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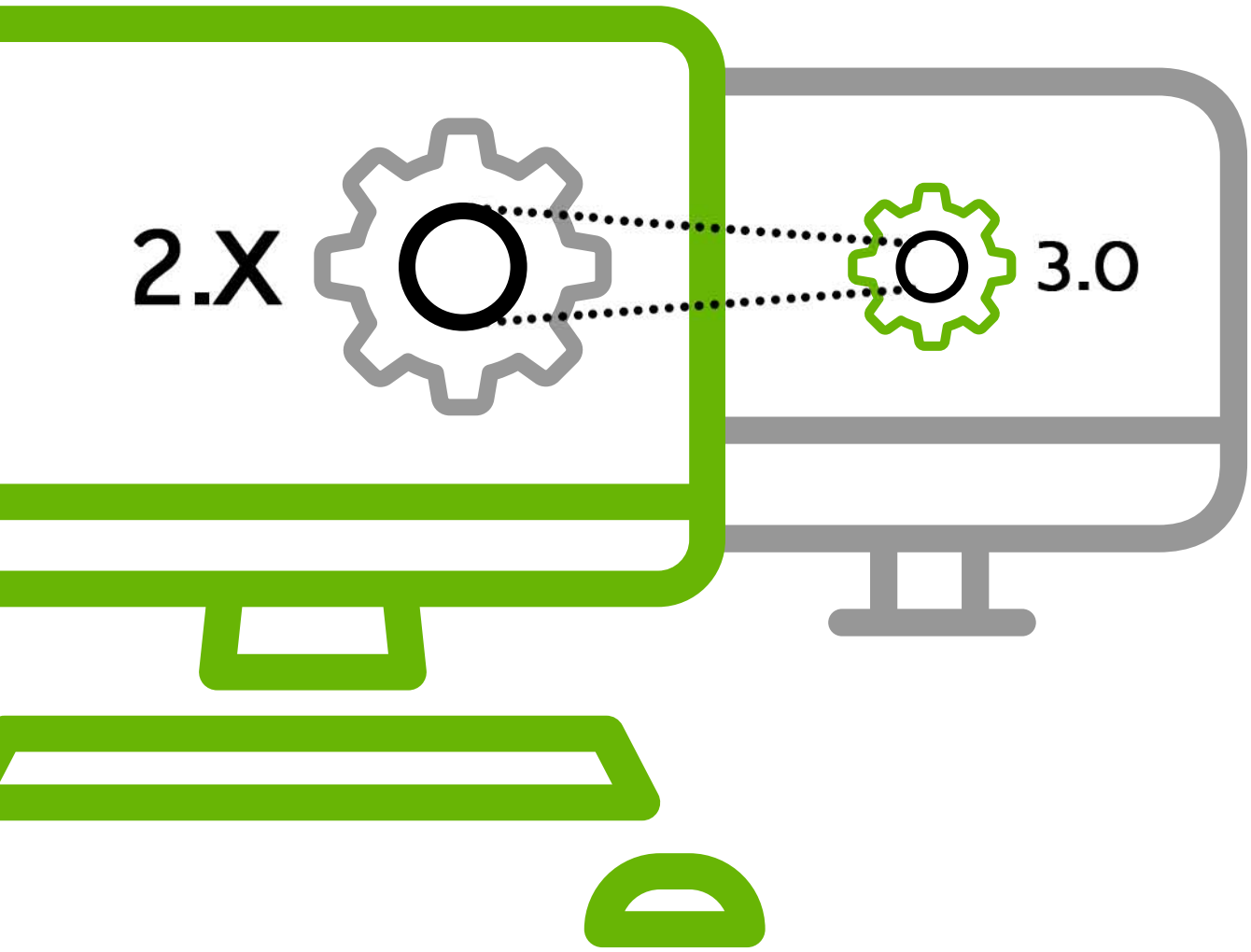
MIGRATING AN APPLICATION FROM ZEND 2.X TO 3.0



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INTRODUCTION

When it comes to test driven development, nothing comes to our mind sooner than Zend Framework does. Used by thousands of developers across the world, Zend is known for its ability to integrate with whichever libraries the developer chooses, and use only what is required, as it is a collection of classes. Most importantly, Zend Framework is backed by guidelines and standards, making it one of the most stable and reliable frameworks with which to develop an app.

