

# **OPC Toolbox™ Release Notes**

## How to Contact The MathWorks



[www.mathworks.com](http://www.mathworks.com) Web  
[comp.soft-sys.matlab](mailto:comp.soft-sys.matlab) Newsgroup  
[www.mathworks.com/contact\\_TS.html](http://www.mathworks.com/contact_TS.html) Technical Support



[suggest@mathworks.com](mailto:suggest@mathworks.com) Product enhancement suggestions  
[bugs@mathworks.com](mailto:bugs@mathworks.com) Bug reports  
[doc@mathworks.com](mailto:doc@mathworks.com) Documentation error reports  
[service@mathworks.com](mailto:service@mathworks.com) Order status, license renewals, passcodes  
[info@mathworks.com](mailto:info@mathworks.com) Sales, pricing, and general information



508-647-7000 (Phone)



508-647-7001 (Fax)



The MathWorks, Inc.  
3 Apple Hill Drive  
Natick, MA 01760-2098

For contact information about worldwide offices, see the MathWorks Web site.

*OPC Toolbox™ Release Notes*

© COPYRIGHT 2005–2010 by The MathWorks, Inc.

The software described in this document is furnished under a license agreement. The software may be used or copied only under the terms of the license agreement. No part of this manual may be photocopied or reproduced in any form without prior written consent from The MathWorks, Inc.

FEDERAL ACQUISITION: This provision applies to all acquisitions of the Program and Documentation by, for, or through the federal government of the United States. By accepting delivery of the Program or Documentation, the government hereby agrees that this software or documentation qualifies as commercial computer software or commercial computer software documentation as such terms are used or defined in FAR 12.212, DFARS Part 227.72, and DFARS 252.227-7014. Accordingly, the terms and conditions of this Agreement and only those rights specified in this Agreement, shall pertain to and govern the use, modification, reproduction, release, performance, display, and disclosure of the Program and Documentation by the federal government (or other entity acquiring for or through the federal government) and shall supersede any conflicting contractual terms or conditions. If this License fails to meet the government's needs or is inconsistent in any respect with federal procurement law, the government agrees to return the Program and Documentation, unused, to The MathWorks, Inc.

### Trademarks

MATLAB and Simulink are registered trademarks of The MathWorks, Inc. See [www.mathworks.com/trademarks](http://www.mathworks.com/trademarks) for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders.

### Patents

The MathWorks products are protected by one or more U.S. patents. Please see [www.mathworks.com/patents](http://www.mathworks.com/patents) for more information.

<b>Summary by Version</b> .....	<b>1</b>
<b>Version 2.1.5 (R2010a) OPC Toolbox Software</b> .....	<b>4</b>
<b>Version 2.1.4 (R2009b) OPC Toolbox Software</b> .....	<b>5</b>
<b>Version 2.1.3 (R2009a) OPC Toolbox Software</b> .....	<b>6</b>
<b>Version 2.1.2 (R2008b) OPC Toolbox Software</b> .....	<b>7</b>
<b>Version 2.1.1 (R2008a) OPC Toolbox Software</b> .....	<b>8</b>
<b>Version 2.1 (R2007b) OPC Toolbox Software</b> .....	<b>9</b>
<b>Version 2.0.4 (R2007a) OPC Toolbox Software</b> .....	<b>10</b>
<b>Version 2.0.3 (R2006b) OPC Toolbox Software</b> .....	<b>11</b>
<b>Version 2.0.2 (R2006a) OPC Toolbox Software</b> .....	<b>12</b>
<b>Version 2.0.1 (R14SP3) OPC Toolbox Software</b> .....	<b>13</b>
<b>Version 2.0 (R14SP2+) OPC Toolbox Software</b> .....	<b>14</b>
<b>Compatibility Summary for OPC Toolbox Software</b> ...	<b>15</b>



## Summary by Version

This table provides quick access to what is new in each version. For clarification, see “Using Release Notes” on page 2.

<b>Version (Release)</b>	<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
<b>Latest Version V2.1.5 (R2010a)</b>	No	No	Bug Reports Includes fixes	Printable Release Notes: PDF  Current product documentation
V2.1.4 (R2009b)	No	No	Bug Reports Includes fixes	No
V2.1.3 (R2009a)	No	No	Bug Reports Includes fixes	No
V2.1.2 (R2008b)	No	No	Bug Reports Includes fixes	No
V2.1.1 (R2008a)	No	No	Bug Reports Includes fixes	No
V2.1 (R2007b)	Yes Details	No	Bug Reports Includes fixes	No
V2.0.4 (R2007a)	No	No	Bug Reports Includes fixes	No
V2.0.3 (R2006b)	No	No	Bug Reports Includes fixes	No
V2.0.2 (R2006a)	Yes Details	No	Bug Reports at Web site	No
V2.0.1 (R14SP3)	Yes Details	No	Bug Reports at Web site	No
V2.0 (R14SP2+)	Yes Details	No	Bug Reports at Web site	No

## Using Release Notes

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorks™ products required for this product (for example, MATLAB® or Simulink®). Determine if enhancements, bugs, or compatibility considerations in other products impact you.

