

Drupal Site Maintenance & Security

Ryann Levo & Stacy Pendell

Custom Development

Cornell Information Technologies





Keeping Drupal up to date

- Drupal core and modules have regular updates
 - Announced by their developers
- Security updates may need quick action to keep site safe
 - Easier to do if site is up to date overall



Why security is important

- Attackers scan and probe sites constantly
 - Looking for ways to steal credentials or insert links
 - Spammers scanning for email addresses can overload a site, causing it to slow down or crash
- Security experts provide a fix or patch when they announce a newly discovered vulnerability, but attackers move quickly



Where to get help

- For Cornell sites, the IT Security Office can help
- Scan sites regularly for vulnerabilities
- Amount of work to prevent an attack is way less than work to recover a compromised site



Check site for core and module updates

- Admin menu / Reports / Available updates

Dashboard Content Structure Appearance People Modules Configuration Reports Help Hello sjp16 Log out

Available updates LIST SETTINGS

Home > Administration > Reports

✖ There are security updates available for one or more of your modules or themes. To ensure the security of your server, you should update immediately! See the [available updates](#) page for more information.

✔ Checked available update data for 30 projects.

Here you can find information about available updates for your installed modules and themes. Note that each module or theme is part of a "project", which may or may not have the same name, and might include multiple modules or themes within it.

Last checked: 0 sec ago [\(Check manually\)](#)

Filter list

All Update available Security update Unknown

Drupal core

Drupal core 7.50 Up to date ✔

Includes:

- Enabled: *Bartik, Block, Color, Comment, Contextual links, Dashboard, Database logging, Field, Field SQL storage, Field UI, File, Filter, Help, Image, List, Menu, Node, Number, Options, Overlay, PHP filter, Path, RDF, Search, Seven, Shortcut, System, Taxonomy, Text, Update manager, User*
- Disabled: *Aggregator, Blog, Book, Contact, Content translation, Forum, Garland, Locale, OpenID, Poll, Stark, Statistics, Syslog, Testing, Toolbar, Tracker, Trigger*

Modules

Administration menu 7.x-3.0-rc5 Up to date ✔

Includes:

- Enabled: *Administration menu, Administration menu Toolbar style*
- Disabled: *Administration Development tools*



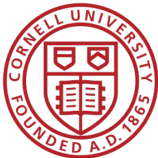
Scroll down to check all updates

- Security updates have red background
- Red could also mean a module is no longer supported by its developers

A screenshot of a Drupal dashboard interface. The top navigation bar includes links for Dashboard, Content, Structure, Appearance, People, Modules, Configuration, Reports, and Help. The user is logged in as 'Hello sjp16' and can click 'Log out'. The main content area displays a list of modules with their update status. The 'Panels 7.x-3.5' module is highlighted with a red background, indicating a security update is required. Other modules like 'Module Filter 7.x-2.0', 'Multiple forms 7.x-1.1', 'Pathauto 7.x-1.3', and 'Pathologic 7.x-2.12' are shown with green backgrounds, indicating they are up to date. The 'Panels 7.x-3.5' section includes details about the recommended version (7.x-3.7), the security update (7.x-3.6), and a list of enabled and disabled sub-modules.

Dashboard Content Structure Appearance People Modules Configuration Reports Help Hello sjp16 Log out

Module	Version	Status
Module Filter	7.x-2.0	Up to date ✓
Multiple forms	7.x-1.1	Up to date ✓
Panels	7.x-3.5	Security update required! ✗
Recommended version:	7.x-3.7 (2016-Aug-20)	Download Release notes
Security update:	7.x-3.6 (2016-Aug-17)	Download Release notes
Includes:		
• Enabled:	Panel nodes, Panels	
• Disabled:	Mini panels, Panels In-Place Editor, Panels translation	
Pathauto	7.x-1.3	Up to date ✓
Pathologic	7.x-2.12	Up to date ✓
Also available:	7.x-3.1 (2015-Nov-22)	Download Release notes
Includes:	Pathologic	