Currently, Zend Framework 3.0 is the most recent version of the open-source PHP framework, and it is time for applications built using previous versions to migrate to the latest version. In this whitepaper, we take a look at the brief history of Zend Framework, why it is chosen by thousands of businesses across the world, and what the latest version has in store of app developers.

Finally, we also look at how you can quickly and safely migrate from Zend Framework v 2.0 to Zend Framework v 3.0. At the end of this document, you will either be convinced to get your application developed using Zend Framework, or migrate your existing application to the latest Zend Framework version, if you haven't already.

WHAT IS ZEND FRAMEWORK?

Zend Framework is an open source web application framework which is based in PHP 7. Zend consists of professional PHP packages that help in building web applications. This object-oriented framework was first released in March 2006, while the latest version of the framework was released in June 2016. It consists of different classes and libraries, making it easier for developers to choose the libraries they want to build an application. However, it is often criticized for having a steep learning curve.

Currently, only the most competent developers work with the Zend Framework to build web applications and services. While there are many PHP frameworks available today, what sets Zend Framework apart is the fact that it makes developing apps easy thanks to its standard components. Developers only need to choose what they need to build an app, and forget the rest of the components.

Everything that a developer requires to build an app is in the box, and the modern design helps the developer to quickly create web apps and services that are stable and robust. It comes with extensive documentation, and for competent developers, app development is quick and easy. It wouldn't be an exaggeration to suggest that Zend Framework helps develop apps that are easy to maintain and use.

- **Zend Framework contains several components to build PHP-based web applications.**
- **Zend Framework v 3.0 is yet to be adopted by most businesses.**
- **Zend Framework supports structured code, which is easy to maintain and helps fix bugs easily.**
- **As Zend Framework urges developers to write object oriented code, app maintenance is easy and simple.**

ADVANTAGES OF BUILDING AN APPLICATION USING ZEND FRAMEWORK

Zend Framework comes with a stable MVC component which ensures that a given website or application structured properly. The guidelines and standards ensure that document management, authentication, localization, ensuring best practices for web, etc. are all a child's play. Zend Framework also works well with SMARTY template library, PEAR, CakePHP, and many others. Object-oriented PHP ensures any app developed using Zend Framework has a modern design. It is easy to learn and comes with full documentation, which helps developers to quickly complete projects and launch apps without delays.

Developers won't have to look at all the source code, and can instead, simply refer to the documentation and build apps. Zend Framework enables simple code that can be tested and relied upon. A developer only needs to write code that is necessary for developing an app, but the frameworks make his job so much easier. In addition, new functionalities and features can quickly be added to existing websites and applications.

While Ruby-On-Rails and Django are popular frameworks to build apps and websites, Zend Framework ensures that developers never have to look beyond PHP for the development process. Most importantly Zend Framework ensures that communication with other applications becomes easier, which means, existing apps and websites can be integrated with others quickly, so that duplicity can be avoided.

- **More reliable and robust than similar frameworks**
- **Makes development quick and easy, so that projects are not delayed**
- **Developers can pick and choose between components and classes to build fully-functional websites and apps**
- **Object-oriented development ensures code can be reused, saving time and effort.**
- **There are several Zend support communities which offer help and assistance to developers if they are stuck during a project.**

ZEND FRAMEWORK V 2.0 VS V 3.0

Currently, most applications either use an outdated version of Zend Framework, which was released almost 12 years ago, or they use Zend Framework 2. In this section, let us take a look at how different Zend Framework 3.0 is from its predecessor v 2.0.

Zend 3.0 is much faster than the previous versions, and is more stable and ready for future. Applications that are built in Zend 3.0 will prove to be safe and secure against many known bugs. Zend 3.0 focuses on performance and is almost 4 times faster than applications using ZF2. it is also important to note that support will no longer be provided for version 1, and no more security updates will be released for that version either. While ZF2 will continue to receive security updates and support, it is highly recommended to migrate existing ZF2 apps to ZF3.

- **Zend Framework 3 offers backward compatibility. However, if your app has ServiceLocatorAwareInterface integrated, ZF3 does not support this. In order to make your app compatible for the migration, factories need to be created for services, controller plugins, etc.**
- **While components were stored in a single repository in Zend Framework 2.0, they are stored in multiple repositories in Zend Framework 3.0. This helps developers to create apps using each component independently.**
- **Zend\ServiceManager and Zend\EventManager components come with improved performance.**
- **As PSR-4 is the recommended directory structure in ZF3 as opposed to PSR-0 in ZF2, you will need minor migration assistance.**
- **MVC applications support middleware listeners.**
- **There are improvements to Zend Framework 3.0 documentation.**

HOW TO MIGRATE APPLICATIONS FROM 2.0 TO 3.0

Before you consider migrating your existing application or website from Zend Framework 2.0 to version 3.0, you will need to remember that serviceLocators can't be found in controllers anymore. You may also see a number of deprecated warnings during the migration process. Many people who try migrating on their own often wonder if they should use the newer factories in place of Models. Finally, the large number of controllers will cause confusion to even the seasoned developer, if they are not experts in Zend Framework.

