

Diffusion Quick Start Guide

Push Technology's Diffusion is the ingredient software required to resolve the limitations and challenges of data distribution by speeding up the delivery of content, enabling rapid scale and optimizing data sent and received.

This guide gives you an overview of a basic installation of Diffusion.

Get Diffusion

To install Diffusion you require the product jar, `Diffusion5.9.4.jar`, and the standalone installer jar, `install.jar`.

You can get both of these files from the Push Technology Download site: <http://download.pushtechnology.com/releases/5.9>

Install Diffusion

Java 8 is required to install Diffusion.

1. Double-click on the `install.jar` file to launch the graphical installer.

The installer locates the Diffusion JAR file if that file is in the same directory as the installer.

2. If the installer cannot locate the Diffusion JAR file, select **File > Load install file** and navigate to the Diffusion JAR file and click **Open**.
3. If you have a production license, select **File > Load license file** and navigate to the license file and click **Open**.

If you do not have a production license, you can use the developer license that is included in the Diffusion server

4. Follow the steps in the graphical installer to install the Diffusion server.

Start the Diffusion server

The Diffusion start scripts are located in the `bin` directory of your Diffusion installation.

On Windows: Use `diffusion.bat` to start the Diffusion server.

On Linux or OS X/macOS: Use `diffusion.sh` to start the Diffusion server.

Default configuration

The Diffusion server is configured by the files in the `etc` directory.

License

Diffusion includes a development license that allows up to 5 concurrent connections to the Diffusion server.

You can upgrade your Diffusion server to use a production license by copying the production license file into the `etc` directory of your Diffusion installation.

Security

Diffusion uses role-based security for authorization. A client session must have a role with sufficient permissions to perform specific actions on the Diffusion server.

The default security configuration is located in the `etc/SystemAuthentication.store` and `etc/Security.store` files of your Diffusion installation.

This configuration includes usernames and passwords for development use:

```
client/password
control/password
admin/password
operator/password
```

We recommend that you change these passwords as soon as possible by editing the `etc/SystemAuthentication.store` file.

Configuration

The Diffusion server is configured by the XML files in the `etc` directory of your Diffusion server.

The default configuration makes port 8080 available to connecting clients.

The Diffusion monitoring console

Diffusion includes a monitoring console that shows realtime information about the Diffusion server and its clients, publishers, and topics.

In a browser, go to `http://localhost:8080`. If your browser is not on the same system as your Diffusion server, replace `localhost` with the hostname or IP address of the Diffusion server.

From this landing page you can go to either the demos page, where you can access the Diffusion demos if you opted to deploy them during the install process, or to the Diffusion monitoring console.

The Diffusion monitoring console is secured by username and password. Use the default user 'admin' and password 'password' to log in to the console.

Developing for Diffusion

You can develop mobile, browser, and enterprise clients that interact with the Diffusion server to stream data and manage your solution and its components.

Client SDKs for the following languages or platforms are provided in the `clients` directory of your Diffusion installation: JavaScript, Java, .NET, C, Apple, Android, Flash, and Silverlight.

For more information about developing clients, refer to the Diffusion User Guide: <http://docs.pushtechology.com/docs/5.9.4/manual/html/>

Resources

- Download site: <http://download.pushtechology.com/releases/5.9>
- Diffusion user guide: <http://docs.pushtechology.com/docs/5.9.4/manual/html/>
- API documentation: <http://docs.pushtechology.com/5.9>
- Support center: <http://support.pushtechology.com>
- Stack Overflow: <http://stackoverflow.com/questions/tagged/push-diffusion>
- Github: <https://github.com/pushtechology/>
- Development Blog: <http://www.pushtechology.com/category/development/>