If you are upgrading from a software version other than the most recent one, review the current release notes and all interim versions. For example, when you upgrade from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

## What Is in the Release Notes

### New Features and Changes

- New functionality
- Changes to existing functionality

### Version Compatibility Considerations

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product release appear under Bug Reports at The MathWorks™ Web site. Bug fixes can sometimes result in incompatibilities, so review the fixed bugs in Bug Reports for any compatibility impact.

### Fixed Bugs and Known Problems

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release

time and as more information becomes available. Bug Reports include provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

## Version 2.1.5 (R2010a) OPC Toolbox Software

This table summarizes what is new in Version 2.1.5 (R2010a):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	Printable Release Notes: PDF  Current product documentation

There are no new features or changes in this version.



## Version 2.1.4 (R2009b) OPC Toolbox Software

This table summarizes what is new in Version 2.1.4 (R2009b):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	No

There are no new features or changes in this version.

## Version 2.1.3 (R2009a) OPC Toolbox Software

This table summarizes what is new in Version 2.1.3 (R2009a):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	No

There are no new features or changes in this version.

## Version 2.1.2 (R2008b) OPC Toolbox Software

This table summarizes what is new in Version 2.1.2 (R2008b):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	No

There are no new features or changes in this version.

## Version 2.1.1 (R2008a) OPC Toolbox Software

This table summarizes what is new in Version 2.1.1 (R2008a):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	No

There are no new features or changes in this version.

## Version 2.1 (R2007b) OPC Toolbox Software

This table summarizes what is new in Version 2.1 (R2007b):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports Includes fixes	No

New features and changes introduced in this version are

- “Graphical Display of OPC Data” on page 9
- “Time Series Objects Now Supported” on page 9

### Graphical Display of OPC Data

The new `trend` function provides a graphical display of live OPC data for an OPC group object. You can now watch live data stream to a MATLAB figure window. The trend functionality is independent of OPC logging tasks. More information is available on the `trend` reference page.

### Time Series Objects Now Supported

OPC Toolbox™ software now supports time series objects, allowing easier analysis and visualization of time domain data in MATLAB software. The addition of this functionality involves the extension of the existing OPC Toolbox functions `getdata` and `opcread` to support the creation of MATLAB time series objects. The new functions `opcstruct2timeseries` and `opcqid` have also been added to the toolbox to support this feature. More information is available on the reference pages for these functions.

## Version 2.0.4 (R2007a) OPC Toolbox Software

This table summarizes what is new in Version 2.0.4 (R2007a):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	No

## Version 2.0.3 (R2006b) OPC Toolbox Software

This table summarizes what is new in Version 2.0.3 (R2006b):

<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
No	No	Bug Reports Includes fixes	No

## Version 2.0.2 (R2006a) OPC Toolbox Software

This table summarizes what is new in Version 2.0.2 (R2006a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports at Web site	No

New features and changes introduced in this version are

### **opcregister Function Enhanced**

The `opcregister` function has been enhanced with a `'-silent'` option to install OPC Foundation Core components without dialog boxes.



## Version 2.0.1 (R14SP3) OPC Toolbox Software

This table summarizes what is new in Version 2.0.1 (R14SP3):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports at Web site	No

New features and changes introduced in this version are

- “Full Event Log” on page 13
- “Changing TimerPeriod Property” on page 13

### Full Event Log

The event log is no longer cleared when a new event arrives and the event log is full. Instead, the oldest event is removed to make space for the new event. For more information, see the reference page for the `EventLogMax` property, by typing

```
doc EventLogMax
```

### Changing TimerPeriod Property

You can now change the `TimerPeriod` property while a client object is connected.

## Version 2.0 (R14SP2+) OPC Toolbox Software

This table summarizes what is new in Version 2.0 (R14SP2+):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports at Web site	No

New features and changes introduced in this version are

- “Support for Simulink Software: OPC Toolbox Block Library” on page 14
- “New Item Property: QualityID” on page 14

### Support for Simulink Software: OPC Toolbox Block Library

This release of OPC Toolbox software includes support for communicating with OPC servers from Simulink software. The OPC Toolbox block library includes blocks for reading data from an OPC server, writing data to an OPC server, and running a Simulink simulation in pseudo real time (by slowing the simulation to run at system time). For more information on using OPC Toolbox software with Simulink software, see “Using the OPC Toolbox Block Library” in the User’s Guide.

### New Item Property: QualityID

The QualityID property has been added to daitem objects. The QualityID, expressed as a 16-bit unsigned integer, represents the quality of the data item when last read. To work with the QualityID property, you use the function `opcqparts` to convert the QualityID property into vendor, major, substatus, and limit status information; and the function `opcqstr` to convert the QualityID property into a string. For more information, see the QualityID property reference page.

## Compatibility Summary for OPC Toolbox Software

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided in the description of the new feature or change.

<b>Version (Release)</b>	<b>New Features and Changes with Version Compatibility Impact</b>
<b>Latest Version V2.1.5 (R2010a)</b>	None
V2.1.4 (R2009b)	None
V2.1.3 (R2009a)	None
V2.1.2 (R2008b)	None
V2.1.1 (R2008a)	None
V2.1 (R2007b)	None
V2.0.4 (R2007a)	None
V2.0.3 (R2006b)	None
V2.0.2 (R2006a)	None
V2.0.1 (R14SP3)	None
V2.0 (R14SP2+)	None