Release Notes for MATLAB[®] Distributed Computing Server™

How to Contact MathWorks



(a)

www.mathworks.comWebcomp.soft-sys.matlabNewsgroupwww.mathworks.com/contact_TS.htmlTechnical Support

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



508-647-7001 (Fax)

508-647-7000 (Phone)

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

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

Release Notes for MATLAB[®] Distributed Computing Server[™]

© COPYRIGHT 2012–2013 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 for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders.

Patents

MathWorks products are protected by one or more U.S. patents. Please see www.mathworks.com/patents for more information.

Contents

<u>R2013a</u>

Automatic detection and transfer of files required for	
execution in both batch and interactive workflows	2
Upgrade Parallel Computing Products Together	3

I

R2012b

6
7
8

R2013a

Version: 6.2 New Features: Yes Bug Fixes: Yes

Automatic detection and transfer of files required for execution in both batch and interactive workflows

Parallel Computing Toolbox can now automatically attach files to a job so that workers have the necessary code files for evaluating tasks. When you set a job object's AutoAttachFiles to true, an analysis determines what files on the client machine are necessary for the evaluation of your job, and those files are automatically attached to the job and sent to the worker machines.

For more information, see "Automatic detection and transfer of files required for execution in both batch and interactive workflows" in the Parallel Computing Toolbox release notes.

Upgrade Parallel Computing Products Together Compatibility Considerations: Yes

This version of MATLAB[®] Distributed Computing ServerTM software is accompanied by a corresponding new version of Parallel Computing ToolboxTM software.

Compatibility Considerations

As with every new release, if you are using both parallel computing products, you must upgrade Parallel Computing Toolbox and MATLAB Distributed Computing Server together. These products must be the same version to interact properly with each other.

Jobs created in one version of Parallel Computing Toolbox software will not run in a different version of MATLAB Distributed Computing Server software, and might not be readable in different versions of the toolbox software. The job data stored in the folder identified by JobStorageLocation (formerly DataLocation) might not be compatible between different versions of MATLAB Distributed Computing Server. Therefore, JobStorageLocation should not be shared by parallel computing products running different versions, and each version on your cluster should have its own JobStorageLocation.

R2012b

Version: 6.1 New Features: Yes Bug Fixes: Yes

Automatic detection and selection of specific GPUs on a cluster node when multiple GPUs are available on the node

When multiple workers run on a single compute node with multiple GPU devices, the devices are automatically divided up among the workers. If there are more workers than GPU devices on the node, multiple workers share the same GPU device. If you put a GPU device in 'exclusive' mode, only one worker uses that device. As in previous releases, you can change the device used by any particular worker with the gpuDevice function.

Detection of MATLAB Distributed Computing Server clusters that are available for connection from user desktops through Profile Manager

You can let MATLAB discover clusters for you. Use either of the following techniques to discover those clusters which are available for you to use:

- On the **Home** tab in the **Environment** section, click **Parallel > Discover** Clusters.
- In the Cluster Profile Manager, click **Discover Clusters**.

For more information, see "Discover Clusters".

Upgrade Parallel Computing Products Together Compatibility Considerations: Yes

This version of MATLAB Distributed Computing Server software is accompanied by a corresponding new version of Parallel Computing Toolbox software.

Compatibility Considerations

As with every new release, if you are using both parallel computing products, you must upgrade Parallel Computing Toolbox and MATLAB Distributed Computing Server together. These products must be the same version to interact properly with each other.

Jobs created in one version of Parallel Computing Toolbox software will not run in a different version of MATLAB Distributed Computing Server software, and might not be readable in different versions of the toolbox software. The job data stored in the folder identified by JobStorageLocation (formerly DataLocation) might not be compatible between different versions of MATLAB Distributed Computing Server. Therefore, JobStorageLocation should not be shared by parallel computing products running different versions, and each version on your cluster should have its own JobStorageLocation.