

Adobe Commerce 2.4 Upgrade Workshop

January 25, 2022



Agenda

In this session, you will learn:

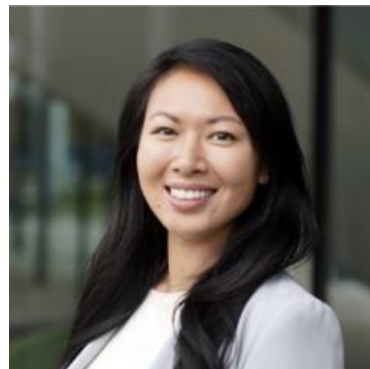
- Recent updates to support and release dates
- How to plan, prepare, and execute an Adobe Commerce upgrade
- How the Upgrade Compatibility Tool can prioritize outstanding issues in your current installation
- Tips & tricks for smoother upgrades
- Best practices for upgrading



Meet Your Speakers!



Yarleen Kourt
Commerce Retention Specialist



Michelle Su
Product Marketing Manager



Igor Sydorenko
Lead Technical Architect



Ryan Street
Adobe Commerce Architect



Join the conversation: [#upgrading-adobe-commerce](#) (slack channel)



Announcements

Updated End of Support Date for 2.3.x

We are shifting our End of Support (EOS) date for our 2.3 line to September 8, 2022, giving merchants additional time to upgrade

Additional Security Patches for 2.3.7 and 2.4.3

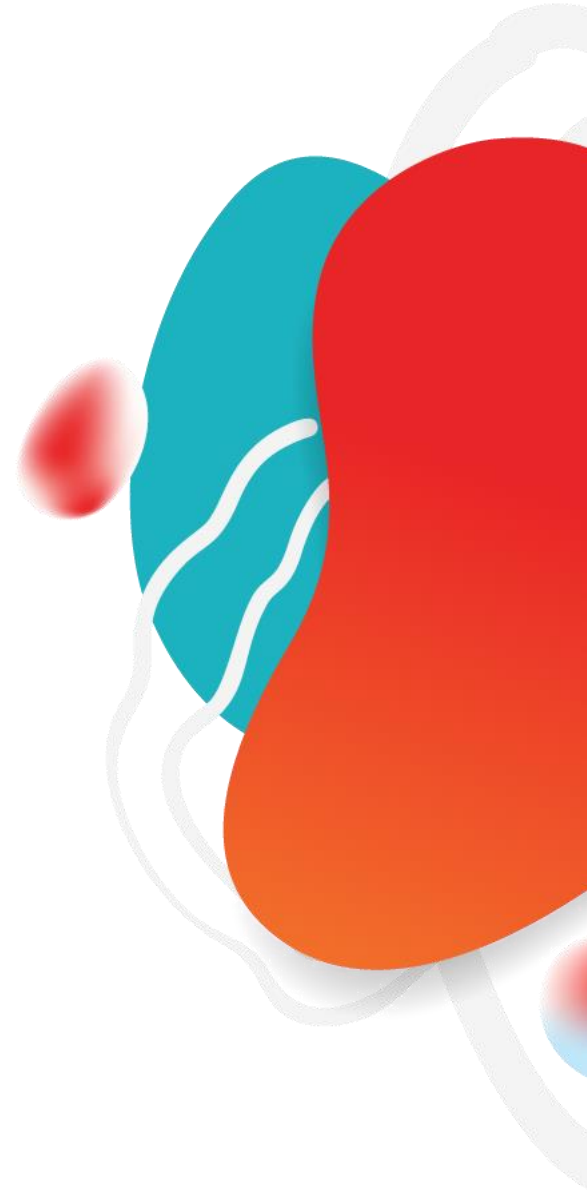
We are adding two security patch releases in August – 2.3.7-p4 and 2.4.3-p3 – to our [2022 release calendar](#) to help merchants stay secure and PCI compliant while those versions are still under support

Extended Support for 2.3.7 and 2.4.0-2.4.3

We will be providing a new offering that will give customers on 2.3.7 and 2.4.0-2.4.3 more time to upgrade to 2.4.4 or higher



Why Upgrade?





