Supported and Compatible Compilers – Release 2007b

Technical Note 1601

Windows (32-bit)

MATLAB® 7.5 and Related Products

			MATLAB®	MATLAB® Builder	MATLAB® Builder	MATLAB® Builder
Compiler	Version	MATLAB® 7.5	Compiler TM 4.7	for .NET 2.2.1	for Excel® 1.2.9	for Java TM 2.0
Borland® C++ Builder® 1	6.0 ²	V	V			
	5.0	V	√			
Borland® C++ Compiler ¹ (free command line tools)	5.5	V	1			
Compaq® Visual Fortran 1	6.6	√				
	6.1	V				
Intel® C++ 3	9.1	V				
	7.1 1	V				
Intel® Visual Fortran ³	9.1	√				
	9.0 1, 4	V				
Lcc - win32	2.4.1	V	√			
Microsoft® .NET Framework SDK	2.0			√5,6		
	1.1			√ 5,6		
Microsoft® Visual C++® 7	6.0 Prof. Edition	V	V	√ 6	V	
Microsoft® Visual C++® 2005 ⁹	8.0 Express Edition	V	1		1	
Microsoft® Visual C++® 2005 SP1	8.0 Prof. Edition	V	1	√ 6	1	
Microsoft® Visual C++® .NET 2003 ⁴	7.1 Prof. Edition	V	1	√ 6	1	
Open Watcom 1,7,8	1.3	V				
Sun™ Java™ Development Kit (JDK)	1.5					V



Simulink®7.0 and Related Products

Compiler	Version	Simulink® 7.0 S- Functions	Simulink 7.0 (Model Reference)	Simulink 7.0 (Accelerator Mode)	Simulink 7.0 (Rapid Accelerator Mode)	Simulink 7.0 (Embedded MATLAB)	Stateflow® 7.0	Real-Time Workshop® 7.0 10	xPC Target™ 3.3
Borland® C++ Builder® 1	6.0 ²	√		√		V	√	√	
	5.0	√		√		V	√	√	
Borland® C++ Compiler (free command line tools)	5.5	٧		V		٧	٧	1	
Compaq® Visual	6.6	√ 11							
Fortran ¹	6.1	√ 11							
Intel® C++3	9.1	√							
	7.1 1	√		√				√	
Intel® Visual Fortran ³	9.1	√ 11							
	9.0 1, 4	√ 11							
Lcc - win32	2.4.1	√	√	√	√	V	√	√	
Microsoft® Visual C++®	6.0 Prof. Edition	1	٧	1	٧	٧	1	٧	1
Microsoft® Visual C++® 2005 9	8.0 Express Edition	1	1	1	٧	٧	1	1	1
Microsoft® Visual C++® 2005 SP1	8.0 Prof. Edition	1	1	1	٧	٧	1	٧	٧
Microsoft® Visual C++® .NET 2003 ⁴	7.1 Prof. Edition	1	1	1	1	٧	1	1	1
Open Watcom 1,7,8	1.3	√		√		√	√	√	1

Notes for the Windows (32-bit) Platform

- 1. These compilers are being phased out and will not be supported in some future release.
- 2. Version 6 of the Borland C++ Builder is packaged with Borland C/C++ Compiler 5.6.
- 3. Intel compilers depend on tools provided by Microsoft development products. The following combinations are supported by MATLAB and Simulink related products:



Intel Compilers on Microsoft Windows		Microsoft® Visual Studio® 2005 SP1 Professional Edition (32-bit)	Microsoft® Visual Studio® .NET 2003 Professional Edition (32-bit)	Microsoft® Visual Studio® Professional Edition (32-bit)	
Compiler Version		8.0	7.1	6.0	
Intel C++	9.1	√			
	7.1			1	
Intel Visual Fortran	9.1	√			
	9.0	√	√		

- 4. These compilers are not supported on Windows Vista.
- 5. MATLAB Builder for .NET supports building .NET Assemblies but not COM Objects when using the Microsoft .NET Framework SDK without Microsoft Visual Studio.
- 6. To build .NET components, Microsoft .NET Framework SDK 1.1 or 2.0 must be installed. These products are automatically installed by Visual Studio 2003 or 2005, respectively. They can also be downloaded from the Microsoft website: http://msdn.microsoft.com.