With these lacunae in mind, here are the steps to migrate an application or website from ZF2 to ZF3.

- **Always begin refactoring with just one module in your app, while the changes run under the ZF2 version. As serviceLocators can't be found in ZF3, you will need to get rid of getServiceLocator process from all your plugins and controllers. Otherwise, you may begin to see PHP deprecated messages. These messages can be hidden by inserting a code into index.php. To compensate for the loss of serviceLocators, you will need to create factories for every class that uses serviceLocators.**

- **Another major difference between ZF2 and ZF3 is the shift from PSr-0 to PSR-4. While you may still continue to keep the structure in PSR-0, ZF 3 works better with PSR-4. After all, the newer version of the framework is designed to work with PSR-4 and is also much simpler. In addition, PSR-0 is deprecated since 2014, and may pose issues during future updates and migrations.**

Of course, app migration needs to factor in several other variables, and errors during migration can cause inexplicable inconvenience to users. It is always advisable to seek the help of professionals before attempting any migration.

ADVANTAGES OF ZEND V 3.0

While migrating from Zend Framework 2.0 to 3.0 can be confusing and difficult, it is still very important for you to do so as soon as possible. Not only is Zend 3.0 the latest update, but your application and its users will thank you for migrating immediately.

- **All web applications will witness an exponential increase in speed and performance the moment you migrate from ZF 2.0 to ZF 3.0. Zend Framework 3.0 makes your application 4 times faster than when it was on ZF 2.0.**

- **If you are currently using Zend Framework 1, you must immediately switch over to the current Zend version as security updates have been stopped for ZF 1. In addition, ZF 2.0 has several security loopholes which have been fixed in ZF 3.0, and it is important for all applications to be migrated to the latest version of Zend Framework to avoid security glitches.**
- **You will also receive support for PHP 6, which is important, considering developments in the PHP sphere.**
- **Zend Framework 3.0 comes with modern design patterns, which help you to ensure that your application's future is secure.**
- **Most importantly, Zend Framework 3.0 has extensive documentation, which will help you to seek help from the community whenever it is required. Community support for previous versions may soon be very hard to find.**

Most app owners and businesses seek the help of an external partner before they attempt migration. This is necessary due to the complexities and vulnerabilities involved in such a technical process. If you are attempting to migrate your application from ZF 2.0 to ZF 3.0 on your own, we advise caution.

YOUR APP RUNS FASTER ON ZEND 3.0

One of the reasons why applications often fall out of favor among users is due to the availability of newer, and better developed applications. There is a constant need to evolve, improve, and enhance existing applications to match with competing web services and applications. While most web applications and services are developed using PHP and other programming languages, Zend Framework offers the best of PHP development.

It allows for higher security precautions, faster development and launching, enhanced performance, and error-free loading. Whether you are currently on Zend Framework 1.0 or 2.0, it is crucial to migrate to the latest version so that you can benefit from all the improvements in the current version. Most importantly, you can provide the gift of a quick and responsive application that is safe and secure, for your users.

A quick and secure app helps you to

- **Gain a competitive edge**
- **Bring better customer experience to the table**
- **Ensure data security and privacy of users**
- **Comply with safety regulations**
- **Future-proof your app for future updates and migrations, when newer frameworks are released**
- **Astound users with 4 times faster performance**

PREPARE YOURSELF FOR A BETTER TOMORROW

While developing and launching an app is an expensive and difficult affair, so is maintaining and keeping it secure. Updating to the latest versions of framework ensure that your app is safe and secure for your users. Most importantly, performance improvements have obvious business benefits, and in a world that is as competitive as today's, it is very important to remain ahead of other applications.

Indus Net Technologies has helped several app developers and businesses to migrate web applications and services from Zend Framework 2.0 to 3.0. Our team is specialized in PHP development, app and website migration, and making sure that applications remain functional and available for users even during migration. For an effortless and quick migration of your app from ZF 2 to ZF 3, contact us today.

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