Why Upgrade: Latest Features

- PHP 8.1 Support
- 3rd Party Dependencies Upgrade
- OpenSearch and Analytics Suite (ElasticSearch Parallel)
- Decoupling Vendor Bundled Extensions
- Expanded GraphQL coverage
- Access to features only on 2.4
 - Live Search
 - Seller Assisted Shopping
 - B2B Purchase Approval Workflows
 - Adobe Payment Services



Why Upgrade: Security

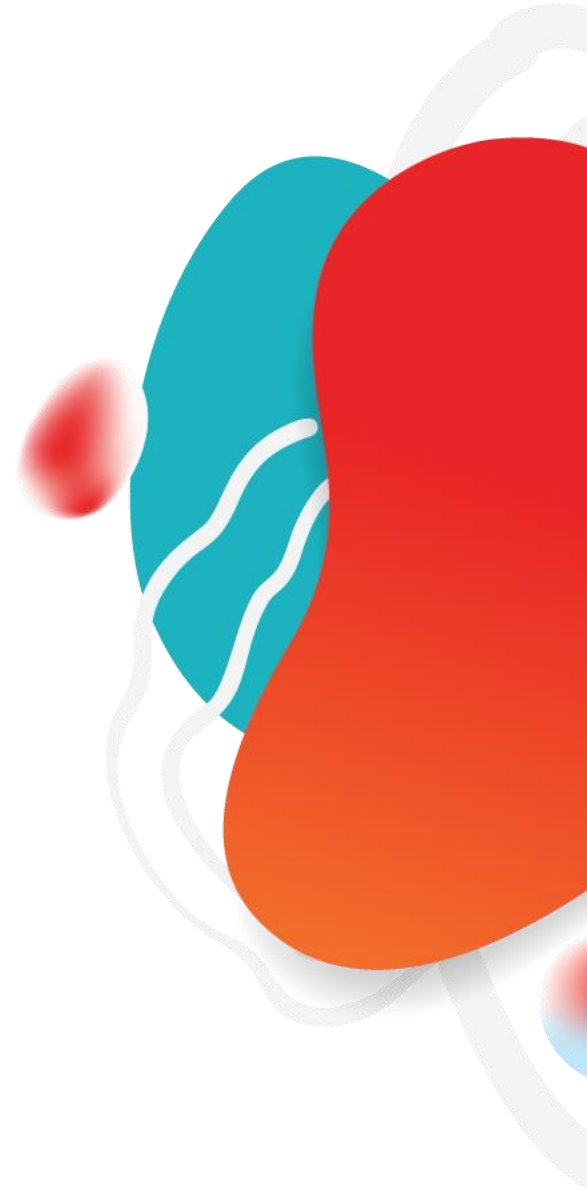
- 83% of security incidents occur on outdated software
- Average cost of a data breach is \$3.86 MILLION
- Adobe Commerce 2.4.4 provides:
 - PCI compliance
 - Multiple security enhancements
 - Security patches are not backported!



Why Upgrade: Performance

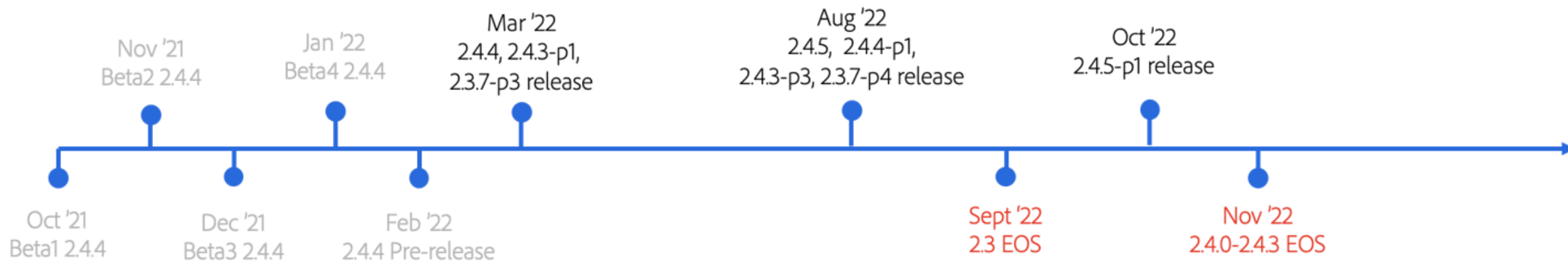
- The first 5 seconds of load time significantly effects conversion rates
- Page speed is a leading SEO factor in rankings
- **Adobe Commerce 2.4.4 provides:**
 - PHP 8.1 performance boost
 - New indexer for gift cards
 - Deferring sales rules calculation for faster cart
 - Improvements to asynchronous ordering
 - Support up to 200M eSKUs, 60k orders per minute and 750 items in cart
 - Improved platform stability
 - 34% reduction in outages for 2.4 compared to 2.3

