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Changes in Genesis 2.0

The ultimate guide to every single change in the Genesis Framework 2.0

Gary Jones

A GAMAJO TECH PUBLICATION



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*For my wife Katie who has supported my freelance endeavours for so long, and for my twins,
known online as Smidge and Smudge, for being the motivation to succeed.*

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Some of the code snippets in this book are copied and pasted directly from the Genesis Framework itself as an example of the point being made. They are intended to be fully in-line with the *GPL 2.0 or later* license that the Genesis Framework has at the time of writing and any oversights that occur with respect to the license are purely accidental.

The other example code snippets are also licensed under *GPL 2.0 or later* as they would be considered derivatives of WordPress or the Genesis Framework. Although every effort is made to provide working code, the author and contributors to the book are not liable for any loss you incur as a result of trying them.

1 Introduction

Good News! Genesis Framework (aka Genesis) 2.0 is now available and its arrival has been greeted with lots of excitement. After all, we're not just talking about a simple upgrade here. Genesis 2.0 contains state of the art code covering both big and small changes to functionality and appearance.

In total, Genesis 2.0 incorporates 131 fixes, improvements, additions and removals over Genesis 1.9.2. It means there's a lot to get your head around if you want to really understand the implications of its release. So as a talented web developer who creates child themes and plugins that run on the Genesis Framework, how will you ensure you make the most of the new functionality?

Will you:

- Sift through the mass of articles and tutorials on the web
- Tinker and play to figure it out
- Immerse yourself in the discussion forums

Well, you could do that, or you could just read the guide that you're currently looking at!

Each chapter has sections grouped and ordered as *Fixed*, *Improved*, *Added* and *Removed*.

This guide also include chapters at the end detailing nine further changes between 2.0.0 and 2.0.1, and 19 changes between 2.0.1 and 2.0.2.

1.1 Who Is This Guide For?

This guide is primarily aimed at those who develop child themes or plugins that work with the Genesis Framework. To a lesser extent, those who just use Genesis or make simple customisations may also find parts of it useful although much of the content matter is purposefully written from a technical perspective.

The official launch announcements that accompany each release necessarily skip over the finer changes to cater for the majority of the StudioPress blog audience, so if you're looking for the details of what's changed, and why, then read on.

1.2 About the Author

I'm a web developer who specialises in WordPress. I'm a key contributor for the Genesis Framework, and I also train and mentor other developers, with a focus on improving the code in their client work or products.

I started using WordPress around version 2.3 (Sept 2007), Genesis at version 1.2 (June 2010) and contributed to version 1.3 and every version since. I don't think it's conceited or unfair to say that, outside of the StudioPress core team of Brian Gardner and Nathan Rice, I've contributed the most to Genesis in both code and persuasive discussion on how to do something the right way. *I have been arguably one of the top three most important figures in the history of Genesis...*¹ as some might say.

Hire Me

If you're looking for a Genesis theme or plugin audit, or some code mentoring to improve yourself as a developer, then get in touch via gamajo@gamajo.com.

1.3 Contributors

Thank you to the following people for their help in getting this guide completed:

- [Carrie Dils](#)² ([@cdils](#)³) - screenshots.
- [Diane Kinney](#)⁴ ([@gidgethegeek](#)⁵) - cover page design.
- [Dorian Speed](#)⁶ ([@DorianSpeed](#)⁷) - review.
- [Jesse Petersen](#)⁸ ([@jpeteresen](#)⁹) - review.
- [Laura Poston](#)¹⁰ ([@WPFab](#)¹¹) - review.
- [Pete Bott](#)¹² ([@PeteLawBlacks](#)¹³) - copyright, legal notice and disclaimer improvements.

1.4 Notes

Some sections have notes - here's a key to what they mean:

¹That's a WordPress joke, by the way.

²<http://www.carriedils.com/>

³<http://twitter.com/cdils>

⁴<http://theversatilitygroup.com/>

⁵<http://twitter.com/gidgethegeek>

⁶<http://bringuptospeed.com/>

⁷<http://twitter.com/DorianSpeed>

⁸<http://www.petersenmediagroup.com/>

⁹<http://twitter.com/DorianSpeed>

¹⁰<http://www.wpfab.com/>

¹¹<http://twitter.com/WPFab>

¹²<http://lawblacks.com/>

¹³<http://twitter.com/PeteLawBlacks>



Tips

The tips section is for giving you extra help or key pointers, such as references to useful plugins.



Warning

The warnings section is something you should read carefully. It's mostly used to highlight when updating to Genesis 2.0 might break something that is considered an edge case; that is, something not many sites are doing, or might be doing something in an odd way.



Information

Information boxes are small asides to the section that you might find useful.

2 User Interface

This chapter covers the mostly visual changes that all users should see. Since it's visual, it's also the chapter with the most screenshot images as well.

2.1 Fixed misalignment of settings page boxes

Due to some padding on the right of the metabox container within the Genesis Theme and SEO settings, the right side of each metabox was out of line with the right side of the notifications that appear at the top when the settings are saved or reset. The padding was removed and now everything lines up.



Theme Settings

[Save Settings](#)[Reset Settings](#)

Settings saved.

