DASSAULT SYSTEMES LICENSED PROGRAM SPECIFICATIONS (LPS) FOR DYMOLA® Release 2017 FD01

Terms that are initially capitalized are defined in the Glossary - Release 2, available at www.3ds.com/terms/glossary.

1. LIST OF LICENSED PROGRAMS

This LPS covers the following DYMOLA Release 2017 FD01 Licensed Programs:

Short Ref.	Licensed Program Name
ACY-C	Dymola - Air Conditioning Library
ACY-N	Dymola - Air Conditioning Library
BTY-C	Dymola - Battery Library
BTY-N	Dymola - Battery Library
CLY-C	Dymola - Cooling Library
CLY-N	Dymola - Cooling Library
DCY-C	Dymola - Brushless DC Drives Library
DCY-N	Dymola - Brushless DC Drives Library
DOZ-C	Dymola - Design Optimization
DOZ-N	Dymola - Design Optimization
DYI-EDU-C	Dymola - Academic Innovate (Shareable)
DYI-EDU-N	Dymola - Academic Innovate (Nodelocked)
DYL-EDU-C	Dymola - Academic Learn (Shareable)
DYL-EDU-N	Dymola - Academic Learn (Nodelocked)
DYM-C	Dymola - Standard Configuration (Shareable)
DYM-N	Dymola - Standard Configuration (Nodelocked)
DYR-C	Dymola - Standard Runtime Configuration
DYR-N	Dymola - Standard Runtime Configuration
EIY-C	Dymola - Engines Library
EIY-N	Dymola - Engines Library
ENY-C	Dymola - Engine Dynamics Library
ENY-N	Dymola - Engine Dynamics Library
EPY-C	Dymola - Electric Power Library
EPY-N	Dymola - Electric Power Library
ETY-C	Dymola - Electrified Powertrains Library
ETY-N	Dymola - Electrified Powertrains Library
FBY-C	Dymola - Flexible Bodies Library
FBY-N	Dymola - Flexible Bodies Library
FCY-C	Dymola - Fuel Cell Library
FCY-N	Dymola - Fuel Cell Library
FDY-C	Dymola - Flight Dynamics Library
FDY-N	Dymola - Flight Dynamics Library
GSC-C	Dymola - Source Code Generation

Short Ref.	Licensed Program Name
GSC-N	Dymola - Source Code Generation
HCY-C	Dymola - Human Comfort Library
HCY-N	Dymola - Human Comfort Library
HDY-C	Dymola - Hydraulics Library
HDY-N	Dymola - Hydraulics Library
HPY-C	Dymola - Hydro Power Library
HPY-N	Dymola - Hydro Power Library
HVY-C	Dymola - HVAC Library
HVY-N	Dymola - HVAC Library
HXY-C	Dymola - Heat Exchanger Library
HXY-N	Dymola - Heat Exchanger Library
LCY-C	Dymola - Liquid Cooling Library
LCY-N	Dymola - Liquid Cooling Library
PNY-C	Dymola - Pneumatics Library
PNY-N	Dymola - Pneumatics Library
PWY-C	Dymola - Powertrain Library
PWY-N	Dymola - Powertrain Library
SEY-C	Dymola - Smart Electric Drives Library
SEY-N	Dymola - Smart Electric Drives Library
SMK-C	Dymola - Simulink Interface
SMK-N	Dymola - Simulink Interface
TPY-C	Dymola - Thermal Power Library
TPY-N	Dymola - Thermal Power Library
VAY-C	Dymola - Vapor Cycle Library
VAY-N	Dymola - Vapor Cycle Library
VDL-C	Dymola - Vehicle Dynamics Library
VDL-N	Dymola - Vehicle Dynamics Library
WPY-C	Dymola - Wind Power Library
WPY-N	Dymola - Wind Power Library
XBM-C	Dymola - Binary Model Export
XBM-N	Dymola - Binary Model Export
YSI-EDU-N	Dymola - Student Innovate (Named User)
YSL-EDU-N	Dymola - Student Learn (Named User)

References in this LPS to Dassault Systèmes <u>Products</u>, Licensed Programs and/or Program Services (<u>Support Services</u>) do not imply that <u>DS</u> intends to make these available in all countries in which DS operates.