Planning Your Upgrade





2022 Release Calendar

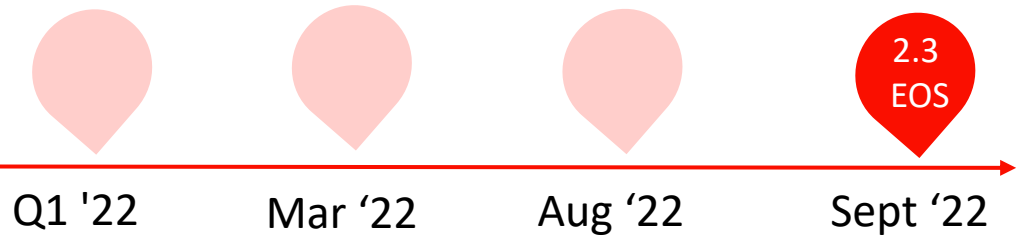




Recommended Upgrade Paths to 2.4.4+

- Different options depending on version (2.3.x branch or 2.4.x branch)
- Pros and cons with each route
- Helps plan out LOE and manage teams

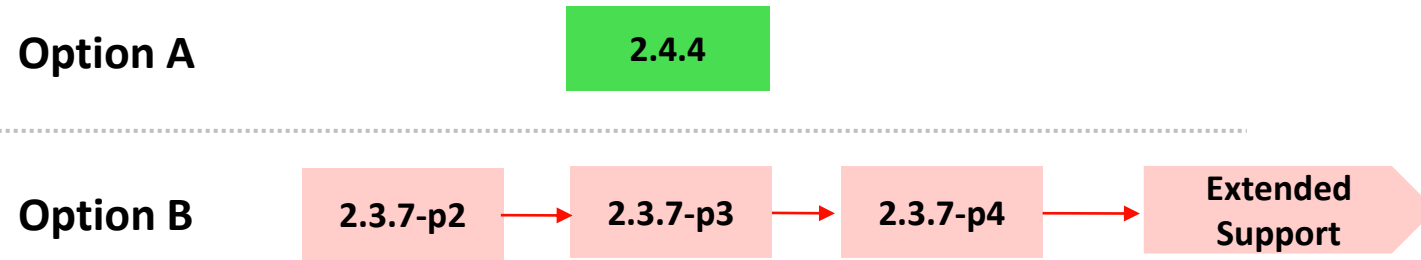
2.3.6 and Lower Upgrade Options



New!

- 2.3.x EOS is being extended until September 8, 2022
- Offering paid extended support for up to one year from EOS date

2.3 EOS shifted to Sept. 6 mths to upgrade*



Considerations for Merchant

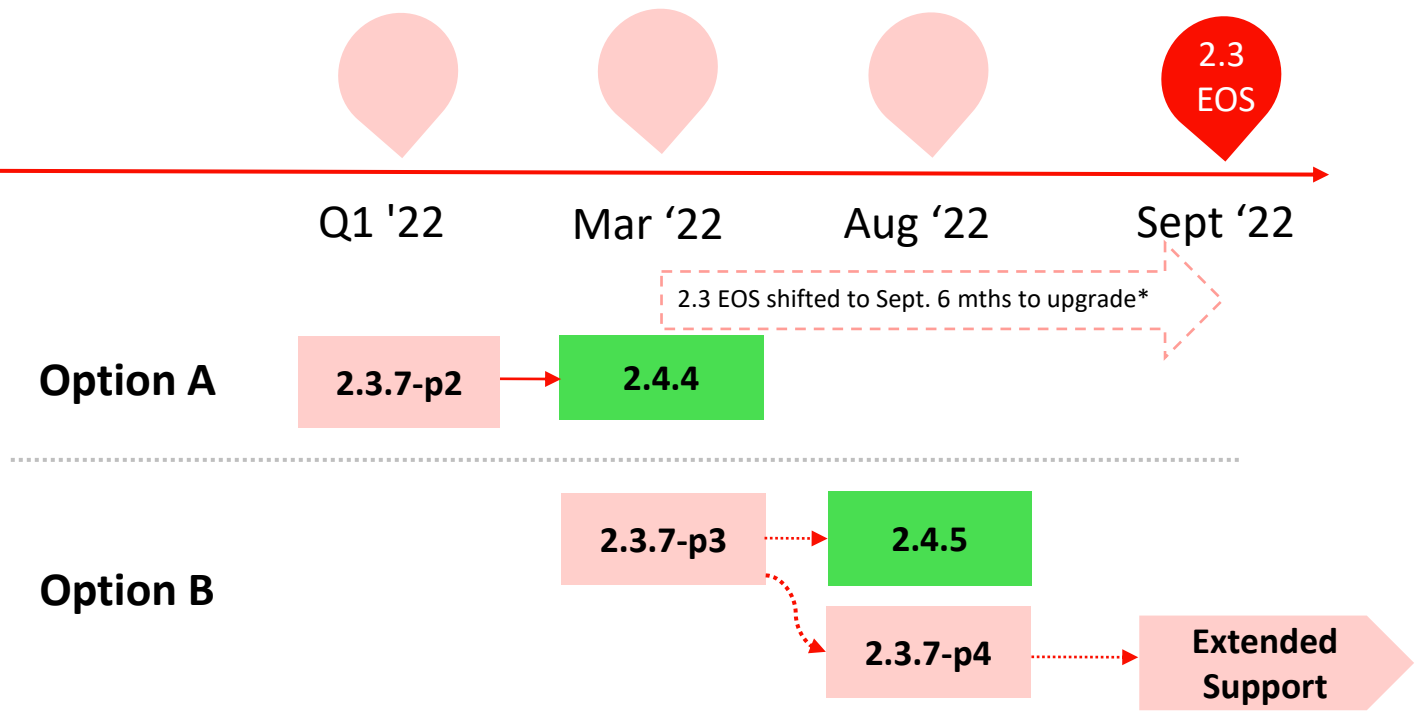
Option	Pros	Cons
A	<ul style="list-style-type: none"> • Start working on 2.4.4 and be on the latest version prior to EOS for 2.3.x • You have 6 months to upgrade (avg upgrade takes ~12 wks) 	<ul style="list-style-type: none"> • Staying on a non-secure version (2.3.6 or lower) longer
B	<ul style="list-style-type: none"> • You can upgrade to 2.3.7 now to access the latest security releases • Then be on paid extended support for up to 1 year (Sept '22-'23) for greater flexibility when planning your next upgrade 	<ul style="list-style-type: none"> • Miss out on features and enhancements in 2.4.4+ • Extended support cost • Due to 3rd party technologies reaching EOS, merchants may need to take additional measures for PCI compliance • When you do your next upgrade, the level of effort will be higher since there will have been more breaking changes between versions