- Non-security updates are tan or yellow

Home » Administration » Reports

Available updates

List Settings

Last checked: 0 sec ago (Check manually)

Filter list

All Update available Security update Unknown

Drupal core

Drupal core 7.44 Update available

Recommended version: [7.50](#) (2016-Jul-07)

- [Download](#)
- [Release notes](#)

⚠

Includes:

- Enabled: *Block, Comment, Contextual links, Field, Field SQL storage, Field UI, File, Filter, Help, Image, List, Menu, Node, Number, Options, Path, RDF, Search, Shortcut, Statistics, Syslog, System, Taxonomy, Text, Update manager, User*
- Disabled: *Aggregator, Bartik, Blog, Book, Color, Contact, Content translation, Dashboard, Database logging, Forum, Garland, Locale, OpenID, Overlay, PHP filter, Poll, Seven, Stark, Testing, Toolbar, Tracker, Trigger*

Modules

Acquia Connector 7.x-2.17 Up to date

Also available: [7.x-3.0-alpha3](#) (2016-Aug-23)

- [Download](#)
- [Release notes](#)

✓

Includes: *Acquia Site Profile Information, Acquia agent, Acquia search*



Site can send email to admins

- Options: daily/weekly, all updates/security only

The screenshot shows the Drupal administration interface for a site named 'Cornell University'. The top navigation bar includes links for Dashboard, Content, Structure, Appearance, People, Modules, Configuration, Reports, and Help. The user is logged in as 'Hello sjp16' and can click 'Log out'. The main content area is titled 'Available updates' and has a breadcrumb trail: Home » Administration » Reports » Available updates. There are 'LIST' and 'SETTINGS' tabs, with 'SETTINGS' being the active one. The settings are as follows:

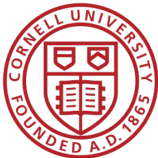
- Check for updates:**
 - Daily
 - Weekly

Select how frequently you want to automatically check for new releases of your currently installed modules and themes.
- Check for updates of disabled and uninstalled modules and themes
- E-mail addresses to notify when updates are available:**
 - cd-drupal-l@cornell.edu

Whenever your site checks for available updates and finds new releases, it can notify a list of users via e-mail. Put each address on a separate line. If blank, no e-mails will be sent.
- E-mail notification threshold:**
 - All newer versions
 - Only security updates

You can choose to send e-mail only if a security update is available, or to be notified about all newer versions. If there are updates available of Drupal core or any of your installed modules and themes, your site will always print a message on the [status report](#) page, and will also display an error message on administration pages if there is a security update.

A 'Save configuration' button is located at the bottom of the settings area. At the bottom of the page, there is a footer that reads 'new infrastructure on Amazon Web'.



Security news from Drupal.org

- Sign up at drupal.org to receive security alerts

[Security-news] Panels - Critical - Multiple Vulnerabilities -SA-CONTRIB-2016-047 - Drupal

Message

Delete Archive Reply Reply All Forward Attachment Move Rules Read/Unread Categorize Follow Up

[Security-news] Panels - Critical - Multiple Vulnerabilities -SA-CONTRIB-2016-047

security-news@drupal.org <security-news@drupal.org> sent by 1 more
 Wednesday, August 17, 2016 at 2:04 PM
 To: security-news@drupal.org

← You replied to this message on 8/17/16, 3:21 PM. [Show Reply](#)

▶ This message is flagged for follow up. Start on Wednesday, August 17, 2016. Due by Wednesday, August 17, 2016.

MessageHeaderAnalyzer [Manage Add-ins...](#)

View online: <https://www.drupal.org/node/2785631>

- * Advisory ID: DRUPAL-SA-CONTRIB-2016-047
- * Project: Panels [1] (third-party module)
- * Version: 7.x
- * Date: 2016-August-17
- * Security risk: 15/25 (Critical)
- AC:None/A:None/CI:All/II:None/E:Theoretical/TD:All [2]
- * Vulnerability: Access bypass, Information Disclosure

----- DESCRIPTION -----

.... Panels does not check access on some routes (Critical)

Panels allows users with certain permissions to modify the layout and panel panes on pages or entities utilizing panels.