Any other documentation with respect to these Licensed Programs, excluding any documentation referenced herein, is provided for reference purposes only and does not extend or modify these specifications.

2. HARDWARE AND SOFTWARE REQUIREMENTS

The DS hardware certification program is available at http://www.3ds.com/support/certified-hardware/.

Hardware and software information for DYMOLA Release 2017 FD01 Licensed Programs are as follows:

2.1 HARDWARE REQUIREMENTS

Hardware requirements for Microsoft® Windows 7, Windows 10 and Linux:

- At least 1 GB RAM
- At least 400 MB disk space

2.2 SOFTWARE REQUIREMENTS

Software requirements for Microsoft® Windows 7. Windows 10 and Linux:

- For the Windows platform, Microsoft C/C++ compiler must be installed separately. Installation instructions in the DYMOLA Installation manual
- On Linux, DYMOLA is supported on SUSE Linux (Release 11) and Red Hat Enterprise Linux (Release 6.6) and compatible systems (32 bits and 64 bits). Please note that multi-criteria design optimization is not supported on Linux.

3. LICENSED PROGRAM MATERIALS AVAILABILITY

Restricted materials - No.

This Licensed Program is available without Source Code materials. It is available in Object Code only.

4. SUPPLEMENTAL TERMS

4.1 GENERAL RULES

The licenses for the Licensed Programs to which this LPS applies are granted pursuant to the <u>Agreement</u>, and according to one of the following licensing schemes (specifying the authorized use and end-users), as specified in the <u>Product Portfolio</u> if available, and as determined in the applicable <u>Quote</u>:

- Concurrent (floating) Based
- Machine Based (node-lock)

Licenses for the Licensed Programs to which this LPS applies are granted for use on Machines by the Users (and Extended Enterprise Users, as applicable) only in the country for which the licenses are ordered. However, (i) Users, whose usual workplace is located in the same country as the country where such use of the Licensed Programs has been authorized, may use the Licensed Programs in any other country (subject inter alia to the export and re-export laws and regulations provisions of the Agreement) for purposes of a business trip of a maximum of thirty (30) consecutive days and (ii) DS may authorize, on a case-by-case basis, the use of certain Licensed Programs by the Users (and Extended Enterprise Users, as applicable) on a Remote Access mode.

It is agreed that, notwithstanding anything to the contrary provided in the <u>Documentation</u>, software components packaged and delivered by DS as part of a given Licensed Program:

- > shall solely be used together and as part of such Licensed Program and
- shall not be used standalone and/or for other purposes than the ones for which such Licensed Program has been marketed and granted to <u>Licensee</u> by DS

If a patent invention is implemented in the Licensed Programs for which a right to use is granted pursuant to the Agreement, DS hereby grants Licensee a non-exclusive license on the applicable patent limited to the use of such Licensed Program.

4.2 SPECIFIC PROVISIONS FOR CERTAIN LICENSED PROGRAMS

As an exception to the Agreement, as long as the corresponding license for the Licensed Programs is valid, DS grants Licensee a non-exclusive, non-transferable license to prepare Derivative Works of the Value Added Technology only. Licensee may distribute such Derivative Works of the Value Added Technology to third parties exclusively in Object Code form. In addition, Licensee is granted the right to modify, copy, and distribute those parts of the Value Added Technology expressly marked as "Sample Code," if applicable. However, Licensee shall not use, and shall not permit any third party to use, any form or part of the Value Added Technology (including without limitation, such as included in a Source Code Output File, a Binary Output File and/or Obfuscated Source Code) to develop a software program competing or intended to compete directly or indirectly with the Licensed Programs to which this LPS applies, for whatever purpose.