*Currently <2.3.6 are not secure as security fixes are provided only in 2.3.7 security patches. Adobe Commerce support is the only advantage of being on this line.

2.3.7 Upgrade Options

New!

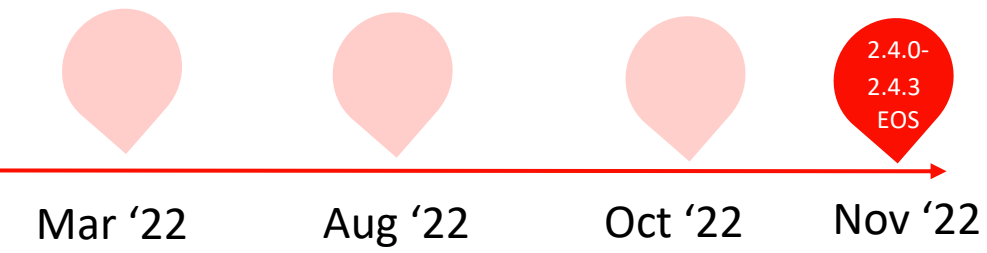
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Considerations for Merchant

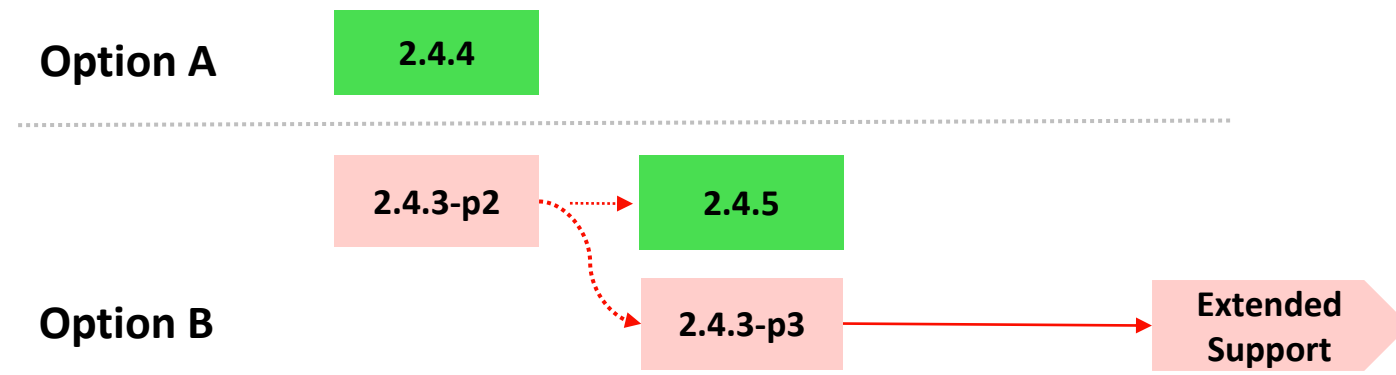
Option	Pro	Cons
A	<ul style="list-style-type: none"> • Low effort upgrade to 2.3.7-p2 now to get secure • Start working on 2.4.4 and be on the latest version prior to EOS in 2.3.x. You have 6 months to upgrade (avg upgrade takes ~12 wks) 	<ul style="list-style-type: none"> • Upgrading between March and September may not be favorable timing for some merchants based on their 2022 development plans
B.1	<ul style="list-style-type: none"> • Take 2.3.7-p3 in March to get secure • Perform high effort upgrade (2.4.5) later in the year to get all the benefits of 2.4.x 	<ul style="list-style-type: none"> • Less time to upgrade before EOS of 2.3.x line and will likely encounter a period where you are not secure • Upgrading during this time will likely cut into holiday peak season
B.2	<ul style="list-style-type: none"> • Get the latest security fixes in March and August and then be on extended support for up to 1 year (Sept '22-'23) 	<ul style="list-style-type: none"> • Extended support cost • The level of effort will be higher for your next upgrade since there will have been more variations between versions • Miss out on the latest features and enhancements in 2.4.4+ • Due to 3rd party technologies reaching EOS, merchants may need to take additional measures for PCI compliance