Information

Version: 1.9.2 · **Released:** April 10, 2013

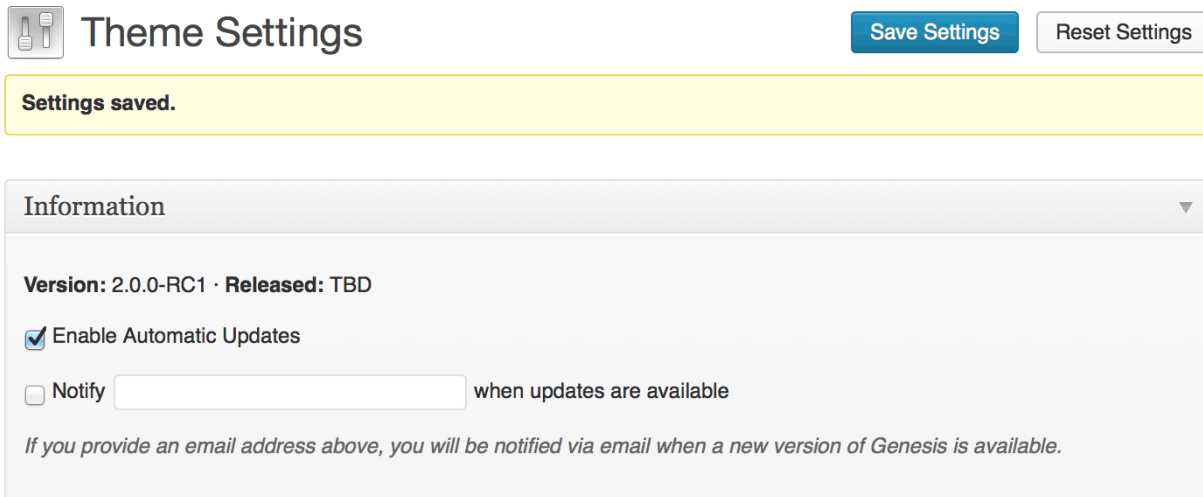
☐ Display Theme Information in your document source


☒ Enable Automatic Updates

☐ Notify when updates are available

If you provide an email address above, your blog can email you when a new version of Genesis is available.

Before: Misaligned metaboxes and notifications



 **Theme Settings** Save Settings Reset Settings

Settings saved.

Information ▼

Version: 2.0.0-RC1 · **Released:** TBD

☒ Enable Automatic Updates

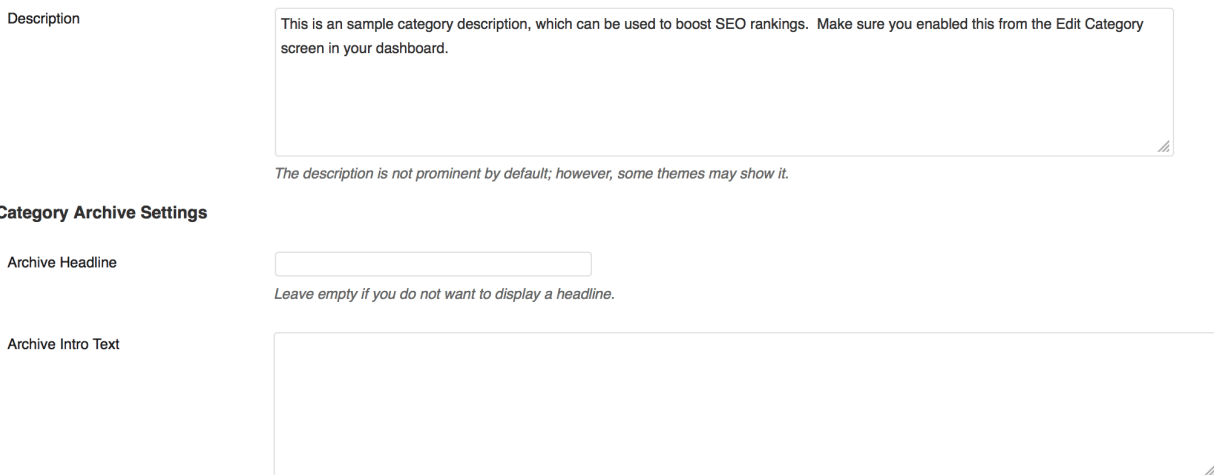
☐ Notify when updates are available

If you provide an email address above, you will be notified via email when a new version of Genesis is available.

After: Metaboxes and notices now align

2.2 Fixed inconsistent term meta UI

The user interface for the meta fields on the Edit Term page was inconsistent - input fields and textareas were different sizes. This was due to a missing class on the `tr` element and an incorrect class on one of the textareas. The correct classes have now been added.



Description

This is an sample category description, which can be used to boost SEO rankings. Make sure you enabled this from the Edit Category screen in your dashboard.

The description is not prominent by default; however, some themes may show it.

Category Archive Settings

Archive Headline

Archive Intro Text

Before: Term meta input and textareas fields are inconsistent width

The screenshot shows the 'Edit Category' screen in WordPress. On the left, there are labels for 'Description', 'Category Archive Settings', 'Archive Headline', and 'Archive Intro Text'. The 'Description' field is a large text area containing the text: 'This is an sample category description, which can be used to boost SEO rankings. Make sure you enabled this from the Edit Category screen in your dashboard.' Below this field is a note: 'The description is not prominent by default; however, some themes may show it.' The 'Category Archive Settings' section contains two fields: 'Archive Headline' and 'Archive Intro Text'. The 'Archive Headline' field is a single-line text input with a note below it: 'Leave empty if you do not want to display a headline.' The 'Archive Intro Text' field is a larger text area.

