT 5 (see Appendix A of the User's Guide).