2.4.0-2.4.3 Upgrade Options



New!

- An additional 2.4.3 patch will be released in August so customers on the version can stay secure for the entirety of 2022
- Offering paid extended support for up to one year from EOS date



Considerations for Merchant

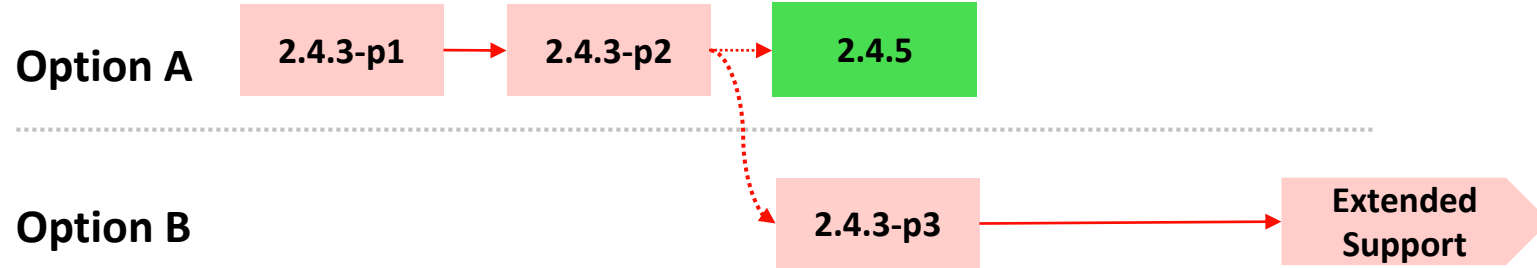
Option	Pro	Cons
A	<ul style="list-style-type: none"> • Get onto 2.4.4 before Nov '22 and get all the latest benefits and have until Nov '24 until another EOS event 	
B.1	<ul style="list-style-type: none"> • Low effort upgrade to 2.4.3-p2, then have more time to plan for a larger upgrade later in the year to get all the benefits of 2.4.4+ 	<ul style="list-style-type: none"> • Upgrading during this time will likely cut into holiday peak season
B.2	<ul style="list-style-type: none"> • Get the latest security and quality fixes in March and August and then be on extended support for up to 1 year (Nov '22-'23) to have more time to plan your next upgrade to 2.4.4+ 	<ul style="list-style-type: none"> • Extended support cost • The level of effort will be higher for your next upgrade since there will have been more variations between versions • Miss out on the latest features and enhancements in 2.4.4+ • Due to 3rd party technologies reaching EOS, merchants may need to take additional measures for PCI compliance

Currently Upgrading to or Newly Upgraded to 2.4.3 Upgrade Options



New!