Much of the functionality to modify these panels rely on backend routes that call administrative forms. These forms did not provide any access checks, or site specific encoded urls. This can allow an attacker to guess the backend url as an anonymous user and see data loaded for the form.

There is no mitigation for this exploit. Any site with panels enabled is vulnerable.

.... Panels In-place Editor does not properly check for access (Moderately Critical)



Review announcement online

- Rating shows how critical each update is

<https://www.drupal.org/security/contrib>

Panelizer - Moderately Critical - Access Bypass - SA-CONTRIB-2016-048

Posted by [Drupal Security Team](#) on August 17, 2016 at 5:13pm

- Advisory ID: DRUPAL-SA-CONTRIB-2014-048
- Project: [Panelizer](#) (third-party module)
- Version: 7.x
- Date: 2016-August-17
- Security risk: 12/25 (**Moderately Critical**)
[AC:None/A:User/CI:None/II:Some/E:Theoretical/TD:Default](#)
- Vulnerability: Access bypass

[Read more](#) · Categories: [Drupal 7.x](#)

Panels - Critical - Multiple Vulnerabilities - SA-CONTRIB-2016-047

Posted by [Drupal Security Team](#) on August 17, 2016 at 4:20pm

- Advisory ID: DRUPAL-SA-CONTRIB-2016-047
- Project: [Panels](#) (third-party module)
- Version: 7.x
- Date: 2016-August-17
- Security risk: 15/25 (**Critical**) [AC:None/A:None/CI:All/II:None/E:Theoretical/TD:All](#)
- Vulnerability: Access bypass, Information Disclosure

[Read more](#) · Categories: [Drupal 7.x](#)



Review details of module update

- Notice a newer release may be recommended

The screenshot shows the Drupal.org website interface. The browser address bar displays <https://www.drupal.org/node/2785597>. The navigation menu includes links for Download & Extend, Community, Documentation, Support, Jobs, Marketplace, and About. The main content area is titled "Download & Extend" and has tabs for "Drupal Core", "Distributions", "Modules", and "Themes". The current page is for the "panels 7.x-3.6" module. Two download buttons are visible: "Download tar.gz" (351.66 KB) and "Download zip" (433.38 KB). Below the download buttons, there is a "Release notes" section with a warning about security vulnerabilities and a recommendation to update to 7.x-3.7. A "Release info" section provides details about the release, including the creator (japerry), creation and update dates, core compatibility (7.x), and release type (Security update, Bug fixes, New features).

Download & Extend

Drupal Core Distributions **Modules** Themes

Panels » Releases

panels 7.x-3.6

Download tar.gz 351.66 KB

Download zip 433.38 KB

Release notes

This release of panels 3.6 brings in mostly bugfixes, and a few minor feature enhancements. It also includes two fixes that resolve the following SA:

- * [Panels - Critical - Multiple Vulnerabilities - SA-CONTRIB-2016-047](#)

All sites are strongly recommended to update to 7.x-3.7 instead of this release.

All changes between Panels 3.5 and 3.6

- [#2784981](#) by dsnopek: Remove confusing legacy permissions from Panels Node
- [#2724969](#) by entendu: Panel Nodes do not respect default render pipeline setting
- [#2465193](#) by EclipseGc: Allow modules to alter IPE buttons w/o hook_page_alter implementation
- [#2391073](#) by mikeytown2, DamienMcKenna, joelpittet: panels_mini_load & friends need caching

Release info

Created by: [japerry](#)
 Created on: August 17, 2016 - 15:27
 Last updated: August 20, 2016 - 14:43
 Core compatibility: 7.x
 Release type: Security update, Bug fixes, New features
 View file hashes: MD5, SHA-1, SHA-256

[View usage statistics for this release](#)



