Release Notes for MATLAB® Production Server™

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Contents

R2012b

Production deployment of MATLAB programs without recoding or creating custom infrastructure 2
Scalable performance and management of packaged MATLAB programs 3
Lightweight client library for calling numerical processing programs from enterprise applications 4
Isolation of MATLAB processes from other system elements 5
Common infrastructure across Microsoft .NET Framework and Java development environments 6
FLEXlm license management integration 7
Linux MAN pages 8
Client API documentation 9
MATLAB files must complete execution prior to exiting MATLAB Production Server 10
Unsupported MATLAB data types for client and server marshaling 11
I18N Compliance Restrictions 12
Apple Macintosh Limitations 13

R2012b

Version: 1.0
New Features: Yes
Bug Fixes: No

Production deployment of MATLAB programs without recoding or creating custom infrastructure

MATLAB® Production Server™ runs MATLAB programs as part of your production IT systems, enabling you to incorporate numerical analytics in enterprise applications.

Use MATLAB Compiler™ to package your MATLAB programs, and deploy them on MATLAB Production Server for use by Web, database, and enterprise applications.

For an overview of MATLAB Production Server functionality and features, see the “Product Description” in the documentation.

Scalable performance and management of packaged MATLAB programs

MATLAB Production Server runs on multiprocessor and multicore servers, providing low-latency processing of many concurrent requests.

You can deploy the product on additional computer servers to increase the number of concurrent requests the system can handle and to provide redundancy. The `auto-deploy` folder on the server is a repository that can be shared across multiple servers for centrally managing your packaged MATLAB programs.

For an overview of the server component of the product, see the "Server Overview" in the documentation.

For detailed information about server processing, workflow, and related tasks, see the documentation.

Lightweight client library for calling numerical processing programs from enterprise applications

Web, database, and enterprise applications connect to MATLAB programs running on MATLAB Production Server using a lightweight client library. Versions of the client libraries are provided for integration with both Microsoft® .NET Framework and Java™ environments and allow the use of native data types when accessing MATLAB programs.

For an overview of the client component of the product, see the “MATLAB Production Server Client Overview”.

Isolation of MATLAB processes from other system elements

The client library isolates the numerical processing associated with running MATLAB programs from your Web, database, and enterprise application servers. This separation allows you to optimize the performance of your system, as well as enable you to update MATLAB programs without affecting your other applications.

For an overview of the client component of the product, see the "MATLAB Production Server Client Overview".

Common infrastructure across Microsoft .NET Framework and Java development environments

MATLAB Production Server client libraries are the only component of the product that is environment-specific. MATLAB programs running on a MATLAB Production Server instance can be accessed by various applications developed or supported by Microsoft .NET Framework or Java.

For detailed information about each client implementation, see “Java Client” and “.NET Client” in the documentation.

FLEXlm license management integration

MATLAB Production Server is licensed using FLEXlm® license management software.

For complete information about licensing, see “License Management for MATLAB Production Server”.

Linux MAN pages

MAN page help, which documents the server commands, is available from the Linux® command line.

Client API documentation

You can find the Javadoc API documentation and Ndoc API documentation, for respective Java clients .NET clients, at *$MDS_INSTALL*/client.

MATLAB files must complete execution prior to exiting MATLAB Production Server

The MATLAB file being deployed must finish executing before an instance of MATLAB Production Server can exit.

Unsupported MATLAB data types for client and server marshaling

Compatibility Considerations: Yes

The following MATLAB data types are not supported by the Java and .NET Client as inputs or outputs for Version 1.0 R2011b+ Beta 2:

- MATLAB function handles
- Complex (imaginary) data
- Sparse arrays

I18N Compliance Restrictions

Compatibility Considerations: Yes

The following are restrictions on I18N compliance for MATLAB Production Server as of this release:

- MATLAB functions residing in a folder named with non-ASCII characters (such as Japanese characters) cannot be deployed.
- MATLAB Production Server cannot be installed into a folder named with non-ASCII characters (such as Japanese characters).
- The MATLAB Compiler Runtime (MCR) is not cross-locale compatible. If a MATLAB Production Server client sends a locale-specific character to a server running an MCR in a different locale, data may be corrupted.

Apple Macintosh Limitations

Compatibility Considerations: Yes

The following limitations apply to Apple Macintosh for this release of MATLAB Production Server:

- On Apple Macintosh, MATLAB Production Server does not support running a display. Any MATLAB files containing graphics will encounter errors if run on MATLAB Production Server. To work around this limitation, add `--no-display` to your server's `main_config` configuration file.
- Specifying a worker pool memory limit (using `--worker-memory-trigger` or `--worker-memory-target`) is not supported on Macintosh OS X. To work around this limitation, remove these options from your server's `main_config` configuration file.