For the avoidance of doubt and without prejudice to the Agreement, distribution of any element of the Value Added Technology in whatever form (whether "as is" or included in a Derivative Work, <u>Licensee Model</u>, <u>Licensee Application</u> or Binary Output File, and/or "Sample Code"), as authorized pursuant hereto remains subject to the export and re-export laws and regulations provision of the Agreement.

In addition, Licensee shall indemnify, defend, and hold harmless DS against any claim, expense, cost (including reasonable attorneys' fees), judgment, damage, or loss of any kind arising out of or in any way relating to, such distribution and/or any third party's access to or use of such Value Added Technology in whatever form.

Notwithstanding any term or condition of the Agreement, DS shall have no obligation whatsoever to defend, hold harmless or indemnify Licensee against any claim arising out of or in any way relating to the distribution or redistribution, directly or indirectly, including as part of any services, of the Value Added Technology in whatever form (including, without limitation, such as included in a Licensee Model, a Binary Output File or a Licensee Application).

Additional terms applicable to Source Code Generation Option

As long as the <u>Source Code Generation Option</u> license is valid, DS grants Licensee a non-exclusive, non-transferable license to use, reproduce and modify (solely for the purpose of improving, adapting to Licensee's needs and bug fixing of Source Code Output File) the Value Added Technology strictly as integrated in the Source Code Output File in order to enable Users (and/or Extended Enterprise Users as applicable) to operate the Output File exclusively for Licensee's internal use. In addition, and as long as the license on the Source Code Generation Option is valid, DS grants Licensee a non-exclusive, non-transferable license to distribute on a worldwide basis to any third parties the Value Added Technology in order to enable such third parties to operate the Source Code Output File exclusively for such third parties' internal use.

Additional terms applicable to Binary Model Export Option

As long as the Binary Model Export Option license is valid, DS grants Licensee a non-exclusive, non-transferable license to use and reproduce the Value Added Technology strictly as integrated in the Binary Output File in order to enable Users (and/or Extended Enterprise Users as applicable) to operate the Binary Output File exclusively for Licensee's internal use. DS grants Licensee a non-exclusive, non-transferable, license to distribute on a worldwide basis to any third parties the Value Added Technology exclusively as integrated in the Binary Output File in order to enable such third parties to operate the Binary Output File exclusively for such third parties' internal use.

Additional terms applicable to Real Time Simulation Option

As long as the Real Time Simulation Option license is valid, DS grants Licensee a non-exclusive, non-transferable license to use, reproduce and modify (solely for the purpose of improving, adapting to Licensee's needs and bug fixing of the Obfuscated Source Code) the Value Added Technology strictly as integrated in the Obfuscated Source Code in order to enable Users (and/or Extended Enterprise Users as applicable) to operate the Obfuscated Source Code exclusively for Licensee's internal use. In addition, and as long as the license on the Real Time Simulation Option is valid, DS grants Licensee a non-exclusive, non-transferable license to distribute on a worldwide basis to any third parties the Value Added Technology integrated in the Obfuscated Source Code exclusively as embedded in a Licensee Application for such third parties' internal use.

5. OTHER PERMITTED USES FOR LICENSED PROGRAMS

USE FOR CERTAIN SERVICES. Except for <u>Development Tool Kit</u>, Licensee is authorized to use the Licensed Programs for added-value engineering or implementation services are services to deliver to a third party end user any deliverable generated specifically for said third party end user from use by Licensee of the Licensed Programs. In any event, Licensee may not (1) use the Licensed Programs to develop software code for (i) general distribution by any means, and whether alone or bundled or delivered with any product, data, information, software, or other element, or (ii) any services that do not add value attributable to the intervention of specific human skills, such as, without limitation, in a data services operation or as an application service provider, or (2) install and/or operate and/or give access to the Licensed Programs on any hardware and/or software environment owned by or under control of any third party unless otherwise expressly authorized in the Agreement, or (3) represent or imply to any party that it is an authorized or certified provider of services for DS. Licensee shall indemnify, defend and hold harmless DS against any claim, expense, judgment, damage or loss (including reasonable attorneys' fees) which arises out of or in any way relates to Licensee's use of the Licensed Programs with third party end users.

