

Migratory Push Server

Installation Guide

Release Version 3.7

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1. Introduction

This guide describes the installation of Migratory Push Server. It is recommended to read *Migratory Push Server Architecture Guide* before reading this chapter for a better understanding of the concepts and to have a more comprehensive background.

1.1 Release

This guide is part of the product documentation for Migratory Push Server release version 3.7.

1.2 Related Documents

- *Architecture Guide*
- *Configuration Guide*
- *Performance Benchmarking Guide*
- *API Developer's Guide* and *API Reference Manual* for each language and technology listed in Table 1.1.

Client Side	Server Side
JavaScript	Java
C++	C++
Silverlight	C# .Net
Java J2SE	PHP
Java J2ME	Python
C#/VB .Net	Ruby
.Net Compact Framework	Perl
iPhone	HTTP

Table 1.1: API Developer's Guides and Reference Manuals

1.3 Support

Migratory offers two support options: Standard Support and Premium Support. For information concerning these support options please visit:

<http://www.migratory.ro/support.html>

For comments, issues, or questions related to Migratory Push Server please contact Migratory as follows:

- *By Email.* For any support request please email at:

support@migratory.ro

- *By Web.* You can open, track, and manage your support tickets on:

<https://www.migratory.ro/support/customer-support-tag>

- *By Phone.* Phone support is available to customers with a valid Premium Support contract.

2. Requirements and recommendations

- Hardware

- In a production environment it is recommended to have a server with at least 4 CPU cores, but the recommendation can grow to more CPU cores depending on the load of data on the server and how much simultaneous clients will be connected.

For development or small deployments there are no special requirements concerning CPU. You can use any decent workstation hardware.

- In a production environment it is recommended to have 8 GB or more memory depending on the load of data on the server and how much simultaneous clients will be connected.

For development or small deployments it is recommended to have at least 512 MB memory.

- Software

- Oracle Sun Java Runtime Environment (JRE) version 1.6 or later.

It is recommended to use a 64-bit version of Oracle Sun JRE.

- Operating System: Linux, Oracle Sun Solaris, Microsoft Windows, and potentially any operating system having support for Oracle Sun JRE 1.6 or later.

The recommended operating system is Linux 64-bit.

Note — Some performance results of Migratory Push Server in a particular hardware and software setup can be found in *Migratory Push Server Performance Benchmarking Guide* available at:

<http://www.migratory.ro/data/MigratoryPushServerBenchmark.pdf>

3. Installing Migratory Push Server on Windows

The installation procedure described in this section has been tested on the following Windows versions and architectures:

- Windows 2000 i586
- Windows Server 2003 i586/x64
- Windows XP i586/x64
- Windows Vista i586/x64
- Windows 7 i586/x64
- Windows Server 2008 x64

Download and double-click the Windows installer program:

```
migratory-pushserver-Version-windows-Architecture.exe
```

Follow the on-screen instructions in the setup program.

Note — The setup program offers the possibility to install Migratory Push Server either in user mode or as a system service. To install Migratory Push Server as a system service, Administrator access privileges will be needed. Also some operations described below such as starting or stopping Migratory Push Server must be executed using the right click then selecting *Run as Administrator*.

After installation:

1. To start Migratory Push Server use:

```
Start -> Programs -> migratory-pushserver -> Start
```

2. To test your installation use:

```
Start -> Programs -> migratory-pushserver -> Access
```

This will open the home page of Migratory Push Server which contains several documentations and several example web applications.

Caution — In a production environment the files of a web application built on Migratory technology should be installed in a standard web server such as Apache. Migratory Push Server has a limited capability to serve web pages, which is offered only to facilitate the development process. The purpose of Migratory Push Server being to push data and not to serve static web pages.

3. To review the logs of Migratory Push Server use:

Start -> Programs -> migratory-pushserver -> Review logs

4. To change the default configuration of Migratory Push Server use:

Start -> Programs -> migratory-pushserver -> Edit configuration

The Migratory Push Server configuration file, `pushserver.conf`, is located in the installation directory provided during the installation process. See *Migratory Push Server Configuration Guide* for full reference on how to configure Migratory Push Server.