To execute applications that use the resulting .NET components, the target machine must have the matching .NET Framework installed.

- 7. When using C++, MATLAB and related products rely on the availability of exception handling in the C++ language. These compilers do not properly support C++ exception handling. Consequently, our support for exception handling is limited with these compilers. You can find more information in *Solution 1-4OKNSV*.
- 8. Open Watcom is supported for use in C/C++ only; Open Watcom Fortran is not supported.
- 9. Microsoft Visual C++ 2005 Express Edition requires the Microsoft Platform SDK for Windows Server 2003, and requires the MSSdk variable to be defined in the Windows environment when used with MATLAB and related products. The value of this environment variable is the path to the installation directory of the SDK. This environment variable is not usually defined by the Microsoft Platform SDK installation program.
- 10. Includes Real-Time Workshop Embedded Coder and Stateflow Coder compiler support.
- 11. Fortran compilers are supported with Simulink only for creating Simulink S-functions using the MATLAB MEX command. The S-functions can be used with normal and accelerated simulations.



Windows (64-bit)

MATLAB® 7.5 and Related Products

Compiler	Version	MATLAB® 7.6	MATLAB® Compiler™ 4.8	MATLAB® Builder™ NE 2.2.2	MATLAB® Builder™ JA 2.0.1
Intel® C++1	9.1	✓			
	10.1				
Intel® Visual Fortran ¹	9.1	✓			
Microsoft® .NET Framework SDK	2.0			✔ 2,3	
	1.1			✔ 2,3	
Microsoft® Platform SDK ⁴	14.0	✓			
Microsoft® Visual C++® 2005 SP15	8.0 Prof Edition	✓	✓	✓ 2	
Sun™ Java™ Development Kit (JDK) ⁵	1.5				✓

Simulink®7.0 and Related Products

Compiler	Version	Simulink® 7.1 (S-functions)	Simulink® 7.1 (Model Reference)	Simulink® 7.1 (Accelerator Mode)	Stateflow® 7.1	Real-Time Workshop® 7.16
Intel® C++1	9.1	✓				
Intel® Visual Fortran ¹	9.1	√ 7				
Microsoft® Platform SDK ⁴	14.0	✓		✓		
Microsoft® Visual C++® 2005 SP1 ⁵	8.0 Prof Edition	✓	✓	✓	✓	✓

Notes for the Windows (64-bit) Platform

- 1. Version 6 of the Borland C++ Builder is packaged with Borland C/C++ Compiler 5.6.
- 2. Intel compilers depend on tools provided by Microsoft development products. The following combinations are supported by MATLAB and Simulink related products:



Intel Compilers on Microsoft Windows		Microsoft® Visual Studio® 2005 SP1 Professional Edition (32-bit)	Microsoft® Visual Studio® .NET 2003 Professional Edition (32-bit)	Microsoft® Visual Studio® Professional Edition (32-bit)	
Compiler Version		8.0	8.0 7.1		
Intel C++	9.1	√			
	7.1			1	
Intel Visual Fortran	9.1	√			
	9.0	√	√		

- 3. These compilers are not supported on Windows Vista.
- 4. MATLAB Builder for .NET supports building .NET Assemblies but not COM Objects when using the Microsoft .NET Framework SDK without Microsoft Visual Studio.
- 5. To build .NET components, Microsoft .NET Framework SDK 1.1 or 2.0 must be installed. These products are automatically installed by Visual Studio 2003 or 2005, respectively. They can also be downloaded from the Microsoft website: http://msdn.microsoft.com.

To execute applications that use the resulting .NET components, the target machine must have the matching .NET Framework installed.

- 6. When using C++, MATLAB and related products rely on the availability of exception handling in the C++ language. These compilers do not properly support C++ exception handling. Consequently, our support for exception handling is limited with these compilers. You can find more information in <u>Solution 1-4OKNSV</u>.
- 7. Open Watcom is supported for use in C/C++ only; Open Watcom Fortran is not supported.