EXTENDED ENTERPRISE USERS. For certain Licensed Programs as identified in the Product Portfolio and subject to all terms and conditions of the Agreement and this LPS, Licensee is authorized to give access to its licenses of such Licensed Programs to Extended Enterprise Users for the sole and exclusive purpose of enabling the Extended Enterprise Users to conduct business with Licensee, provided that use of the Licensed Programs by any such Extended Enterprise User shall be limited to use (i) solely as configured and deployed by Licensee and (ii) solely in connection with the Extended Enterprise User's performance of services for and on behalf of Licensee, and not for such Extended Enterprise User's own or another's account or for the purpose of hosting, modifying, or otherwise using or maintaining the Licensed Programs.

OUTSOURCING TO A THIRD PARTY. Licensee is authorized to execute the Licensed Programs remotely on computers operated by third parties, provided that only duly authorized Users, and/or Extended Enterprise Users if applicable, shall have access to the Licensed Programs. Licensee may appoint a third party, such as an outsourcer, to operate the hardware on which the Licensed Programs are installed, on behalf of Licensee, only if (i) Licensee does not assign the Agreement or any licenses granted there under, in whole or in part, to the third party, (ii) the third party and Licensee enter into a written agreement under which the third party agrees that its access to and use of the Licensed Programs is subject to all of the grant of license, confidentiality, restrictions, and limitations on use provisions of the Agreement, and (iii) such third party is not a competitor of any <u>DS Group Company</u>. Licensee acknowledges and agrees that the third party shall be deemed an agent of Licensee. If Licensee becomes aware of any actual or suspected unauthorized use or disclosure of the Licensed Programs, Licensee shall immediately terminate the third party's access to and use of the Licensed Programs. Licensee shall indemnify, defend, and hold harmless DS against any claim, expense, judgment, damage, or loss (including reasonable attorneys' fees) which arises out of or in any way relates to each third party's access to or use of the Licensed Programs.

LICENSEE'S RESPONSIBILITY. In addition to all terms and conditions of the Agreement and all other provisions of this LPS, Licensee agrees that it is responsible for ensuring that any use of the Licensed Programs by all Users, and, if applicable all Named Users and/or Extended Enterprise Users, shall at all times be in compliance with the terms and conditions of the Agreement, and any breach by Extended Enterprise Users (if applicable) of the terms of this Agreement shall also be deemed a breach by Licensee.

EDUCATIONAL ALLOWANCE AVAILABILITY. The standard educational allowance does not apply to the Licensed Programs to which this LPS applies.

6. SPECIFIC TERMS FOR THIRD PARTY SOFTWARE

The specific terms relating to the use of certain third party software components or products not developed by or for a DS Group Company and granted to Licensee to be used in connection with or within a Licensed Program are defined hereafter:

6.1 OPEN SOURCE SOFTWARE

The Licensed Programs may include open source software components. Whenever notices (such as acknowledgment, copies of licenses or attribution notice) are required by the original licensor, such notices are included in the Documentation of the Licensed Programs.

Moreover, some components may not be distributed and licensed under the terms of the Agreement but under the terms of their original licenses as set forth in the Documentation of the Licensed Programs themselves. Source code for these components is available upon request.

The warranty and indemnification provided by DS under the Agreement does NOT apply to all such open source software components. Support Services provided by DS under the Agreement apply to open source software components and shall be provided by DS and not by the original licensor, but only for the use of the Licensed Programs that is in compliance with the terms of the Agreement, and in conjunction with the Licensed Programs. The original licensors of said open source software components provide them on an "as is" basis and without any liability whatsoever to Licensee.