After: Term meta field widths are now consistent

2.3 Improved in-post scripts box by moving it to its own box

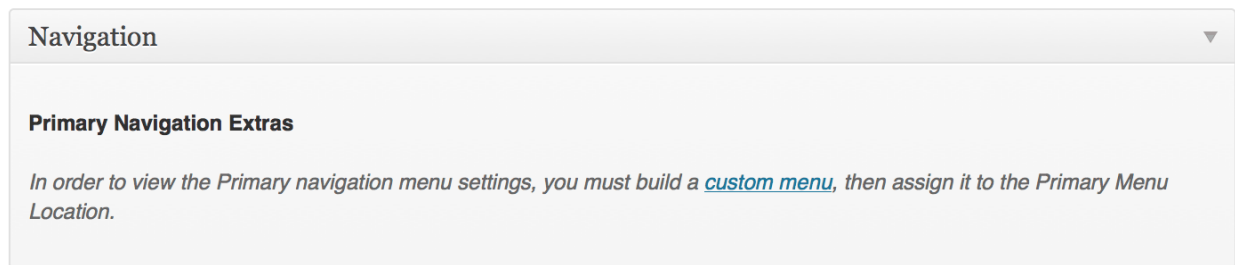
The choice to include script references on a per-entry basis has nothing to do with SEO, so having this field disappear when the SEO Settings box was hidden due to a supported SEO plugin being active was both confusing and reduced useful functionality.

The scripts field has now been moved to its own metabox, which doesn't get hidden when an SEO plugin is active.

2.4 Improved feedback for Navigation settings

Previously, the Theme Settings -> Navigation box would always display a notice about building a custom menu and assigning it to the right location, even if the user had already done this.

This was changed so that instead of a single message for the whole box, it was done for Primary and Secondary menus individually, and only if the respective location didn't have a menu assigned. Later, the Secondary Navigation section was removed leaving just the single notice specifically for the Primary Navigation.



Simplified Navigation settings feedback

2.5 Improved What's New page with new content, and random order of contributors

As you might expect, the What's New page that you see when you update Genesis has been updated with content relevant for Genesis 2.0. The list of contributors has been pulled out into a `genesis_contributors()` function, and this is used to then display the contributors in a random order.

The list of contributors included the addition of Remkus de Vries, Mark Jaquith, Brandon Kraft, Travis Northcutt and Greg Rickaby.

The Gravatar images that accompany the list of people on this page are now retrieved at a size of 120x120 pixels, but still shown at 60px square for the benefit of retina displays.



View What's New

While the What's New page is usually only seen after an update, you can use the [Genesis What's New Info](#)¹ plugin to add it as an admin menu link.

2.6 Improved admin styles to work better with MP6 plugin

The [MP6](#)² plugin is expected to be the basis for a new admin design in WordPress 3.7. By default however, the Genesis admin styles conflicted with the styles added by the plugin. Although not strictly supported (a conflicting change in MP6 after Genesis 2.0 launches is unlikely to result in a new release of Genesis), the admin menu icon and some metabox bottom padding have been fixed so that it should display better for those using MP6 during WordPress 3.6.

¹<http://wordpress.org/plugins/genesis-whats-new-info>

²<http://wordpress.org/plugins/mp6/>

2.7 Improved wording for email notification setting

The previous wording on the Theme Settings page was:

If you provide an email address above, your blog can email you when a new version of Genesis is available.

Since WordPress is used as more than just a blog by many users, this was changed to

If you provide an email address above, you will be notified via email when a new version of Genesis is available.

☐ Notify when updates are available

If you provide an email address above, you will be notified via email when a new version of Genesis is available.

Updated wording for Theme Settings page

2.8 Improved labels containing URI to use URL instead

There's a subtle technical difference between a uniform resource identifier (URI) and a uniform resource location (URL). A URL is one type of URI. In the case of typical users though, the URL is generally better understood even when URI would be the correct term to use. Four input labels regarding redirection of feeds and entries have been changed from URI to URL to make them friendlier.

2.9 Improved widget areas by only showing default content to those who can edit widgets

The default widget area content gives instructions on the front-end of the site on how to change that widget area. This is redundant for everyone who might visit since only those who can change the widgets can do anything with this information. Genesis 2.0 now checks for that capability (`edit_theme_options`) before showing it. This saves having to employ the empty text widget trick, where someone might have wanted the empty widget area or sidebar to display, but without any contents showing.

2.10 Added archive settings for custom post types

Custom post types can have an archive page, but until Genesis 2.0, you couldn't easily set what the SEO details were for it, without getting into some heavy custom coding.