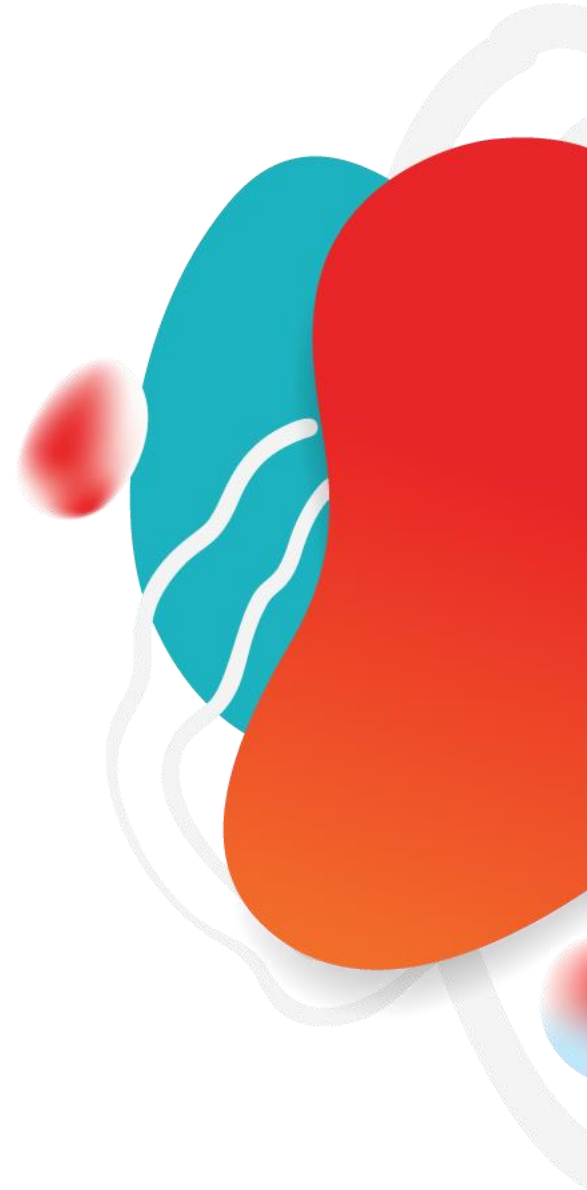
- An additional 2.4.3 patch will be released in August so customers on the version can stay secure for the entirety of 2022
- Offering paid extended support for up to one year from EOS date



Considerations for Merchant

Option	Pros	Cons
A	<ul style="list-style-type: none"> • For those already in process of upgrading to 2.4.3, continue! Get on a secure line and upgrade to 2.4.5 later in the year to realize the all the benefits of 2.4.4+ 	
B	<ul style="list-style-type: none"> • If you are in the process of upgrading to 2.4.3, continue and get on a secure line, then purchase extended support for up to 1 year (Nov '22-Nov '23) so you have more time to prepare for your next large upgrade 	<ul style="list-style-type: none"> • Extended support cost • Miss out on features and enhancements in 2.4.4+ • When you do your next upgrade, the level of effort will be higher since there will have been more variations between versions • Due to 3rd party technologies reaching EOS, merchants may need to take additional measures for PCI compliance

Upgrade Strategy



Upgrade Strategy

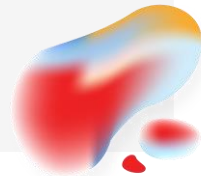
Project Kickoff

- Monitor Release Schedule
- Set upgrade expectations
- Define when & how to plan for upgrades



Annual Planning

- Partner/Merchant Coordination
- Discuss yearly platform health, security impact, direction, & strategy
- Define yearly goals & KPIs
- Assign budget & release windows



Upgrade Execution

- Analysis
- Dev & QA
- UAT & Launch Prep
- Launch
- Post-Launch





Upgrade Execution: Analysis

- Scope of target release
- Upgrade Compatibility Tool results
- Upgrading services to support target version
- Extensions and third-party modules
- Custom modules
- Composer packages and dependencies



Upgrade Execution: Analysis

Service	Current Version	Upgrade Version	Notes
PHP	7.2.33	7.4	
Redis	5.0.5	6.0	
Rabbitmq	3.7	3.8	Not currently being used but we should consider using
MariaDB	10.2.33	10.4	
Composer	1.9.2	2.0	
Elasticsearch		7.9	

#	Extension / Module Name	Composer package	Vendor	Current version	Functionality	Status	Compatible with latest AC version?	Issues	Native in AC?	Action	Notes
1	Extension name and link	extension/ extensionx- magento-2	Vendor name	Version installed	Business requirements	Enabled / Disabled	Yes/No	List identified issues faced with this extension	Yes/No	Keep/ Replace/ Remove	

#	Module	Functionality	Required	Native in AC?	Action	Notes
1	Module name	Business requirements	Yes/No	Yes/No	Keep/ Replace/ Remove	



Upgrade Execution: Development & QA

- Easiest to describe, but longest to execute
- [Application Testing Guide](#)



Upgrade Execution: UAT & Launch Prep

- Review and validate site
- Decide whether you want to use a maintenance page
- Define launch steps, including cron processes and external services
- Start testing and refining dry runs of launch



