# Windows installation guide for Abaqus 2016

# 1 Licence Requirements

Before installing Abaqus please read the licence requirements, in particular noting:

Only appropriately authorised support staff may make physical copies of the software or documentation. Abaqus may only be installed on computers owned by the University of Manchester; it may not be installed on computers owned by staff or students. With limited exceptions use of Abaqus by students is limited to on-campus facilities. ABAQUS on-line documentation may not be made available over the open internet.

# 2 Supported compilers for Abaqus 2016

# 2.1 C++ Compiler

Visual Studio 2012 Update 4 (available from ESD)

#### 2.2 Fortran Compiler

Intel® Fortran Composer XE 2011 Update 6 Download the installer Installation guide

# 3 Installation

There are 4 installers which have to be run in the following order:

1. Documentation

Note that installing the documentation is not optional - the solvers won't install unless the documentation has already been installed.

- 2. Services (solvers)
- 3. CAA developer
- 4. CAE

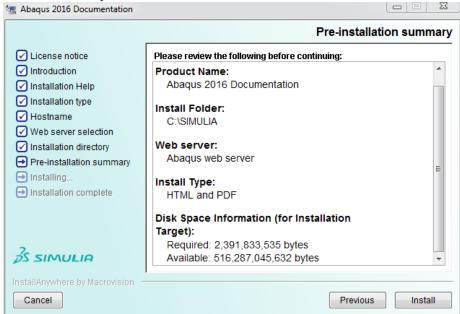
It's generally just a process of double-clicking on each setup.exe in turn and accepting the defaults, but some details are given below for key steps.

#### 3.1 Documentation

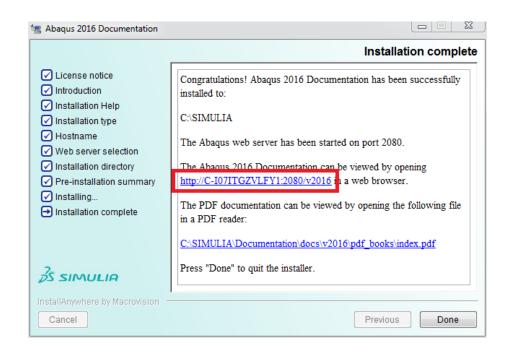
Mount the documentation installer  $Abaqus_fesafe_2016_documentation.iso$  Run this installer

 $\verb|\label{loc_simulia_Abaqus_fe-safe}| $$1\DOC_SIMULIA_Abaqus_fe-safe\\| 1\Abaqus_2016\\| setup.exe$ 

Choose HTML and pdf



Make a note of the link provided at the end of the installation which is required to view the documentation in a web browser (shown in the red box below). You are required to enter this later on in the installation process.



# 3.2 Services (solvers)

Run the installer

\3DEXPERIENCE\_AbaqusSolver\Windows64\1\setup.exe

## 3.3 CAA developer

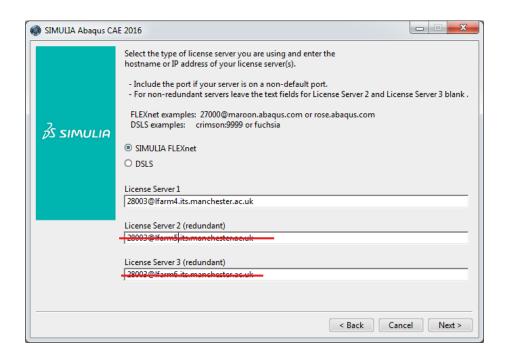
Run the installer  $\CAA_3DEXPERIENCE_AbaqusSolver\Windows64\1\setup.exe$ 

#### 3.4 CAE

Run the installer  $\SIMULIA\_Abaqus\_CAE\Windows64\1\setup.exe$  Choose Flexnet as the licence type and enter the licence server:

28003@lfarm4.its.manchester.ac.uk

There is a known bug in this version of Abaqus which causes the installation to fail if you enter the two redundant licence servers (28003@lfarm5.its.manchester.ac.uk and 28003@lfarm6.its.manchester.ac.uk)- this should be fixed in following releases.



#### 3.4.1 A warning about the working directory

You will be asked to choose a location for the Abaqus working directory. By default, this is C:\temp and this will be created if it doesn't already exist. If you want to use a different directory, make sure it exists. The text box suggests you can specify a path to be created (by changing the default C:\temp), however the installer won't create a new directory for you, and Abaqus won't install properly.

#### 3.4.2 Subset verification suite

As part of the installation process, Abaqus will run the verification suite and report the results. Note this is only a sub-set of the verification suite, so the verification should be run again post-installation.

#### 4 Post-installation tasks

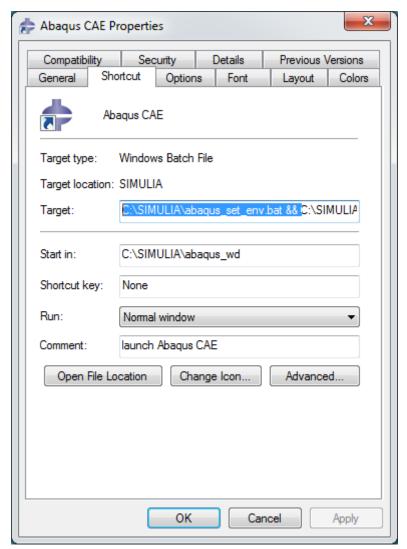
### 4.1 Modify shortcuts to get user subroutines working

To get User Subroutines working with Intel Compiler XE 2011, copy abaqus\_set\_env.bat to C:\SIMULIA\ and then modify the Abaqus start menu shortcuts thus:

- 1. Go to the Start Menu  $\rightarrow$  All Programs  $\rightarrow$  Dassault Systemes SIMULIA Abaqus CAE 2016, right click on Abaqus CAE, then left click on properties
- 2. Copy and paste the below string (everything within, but not including the quote marks) to the very beginning of the **Target** field. Ensure there is a

single space either side of the final "&&" "C:SIMULIA\abaqus\_set\_env.bat && "

3. Repeat this for the Abaqus Command and Abaqus Verification shortcuts in the Dassault Systemes SIMULIA Abaqus CAE 2016 sub-menu



# 4.2 Verification suite

Run the verification suite to test the installation was successful. Start Menu  $\rightarrow$  All Programs  $\rightarrow$  Dassault Systemes SIMULIA Abaqus CAE 2016  $\rightarrow$  Abaqus verification. Tests should report PASS (or skipped for unlicensed features) in the verify.log file. If Abaqus has not been configured correctly to use the Fortran and C++ compilers then tests will fail for user subroutines and make utilities.