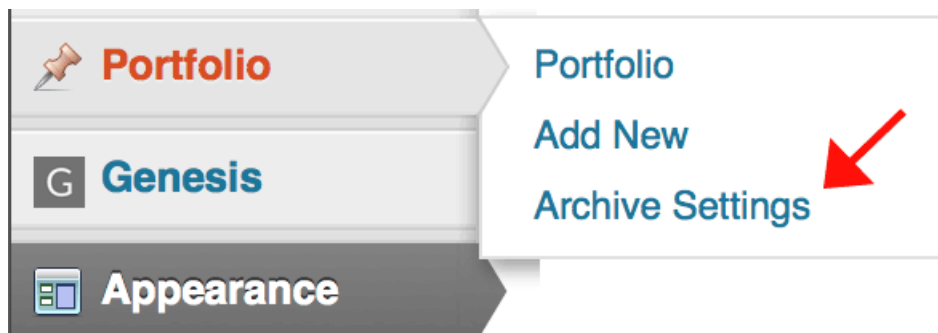
To enable the archive settings, the registration of the custom post type must ensure that `public`, `show_ui`, `show_in_menu` are true, `has_archive` is true or a non-empty string, and `_builtin` is false. These conditions are filterable via the `genesis_cpt_archives_args` filter.

The custom post type must also specify support for `genesis-cpt-archives-settings` during or after registration. This means that displaying of the archive settings is opt-in.

```
add_action( 'init', 'prefix_register_book' );
/**
 * Register a book custom post type.
 */
function prefix_register_book() {
    $args = array(
        'label'          => __( 'Books', 'text-domain' ),
        'public'          => true,
        'show_ui'         => true, // Not needed as public is true
        'show_in_menu'    => true, // Not needed as show_ui is true
        'has_archive'     => 'books',
        // _builtin should not be used, and is false by default anyway
        'supports'        => array(
            'title', // Just an example
            'editor', // Just an example
            'genesis-cpt-archive-settings', // Opt-in
        ),
    );
    register_post_type( 'prefix-book', $args );
}

// If the post type has already been registered elsewhere and meets the
// properties criteria, then the following is sufficient
add_post_type_support( 'prefix-movie', 'genesis-cpt-archive-settings' );
```

Once enabled, you'll have a new link on the admin menu for archive settings, either underneath the post type top-level menu, or underneath the post type list link. When selected, you'll be presented with options to set an archive headline and intro text, as well as a custom title, meta description and meta keywords, robots meta and layout settings, similar to what is found in per-post settings.



The custom post type archive settings link on the admin menu

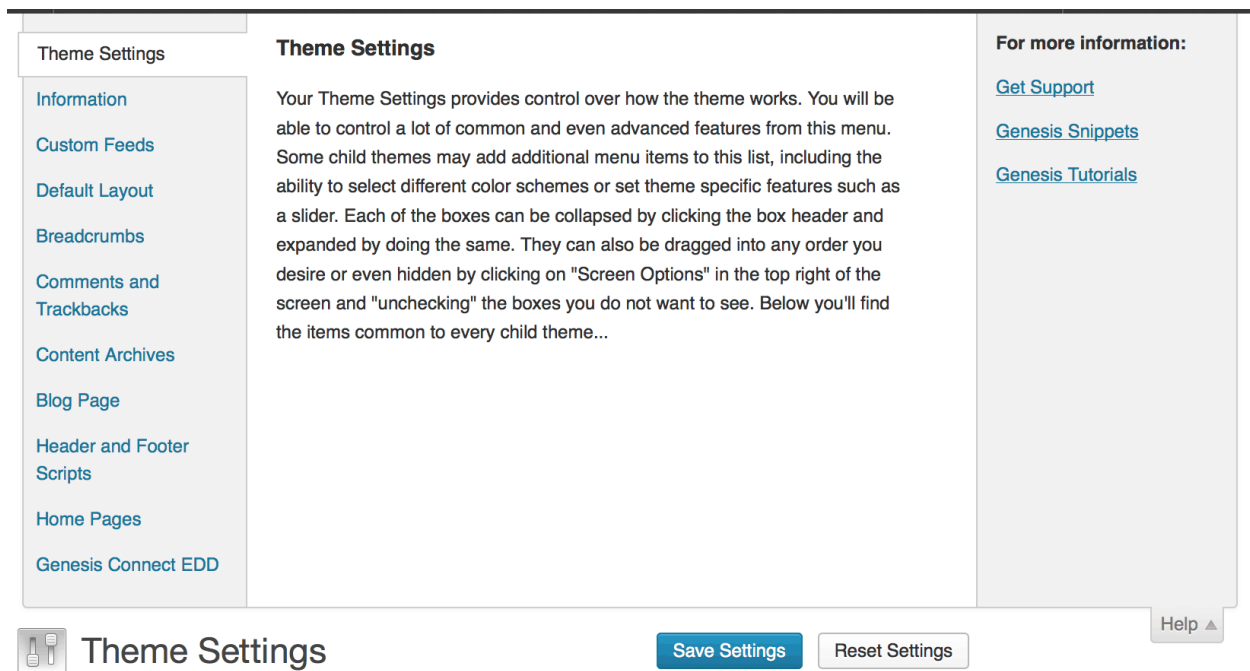
2.11 Added contextual help to settings pages

Contextual help is a feature of WordPress that adds a Help tab to the top right of admin screens. It's here that developers can give a little more guidance to that screen, without having to add it to the page itself (visually distracting from the intended task), or provide a link that takes the user out of the context of what they were trying to do.

Genesis 2.0 provides a first pass at contextual help. These might be revised in later releases, especially as settings change. Go to a Genesis admin screen, then click on the Help tab in the top right to see it.