Check newest release

- Review all releases newer than currently on site

The screenshot shows the Drupal.org website interface. The browser address bar displays the URL <https://www.drupal.org/project/panels/releases/7.x-3.7>. The site header includes navigation links: Download & Extend, Community, Documentation, Support, Jobs, Marketplace, and About. The main content area is titled "Download & Extend" and features tabs for Drupal Core, Distributions, Modules, and Themes. The current page is "panels 7.x-3.7". Two download buttons are visible: "Download tar.gz" (353.24 KB) and "Download zip" (434.05 KB). The "Release notes" section states that this is a bugfix release based on regressions brought up in the security release for Panels 3.6. It is strongly recommended over Panels 3.6 to fix a security issue. The "Release info" section provides details: Created by: japerry, Created on: August 20, 2016 - 14:43, Last updated: August 20, 2016 - 14:43, Core compatibility: 7.x, and View file hashes: MD5, SHA-1, SHA-256. A link for "View usage statistics for this release" is also present.

Download & Extend

Drupal Core Distributions Modules Themes

Panels » Releases

panels 7.x-3.7

Download tar.gz 353.24 KB

Download zip 434.05 KB

Release notes

This is a bugfix release based on regressions brought up in the security release for Panels 3.6. This release goes to 11!

This release is **strongly recommended** over Panels 3.6 to fix the following security issue:

- * [Panels - Critical - Multiple Vulnerabilities - SA-CONTRIB-2016-047](#)

Fixes since Panels 7.x-3.6:

- [#2787241](#) by dsnopek, cboyden, japerry: IPE buttons do not reappear after changing layout
- [#2787047](#) by dsnopek: Pages created via the "Landing page" wizard don't have storage type/id set
- [#2787103](#) by dsnopek, cboyden, japerry: IPE with Page Manager permission no longer works

Release info

Created by: [japerry](#)
 Created on: August 20, 2016 - 14:43
 Last updated: August 20, 2016 - 14:43
 Core compatibility: 7.x
 View file hashes: MD5, SHA-1, SHA-256

[View usage statistics for this release](#)



Review each issue

- Does this specific change affect our site?

Drupal™

Download & Extend

[Drupal Core](#)
[Distributions](#)
[Modules](#)
[Themes](#)

[Panels](#) » [Issues](#)

CSS IDs and classes for panes are potentially rewritten in 3.6 update, breaking themes that rely on them

This is my first bug report, so forgive me if I'm doing this wrong.

After installing today's release of 7.x-3.6, some of the CSS on my page was no longer being applied. After some investigation, it appears that the CSS classes added in CSS properties are being converted to lower case. Upper case letters are still valid for class attributes and, since class attributes are case sensitive, it is preventing the CSS from being applied.

I suspect that this bug was introduced in the following feature request implemented in today's release:

<https://www.drupal.org/node/1441218>

Thanks!

Files:

Comment	File	Size	Author
#16	panels-underscores-in-ids-2785843-16.patch	3.09 KB	bkosborne
#5	2785843-5.patch	820 bytes	svenb

[▶ 2 more files](#)

Closed (fixed)

Project:	Panels
Version:	7.x-3.6
Component:	Plugins - display renderers
Priority:	Major
Category:	Bug report
Assigned:	Unassigned
Issue tags:	
Reporter:	karen11
Created:	August 17, 2016 - 20:58
Updated:	September 2, 2016 - 21:34

[Log in](#) or [register](#) to update this issue



Drupal vendors can help

- A Drupal-centric vendor like Acquia or Pantheon can act quickly to block the most critical attacks
 - Sites are protected until a full update can be done
- Dashboard tools make updates easier
- Shared maintenance: time spent reviewing updates can be split among multiple sites



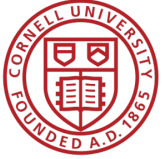
Steps to update a Drupal module

- Back up the site's code and database
 - Make sure you can restore both if needed
- Download the new version
- Check whether the currently installed version has any patches that need to be kept
- Copy new version into the site's code
- Push onto dev or test site
- Test everything
 - Updates may interact with other modules



Our process

- Review updates
- Install on development site
- Test
 - Specific issues described in release announcement
 - Site in general: look for interaction with other modules
- Copy to test site
- Ask site owner to test



Questions?

- Thanks for coming! Remember to update!