Upgrade Execution: Launch

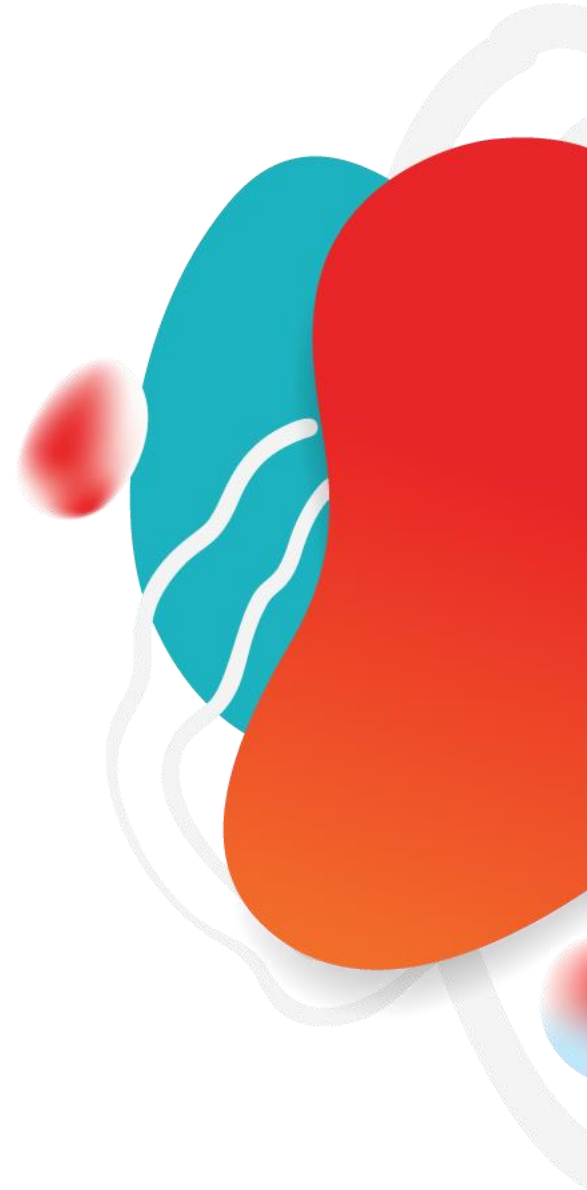
- Deploy to production using your processes defined in launch prep
- Follow best practices for launching (later in this workshop)



Upgrade Execution: Post-Launch

- Check analytics and logging to ensure there are no unexpected issues
- Keep an eye on performance
- Turn on and monitor all monitoring tools (New Relic, Uptime, etc.)

Preparing Your Upgrade





Platform Changes in 2.4.4

- General Availability for 2.4.4 is on March 8th, 2022
- Support for PHP 8.1
- Removed support for PHP 7.3
- Updated versions of dependencies (jQuery, ElasticSearch, Redis, MySQL, etc.)
- Support for new OpenSearch Suite
- Removal of legacy / redundant libraries (JS, Laminas, NPM, etc.)



System Requirements

- Composer 2.x
- OpenSearch 1.2.x or Elasticsearch 7.16.x
- MariaDB 10.4 or MySQL 8.0
- PHP 8.1
- RabbitMQ 3.9
- Redis 6.2
- Varnish 7.0
- Nginx 1.8 or Apache 2.4



Prerequisites

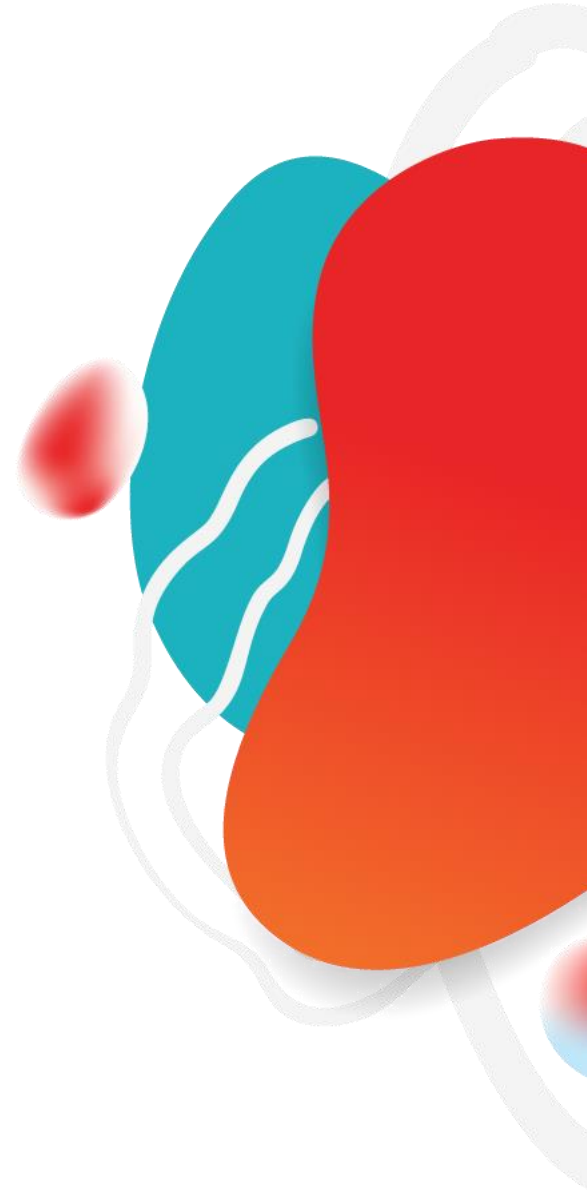
- Ensure all software is up to date
- Verify ElasticSearch / OpenSearch is installed
- Verify all Prerequisites are fulfilled
- Verify cron jobs are running
- Verify system permissions