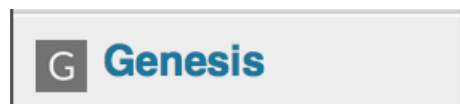
Location of the Contextual Help tab



Contextual help open

2.12 Added distinct admin menu icon

Previous versions of Genesis re-used the favicon as the icon for the top-level admin menu. This has now changed so that it has its own specific admin menu icon. This allows the favicon to stay as a .ico file, while maintaining the menu icon as a .png.



Admin menu icon

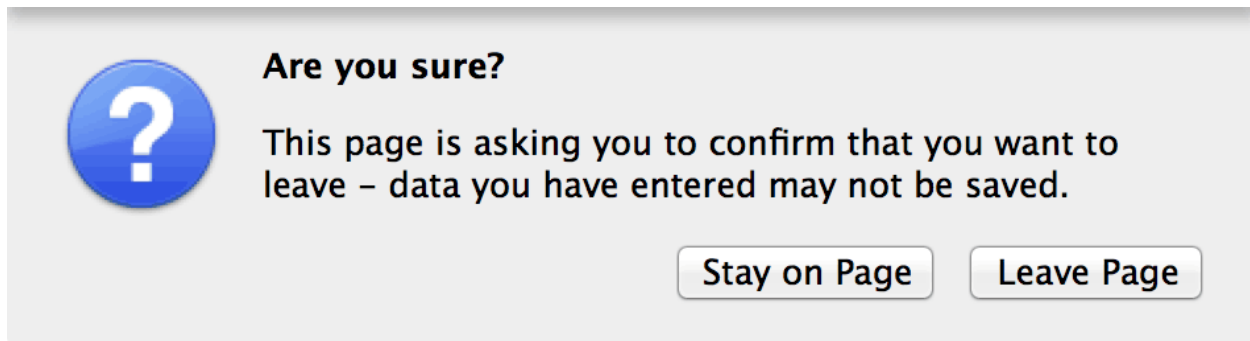
2.13 Added an unsaved settings alert

If you start a new post, enter a title or some content, but then try to navigate away from that page without saving, WordPress will helpfully give you a warning that doing so would lose what you had written.

Previously, if you made a change in a Genesis settings page and tried to navigate away, you would do so and lose whatever changes you'd not yet saved.

If JavaScript is enabled, Genesis 2.0 now gives a warning instead. It does this by looping through each form control (input, textarea, select and button), and then setting a flag if any of them

has changed. When the user is about to leave the page (window unloaded), it checks for this flag and gives the user a confirmation box to confirm that it is what they really wanted to do. If the Save button is selected, the flag is reset so that the submission can happen without the confirmation getting in the way.



JavaScript alert when trying to navigate away from unsaved settings

2.14 Added semantic heading setting for using multiple h1 elements on a page

Although HTML5 supports sectioned or outlined content, and therefore multiple levels of headers on a page, there's still some debate within the SEO community about whether the search engines still actually prefer a single h1 element, for instance, on a page.

If HTML5 support is activated, this new setting makes the site title into a level one heading and the site description into a level two heading, regardless of whether the page might have its own level one heading such as a single entry title or archive title. Furthermore, on an archive page with lots of titles of single entries, having this setting enabled will mark them all up as level one headings, instead of the usual level two.

2.15 Added permalink on posts with no title

One of the theme requirements is that posts with no title displayed in an archive should still have a link allowing access to the single entry. This isn't just for certain post formats which traditionally may not have a post title, even if one was added in, for standard posts where no title was entered.

Genesis 2.0 now adds a permalink to the end of the content (full content or excerpt) that is linked through to the single post, which means that authors can choose not to have a title for their entry, if they so wish, without affecting the usability of their site. The permalink does not show up on single entries, within feed content, or if the entry has a title.



Amending and Removing the Permalink

The permalink can be amended by filtering `genesis_post_permalink`, or removed altogether via:

```
// HTML5 themes
remove_action( 'genesis_entry_content', 'genesis_do_post_permalink' );
// XHTML themes
remove_action( 'genesis_post_content', 'genesis_do_post_permalink' );
```

2.16 Added recognition of SEO Ultimate plugin

Genesis already supported several prominent SEO plugins. If it found a class or constant known to be defined by them, it would disable the Genesis SEO settings page and in-post SEO metabox.

Genesis 2.0 now adds SEO Ultimate to the supported list of plugins.

2.17 Removed Fancy Dropdown settings

The individual Fancy Dropdown settings for Primary and Secondary menus has been removed in favour of a single Load Superfish Script setting, though this setting is only available if the child theme does not have HTML5 support. This new setting also detects if you had the old settings turned on too, so you don't lose your old setup.

Having one menu with Superfish being applied and one menu without was an edge case. Usually users wanted both or neither, and the same number of scripts were being loaded whether one or both menus were supported, so there was no performance impact.

2.18 Removed empty Secondary Navigation section

When the Fancy Dropdowns settings got removed from individual Primary and Secondary Navigation sections, this left no settings under the Secondary Navigation subtitle, so the section was removed completely. Since there was now no need to distinguish between the Primary and Secondary Navigation sections, the Primary Navigation heading was also removed, to just leave the Primary Navigation Extras heading.