6.2 ADDITIONAL THIRD PARTY SOFTWARE TERMS

The following terms apply in addition to the Agreement:

NONE

6.3 <u>EXCLUSIONS</u>

The Support Services provided by DS under the Agreement are not applicable to open source software components listed hereunder:

NONE

7. SPECIFICITIES

7.1 TYPE/DURATION OF PROGRAM SERVICES (also referred to as "SUPPORT SERVICES")

Support Services means the maintenance, enhancement and other support services related to a Licensed Program as described at http://www.3ds.com/terms/support-policies

7.2 DESIGNATED MACHINE IDENTIFICATION

No

7.3 TEST PERIOD

No

8. SECURITY MECHANISMS

DS and its affiliated companies take all legal steps to eliminate piracy of their software products. In this context, the Licensed Programs may include a security mechanism that can detect the installation or use of illegal copies of the Licensed Programs, and collect and transmit data about those illegal copies only (including IP and MAC addresses). Data collected will not include any Licensee data created with the Licensed Programs. By using the Licensed Programs, Licensee consents to such detection and collection of data, as well as its transmission and use if an illegal copy is detected. DS also reserves the right to use a hardware lock device, license administration software, and/or a license authorization key to control access to the Licensed Programs. Licensee may not take any steps to avoid or defeat the purpose of any such measures. Use of any Licensed Programs without any required lock device or authorization key provided by DS is prohibited.

9. SOFTCOPY PUBLICATIONS

The Licensed Program may include licensed publications in displayable or source form. Except as provided in this section, the terms and conditions of the Agreement apply to these publications and to any copies that are made from them.

The licensed publications may be used in displayable or source form on all machines designated for this Licensed Program. The licensed publications may also be copied and used on other machines in support of authorized use of this Licensed Program.

To support authorized use of the Licensed Program, printed copies of the displayable or source material may be made if the copyright notice and any other legend of ownership is reproduced on each copy or partial copy.

10. WARRANTY

The Licensed Programs are warranted as specified in the Agreement.

These Licensed Program Specifications may be updated from time to time and such updates may constitute a change in specifications.

Following the discontinuance of all Program Services (Support Services), this Licensed Program will be provided "As Is" as specified in the Agreement.

11. ADDITIONAL DEFINITIONS

The following definitions are supplementary to the Glossary - Release 2, available at www.3ds.com/terms/glossary.

Remote Access means, if so specified in the Product Portfolio, that Users and/or Extended Enterprise Users may access and use the Licensed Program remotely via the Internet from any country (subject inter alia to the export and re-export laws and regulations provisions of the Agreement).

The following definition supersedes the definition of the Glossary - Release 2, available at www.3ds.com/terms/glossary.

Token Based. Use of a Licensed Program granted in Token Based mode provides a right to use a determined number of tokens for the duration of the license. Tokens are reserved for one use at a time and when released, are available for other uses. The quantity of tokens required for a given use of the Licensed Program is determined in the Product Portfolio and/or in the Documentation, and may be changed in the event of modifications to such Licensed Program. Pool of tokens of same type can be accessed and used simultaneously by one or several authorized Users and/or Extended Enterprise Users and/or Machines, as applicable within the limit of the number of available tokens. Tokens of given type(s) may be required to enable use of other Licensed Programs.

12. TRADEMARKS

DYMOLA, **3D**EXPERIENCE, the Compass logo and the 3DS logo, CATIA, SOLIDWORKS, ENOVIA, DELMIA, SIMULIA, GEOVIA, EXALEAD, 3D VIA, BIOVIA, NETVIBES, 3DSWYM, IFWE and 3DEXCITE are commercial trademarks or registered trademarks of Dassault Systèmes, a French "société européenne" (Versailles Commercial Register # B 322 306 440), or its subsidiaries in the U.S. and/or other countries. All other trademarks are owned by their respective owners. Use of any Dassault Systèmes or its subsidiaries trademarks is subject to their express written approval.

Licensed Programs and services names may be trademarks or service marks of Dassault Systèmes or its subsidiaries.