5. To remove Migratory Push Server from the system use:

Start -> Programs -> migratory-pushserver -> Uninstall

The next step is to build your client and agent applications using the APIs provided with Migratory Push Server system. See the *Developer's Guide* and *Reference Manual* for each programming language.

4. Installing Migratory Push Server on RPM-Based Linux

The installation procedure described in this section has been tested on the following RPM-based Linux distributions and architectures:

- CentOS i586/x64
- RedHat i586/x64

Download and install the RPM package by running the following command as root user:

```
rpm -vi migratory-pushserver-Version-Architecture.rpm
```

This will deploy Migratory Push Server as follows:

Location	Description
<code>/etc/migratory-pushserver/pushserver.conf</code>	The configuration file of Migratory Push Server. See <i>Migratory Push Server Configuration Guide</i> for full reference.
<code>/var/log/migratory-pushserver/</code>	The logs folder which will contain multiple log files generated by log rotation as well as a log file obtained from the redirection of the standard output and the standard error of Migratory Push Server service
<code>/usr/share/migratory-pushserver/</code>	The folder containing the implementation of Migratory Push Server as a JAR file as well as the Oracle Sun JRE bundle
<code>/usr/bin/migratory-pushserver</code>	A script used by the <code>init.d</code> daemon script
<code>/etc/init.d/migratory-pushserver</code>	The <code>init.d</code> daemon script used to start, stop, restart, and get status information for Migratory Push Server service
<code>/usr/share/doc/migratory-pushserver</code>	The folder containing the documentations, the licenses, and several example web application of Migratory Push Server

Caution — In a production environment the files of a web application built on Migratory technology should be installed in a standard web server such as Apache. Migratory Push Server has a limited capability to serve web pages, which is offered only to facilitate the development process. The purpose of Migratory Push Server being to push data and not to serve static web pages.

After installation:

1. The service will start automatically at the machine boot. To manually start, stop, restart,

and get the status of the service run as root the appropriate command as follows:

```
/etc/init.d/migratory-pushserver start
/etc/init.d/migratory-pushserver stop
/etc/init.d/migratory-pushserver restart
/etc/init.d/migratory-pushserver status
```

2. To test the installation start a web browser on the machine where Migratory Push Server has been installed and open the following URL:

```
http://localhost:8800
```

If a browser is not available on the system where Migratory Push Server has been installed, and supposing such system has the DNS name `push.example.com` and the port 8800 is not blocked by the system firewall, then you can remotely test the installation by opening the following URL from a remote computer connected to `push.example.com`:

```
http://push.example.com:8800
```

This will open the home page of Migratory Push Server which contains several documentations and demonstrations.

3. To upgrade Migratory Push Server to a newer version, run as root the following command:

```
rmp -vU migratory-pushserver-NewVersion-Architecture.rpm
```

Note — The upgrade process will preserve the old configuration files to assure a continuation of your service. A copy of the default configuration of the new version is also provided with the extension `.new`.

4. To remove the push server from the system run as root the following command:

```
rpm -ve migratory-pushserver
```

The next step is to build your client and agent applications using the APIs provided with Migratory Push Server system. See the *Developer's Guide* and *Reference Manual* for each programming language.

5. Installing Migratory Push Server On DEB-Based Linux

The installation procedure described in this section has been tested on the following DEB-based Linux distributions and architectures:

- Debian i586/x64
- Ubuntu i586/x64

Download and install the DEB package by running the following command as root user:

```
dpkg -i migratory-pushserver-Version-Architecture.deb
```

This will deploy Migratory Push Server as follows:

Location	Description
<code>/etc/migratory-pushserver/pushserver.conf</code>	The configuration file of Migratory Push Server. See <i>Migratory Push Server Configuration Guide</i> for full reference
<code>/var/log/migratory-pushserver/</code>	The logs folder which will contain multiple log files generated by log rotation as well as a log file obtained from the redirection of the standard output and the standard error of Migratory Push Server service
<code>/usr/share/migratory-pushserver/</code>	The folder containing the implementation of Migratory Push Server as a JAR file as well as the Oracle Sun JRE bundle
<code>/usr/bin/migratory-pushserver</code>	A script used by the <code>init.d</code> daemon script
<code>/etc/init.d/migratory-pushserver</code>	The <code>init.d</code> daemon script used to start, stop, restart, and get status information for Migratory Push Server service
<code>/usr/share/doc/migratory-pushserver</code>	The folder containing the documentations, the licenses, and several example web applications of Migratory Push Server

Caution — In a production environment the files of a web application built on Migratory technology should be installed in a standard web server such as Apache. Migratory Push Server has a limited capability to serve web pages, which is offered only to facilitate the development process. The purpose of Migratory Push Server being to push data and not to serve static web pages.

After installation:

1. The service will start automatically at the machine boot. To manually start, stop, restart,

and get the status of the service run as root the appropriate command as follows:

```
/etc/init.d/migratory-pushserver start
/etc/init.d/migratory-pushserver stop
/etc/init.d/migratory-pushserver restart
/etc/init.d/migratory-pushserver status
```

2. To test the installation start a web browser on the machine where Migratory Push Server has been installed and open the following URL:

```
http://localhost:8800
```

If a browser is not available on the system where Migratory Push Server has been installed, and supposing such system has the DNS name `push.example.com` and the port 8800 is not blocked by the system firewall, then you can remotely test the installation by opening the following URL from a remote computer connected to `push.example.com`:

```
http://push.example.com:8800
```

This will open the home page of Migratory Push Server which contains several documentations and demonstrations.

3. To upgrade Migratory Push Server to a newer version run as root the following command:

```
dpkg -i migratory-pushserver-NewVersion-Architecture.deb
```

Note — The upgrade process will preserve the old configuration files to assure a continuation of your service. A copy of the default configuration of the new version is also provided with the extension `.new`.

4. To remove the push server from the system run as root the following command:

```
dpkg --purge migratory-pushserver
```

The next step is to build your client and agent applications using the APIs provided with Migratory Push Server system. See the *Developer's Guide* and *Reference Manual* for each programming language.

6. Platform Independent Installation of Migratory Push Server

Download and extract the tarball distribution of the Migratory Push Server to a proper folder. You will have the following layout in your installation folder:

Location	Description
doc	Folder containing the documentation set for Migratory Push Server
html	Folder containing the the home page and several example web applications of Migratory Push Server <div style="text-align: center;"> <p>Caution — In a production environment the files of a web application built on Migratory technology should be installed in a standard web server such as Apache. Migratory Push Server has a limited capability to serve web pages, which is offered only to facilitate the development process. The purpose of Migratory Push Server being to push data and not to serve static web pages.</p> </div>
logs	Folder containing the log files of Migratory Push Server
THIRD-PARTY-LICENSES	Folder contains the licenses files of the third-party components used by Migratory Push Server
LICENSE.txt	Use of Migratory Push Server is subject to the license terms defined by this file
pushserver.conf	The configuration file of Migratory Push Server. See <i>Migratory Push Server Configuration Guide</i> for full reference
pushserver.jar	The object code implementation of Migratory Push Server
README.txt	A short introduction to the product
start-pushserver.bat	The start script of Migratory Push Server for Windows systems
start-pushserver.sh	The bash start script of Migratory Push Server for Linux/Unix systems

1. To start Migratory Push Server, open a console/terminal, change to the directory where Migratory Push Server package has been extracted, and run one of the following commands according to your operating system:

```
start-pushserver.bat
./start-pushserver.sh
```

2. To test the installation, start a web browser on the machine where Migratory Push Server has been installed and open the following URL:

`http://localhost:8800`

If a browser is not available on the system where Migratory Push Server has been installed, and supposing such system has the DNS name `push.example.com` and the port 8800 is not blocked by the system firewall, then you can remotely test the installation by opening the following URL from a remote computer connected to `push.example.com`:

`http://push.example.com:8800`

This will open the home page of Migratory Push Server which contains several documentations and demonstrations.