2.19 Removed Theme Information setting

The purpose of the Theme Information setting was to add a meta tag into the head that displayed the version of the child theme and the Genesis version being used. This was primarily for support

purposes. However, this information is already publicly disclosed by looking at the referenced style sheet (child theme), and knowing the typical location of the Genesis style sheet for finding out the Genesis version in use.

2.20 Removed the Older / Newer archive pagination format

The Older Posts / Newer Posts archive pagination format was mostly the same as the Previous Page / Next Page, except that it had different wording. The wording was limited though:

- It only applied to posts, and not other custom post types.
- The terms older and newer only made sense when the query returned entries in descending date order.

Any sites set to use Older Posts / Newer Posts will fallback to the new default of the Next Page / Previous Page.

2.21 Removed child theme README admin menu item

For such a simple task, this was probably the single-most discussed point for Genesis 2.0, and it all started back in 2011 before Genesis 1.8 was released.

The ticket started off due to the `readme.txt` (what should be a plain text file) getting more and more markup in it, since child theme readme files were being included and displayed on the Readme admin page. The initial suggestion was to consider including a `readme.html` (HTML) for that purpose, and leave the `readme.txt` as plain text, with the HTML version preferred if it existed. A `readme.md` (Markdown) version was another alternative.

The rejection for the Markdown file was that it would need a parser included within Genesis, and that wasn't something wanted in core.

The HTML file was also rejected as it would have to be incomplete (just content, not head or body tags for instance) which seemed even less ideal. An `iframe` was briefly considered but this would then leave the content unstyled.

The questions were then asked - *what were other themes frameworks doing with their readme files (if anything)?*, and *what does it actually add to the theme?* In short, no other frameworks were doing anything special with it, but several Genesis developers said they were using it to provide clients with theme-specific information. When it was later suggested (and indeed committed but later reversed due to it being only a short time before the releases of 1.8) to remove the link to the readme file from the admin menu, those developers said that their clients would lose access to this information.

The counter-arguments to this were that the purpose of a readme file was to serve developers not end-users, and the typical content historically included from all software was listed. The typical use of most child themes from StudioPress and the community was to display install instructions, which by the time the theme is already installed and the readme file available to see in the admin menu, were redundant. Other bits sometimes included were already available elsewhere:

- Theme description - see Appearance -> Themes
- Extra widget areas - see Appearance -> Widgets
- Extra image sizes - see the image size dropdowns
- URL for support - see Contextual Help
- Other information for clients - see Contextual Help or build a basic admin page.

An argument was also put forward that for users new to Genesis, potentially having a link through to a child theme readme, and looking at the often woeful, but nearly always technical content there is the best way of scaring them off. Dashboard widgets and the whole sub-industry of WordPress-related training were given as other alternatives to using the readme file to give information to end-users.

A parallel was drawn between the incorrect utilisation of the readme files and that of Genesis adding post custom title, taxonomy term custom title and description and the Import/Export feature. These all exist in WordPress in some form already, yet the use by Genesis is different from the task they were added to WordPress for; Readme files were added to help developers or users get the child theme installed, not to communicate information after the theme was installed.

The suggestion was then made that having the admin menu link to a readme could be done via a plugin instead, so that developers who had been using the readme for end-user information could quickly install the plugin instead of re-coding to move the information to contextual help or an admin page. Alternatively, a non-backwards compatible suggestion was made for changing the name of the file looked for to `INSTRUCTIONS.txt`, so that `README.txt` was freed up for its traditional role.

Having got through to the end of March 2013, the vote was made to remove the admin link completely, since at least one of the main developers who objected previously had indeed moved on to other methods of providing end clients with info.

3 Design

The Design chapter is mainly about the changes in the `style.css` file or how the front-end looks by default.

3.1 Improved organisation of style sheet

Genesis 1.9 included an arrangement of styles that was different to 1.8, but developers found the ordering trickier to work with when using the Sample theme as a starting point. Genesis 2.0 changed the arrangement again to use a more logical grouping, and reports from the beta period suggested that developers found this easier to work with.

Comparison of Style Sheet Table of Contents for Genesis Framework 1.9 and 2.0

Genesis Framework 1.9 Table of Contents	Genesis Framework 2.0 Table of Contents
01 Import Fonts	- Imports
02 Defaults	- HTML5 Reset
03 Typography	- Baseline Normalize
- Font Color	- Box Sizing
- Font Family	- Float Clearing
- Font Size	- Defaults
- Font Miscellaneous	- Typographical Elements
04 Layout	- Headings
- Structure	- Objects
- 1152px CSS Grid	- Forms
- Header	- Tables
- Main Content	- Structure and Layout
- Post Info & Meta	- Site Containers
- Column Classes	- Column Widths and Positions
- Miscellaneous	- Column Classes
05 Menus	- Common Classes
- Primary Navigation Extras	- WordPress
06 Headings	- Genesis
07 Lists	- Titles
08 Post Navigation	- Widgets

Comparison of Style Sheet Table of Contents for Genesis Framework 1.9 and 2.0

Genesis Framework 1.9 Table of Contents	Genesis Framework 2.0 Table of Contents
09 Comments	- Featured Content
10 Sidebars	- Plugins
11 Footer	- Genesis eNews Extended
- Footer Widgets	- Genesis Latest Tweets
- Gravity Forms	- Gravity Forms
12 Forms & Buttons	- Jetpack
13 Images & Captions	- Site Header
14 Media Queries	- Title Area
- max-width: 1024px	- Widget Area
- max-width: 768px	- Site Navigation
- max-width: 480px	- Header Navigation
	- Primary Navigation
	- Secondary Navigation
	- Content Area
	- Entries
	- Pagination
	- Comments
	- Sidebars
	- Footer Widgets
	- Site Footer
	- Media Queries
	- max-width: 1139px
	- max-width: 1023px
	- max-width: 767px

While the old style sheet started to group by CSS properties, the new one groups by elements before moving on to a more modular organisation.

The removal of the numbers was intentional, since it avoids to constantly having to fix the numbers in the table of contents and in subheadings within the main part of the file, whenever a new item is added or sections are re-ordered.

The grouping of plugins was also intentional, so that if you don't use any of those plugins, the whole section can be easily deleted.

3.2 Improved reset styles by switching to normalize.css

Previous versions of Genesis had used a reset that had originated [Eric Meyer's Reset CSS](http://meyerweb.com/eric/tools/css/reset/)¹. Genesis 2.0 has changed that and now starts off with the latest version (2.1.2) of [Normalize.css](http://git.io/normalize)² as that

¹<http://meyerweb.com/eric/tools/css/reset/>

²<http://git.io/normalize>

brings the common browsers into line with each other, rather than resetting to the lowest common denominator and then having to build the typical styles back up again.

The Normalize.css project is used as part of the [HTML5 Boilerplate](http://html5boilerplate.com/)³ and [Bootstrap](http://twitter.github.com/bootstrap/)⁴ projects, both very popular front-end frameworks, which means that Normalize.css has had plenty of developers looking at it and working with it, so it is well tested. The browsers that Normalize.css 2.1.2 supports are IE 8+, Firefox 4+, Safari 5+, Opera, and Chrome.

3.3 Improved selectors by removing all* use of ID selectors in style.css

The main reasons that ID selectors shouldn't be used is that the specificity of an ID selector is 100, compared to 10 for a class and 1 for a type selector, so coming up with a more specific selector later in a style sheet can be tricky, without then descending into specificity wars.

Genesis Framework 1.9.2 had 107 ID selectors being used, but this has been cut down to zero for Genesis 2.0. This achievement means that Genesis 2.0 requires WordPress 3.6, since previous to 3.6, the #respond element didn't have a class, and [this commit](http://core.trac.wordpress.org/changeset/24525)⁵ fixed that.



* = Not Quite All

OK, it's not quite zero ID selectors. One did creep back in during development, and that was for hiding of the stats image in the Plugins -> Jetpack section. Since this is optional, and only for a plugin, I'm opting to ignore this one.

3.4 Improved development speed, by switching to 62.5% (10px) default font-size

The benefit of setting the font-size as 62.5% of the browser default (16px) means that the base font size is equivalent to 10px. Working out what the font-size of other elements should be (using the rem unit) then becomes considerably easier, since it's a factor of 10 e.g. 20px = 2rem, 24px = 2.4rem.

The downside is that the base font-size is 10px, meaning that font-sizes are needed for all other elements instead of relying on browser defaults. Using the rem unit also means having to provide pixel unit fallback for IE8 and below.

³<http://html5boilerplate.com/>

⁴<http://twitter.github.com/bootstrap/>

⁵<http://core.trac.wordpress.org/changeset/24525>

3.5 Improved Google Web Fonts usage by switching to a protocol-less URL

For sites hosted with SSL (https), trying to pull in an asset from a non-secure (http) URL may cause warnings in some browsers. Switching to a protocol-less URL (so that the URL starts with //) means that it uses the protocol (http or https) that the parent page is using. Should a site move over to SSL at some point in the future, it's one less thing to have to remember to fix.

3.6 Added `iframe` to CSS to cover responsive video

Some videos are displayed in an `iframe`, so to prevent them from breaking the layout, the `iframe` is given a maximum width of 100%, just like `object`, `image`, `embed` and `video` elements.

3.7 Added new clearfix method for block elements

Genesis now implements the [Micro Clearfix Hack](http://nicolasgallagher.com/micro-clearfix-hack/)⁶ to handle the clearing of floats, for container classes, and a generic `.clearfix` class.

The [WordPress.com theme development guidelines](http://developer.wordpress.com/themes/)⁷ requires this instead of the `overflow` method that previous versions of Genesis had used.

The discussion around these being added is interesting. The commit when these were added shows 13 `overflow: hidden` statements being removed, in favour of 24 block-level (*flow* in HTML5 terminology) elements and a class, constituting 75 selectors. It is generally agreed that having a *key selector* (the last part of a selector) as a type selector (element) is bad, for two reasons:

1. It makes the styling too broad, meaning other uses of that element may inherit unwanted styles which then have to be undone.
2. It has a performance impact as browsers parse selectors from right to left.

This was supported by code from TwentyThirteen that was shared that also used the micro clearfix hack, but only targeted the classes of elements that should be cleared. It was pointed out that the Genesis demo content didn't contain some of the elements being targeted in the Genesis float clearing styles, such as `audio`, `address` or `output` elements.

There was also some discussion about whether this code was seen as a part of a reset or normalizing of browser defaults or neither. The fact that [Normalize.css](http://git.io/normalize)⁸ doesn't contain similar code suggests it's not part of standardising browser default behaviour. The way floats and clearing are written in

⁶<http://nicolasgallagher.com/micro-clearfix-hack/>

⁷<http://developer.wordpress.com/themes/>

⁸<http://git.io/normalize>

the specification, and implemented by browsers, and have existed for years without being changed, suggested that this code isn't a reset either. This mass clearfix seemed to be an attempt to change how the float model works within Genesis and Genesis child themes compared the rest of the web. The counter-argument was that this was indeed the case, but that it was changing it to a simpler concept that newer developers should be able to understand easier.

During the Release Candidate 1 stage, the scope of selectors was drastically narrowed from all of the elements to just the classes for the container elements and the `.clearfix` class. This brings it more in line with TwentyThirteen, stops the global float clearing styles on type selectors, and avoids issues like exploding the appearance of Gists (a CSS ruleset had been added during the development, but this was not needed now) or trying to float images next to block-level elements which then push the following container below the image.

3.8 Added `rtl.css` file

A design of a website can seem illogical when the content is added in a language that uses a right-to-left (RTL) script such as Arabic, Hebrew, or Urdu (languages don't have a direction - scripts do).

WordPress supports this by enqueueing an `rtl.css` file if it detects that the locale is typically displayed in an RTL script. The purpose of this style sheet is to reverse the horizontal styles on elements, such as margin, padding, borders, floats etc.

The `rtl.css` file that comes with Genesis 2.0 and the Sample theme provides theme authors a good starting point for their own themes.



Testing RTL Style Sheets

To test how the `rtl.css` affects the contents, use the [RTL Tester](http://wordpress.org/plugins/rtl-tester/)⁹ plugin which adds a button to the admin bar that toggles the RTL flag for the site between left-to-right and right-to-left.

3.9 Added updated screenshot

To cater for higher resolution displays, the screenshot file was doubled in size, so it could be displayed at the usual 300 × 225px size with double the normal resolution.

⁹<http://wordpress.org/plugins/rtl-tester/>



Genesis
By [StudioPress](#)

The screenshot file now contains twice as many pixels for retina displays

3.10 Removed RSS and Twitter images

Genesis 2.0 and the Sample theme no longer use an RSS or Twitter image for the Primary Navigation Extras, so these were removed. This was generally a design decision to reduce the number of images used, but it also may encourage developers to consider using a single sprite of all small images for better performance. Equally, since most sites usually have more social connections than just RSS or Twitter, only being able to choose one to display in the primary menu seems odd, since the others would have to be elsewhere on the page.

During development, the Twitter image changed to the official one, when the Twitter branding guidelines were updated, before later being removed altogether.

3.11 Removed device-specific subheadings

Responsive style sheets should cater for content-based breakpoints, not device-specific. Even if they aren't, with the creation of new devices happening regularly, only apparently catering for specific

ones (iPad, iPhone) by leaving comments to that effect seemed to be a little short-sighted. Genesis 2.0 removes those comments, so developers using the Sample theme as their starting point don't feel as compelled to stick with the breakpoints.

3.12 Removed support for five-column layout

The grid CSS is now derived from Bootstrap (aka Twitter Bootstrap), and the grid there is based on factors of 12. One, two, three, four and six columns all fit nicely into the grid, but five doesn't so Bootstrap doesn't include it, and therefore neither does Genesis 2.0.

Buy *Changes in Genesis 2.0* and save yourself time, hassle and money

After reading these two free chapters you're now up to speed with 33 of the 131 changes in the new Genesis 2.0 framework. And I'm sure you found it quicker, easier and less hassle than trying to figure the changes out yourself.

If so, why not save yourself more time and discover the lowdown on the remaining 98 (plus another 20 for Genesis 2.0.1 and 2.0.2) changes for less than the price of a typical Genesis child theme. It's the cheapest, most efficient way to learn how the new framework will impact you.

What the guide covers

As a code fanatic and key contributor to Genesis 2.0 I've spent **tens of hours** tracking all the fixes, improvements, additions and removals. And in *Changes in Genesis 2.0* I not only list these changes, I go a step further and provide comprehensive explanations for all of the changes in the new Genesis framework.

In addition to the chapters on User Interface and Design you've already read, the full guide contains chapters on:

- HTML5
- Assets
- Widgets
- Code (huge chapter)
- Changes in Genesis 2.0.1 (covering nine further changes between 2.0.0 and 2.0.1)
- Changes in Genesis 2.0.2 (covering 19 further changes between 2.0.1 and 2.0.2)

Why you should buy it

By now, you'll hopefully recognise that *Changes in Genesis 2.0* is a "must have" tool if you're serious about developing with Genesis.

That's because:

1. **It contains everything you need to know in one place.**
The full guide contains a comprehensive list of all the changes along with detailed explanations for every fix, improvement, addition and removal.

2. **It will help you write better code and increase your profit potential.**

An understanding of how Genesis code is structured will give you the confidence to copy and paste, or customise code that won't fall down when Genesis updates. It means you'll be able to offer a better service to your customers and take on more complex development work.

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Final words

Thank you for taking the time to read this sample guide. I hope you've found it useful. Have fun getting to grips with the new development possibilities Genesis 2.0 has made possible.

¹⁰<http://leanpub.com/changesingenesis20>