Understanding The Scope of Upgrading

- Read through the release notes to understand the scope of the upgrade
- Verify backward incompatible changes
- Verify Third-Party module compatibility
- Verify custom modules are compatible

Upgrade Compatibility Tool (UTC)





Upgrade Compatibility Tool: What is it?

- Analyzes your instance for potential upgrade issues
- Checks your current version against your target version
- Reduces effort required to understand scope
- Provides clear direction and priority to resolve compatibility issues
- Offers HTML capabilities to help visualize incompatibilities

Slack channel: [#upgrade-compatibility-tool](#) (share feedback, ask questions, etc.)



Using The Tool

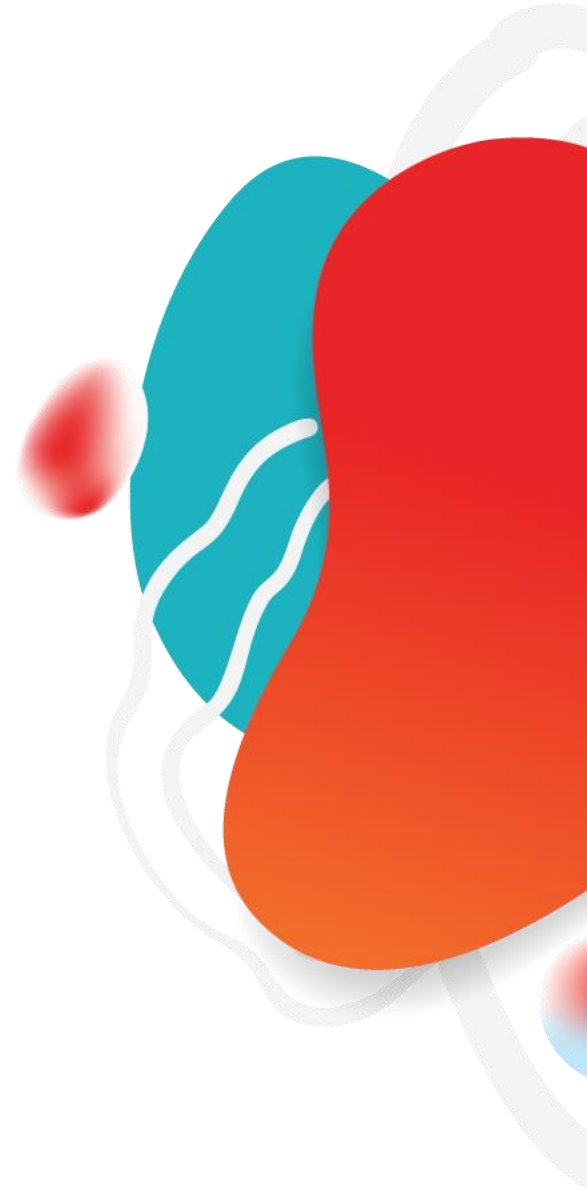
- Download and install the tool
- Run the tool against your instance
- Analyze output and determine priorities



Tips & Advice

- Use the [Error Message Reference](#) for more insight on codes and solutions
- Use the generated report to estimate the effort required to update your code
- Continue to use the tool throughout development to track progress
- Compare results whenever you upgrade to help better estimate future upgrade efforts
- The tool is regularly updated with more features. Update often for the latest features
- `--ignore-current-version-compatibility-issues` & `--min-issue-level` flags provide the most important issues to address

The Upgrade Process





Upgrade Steps

1. Enable maintenance mode
2. Backup composer.json & lock file
3. Install composer update plugin & update dependencies
4. Update and apply dependencies and changes
5. Update database schema and data
6. Upgrade modules and themes
7. Deploy static content and clean the cache
8. Restart any optional services
9. Disable maintenance mode

Best Practices

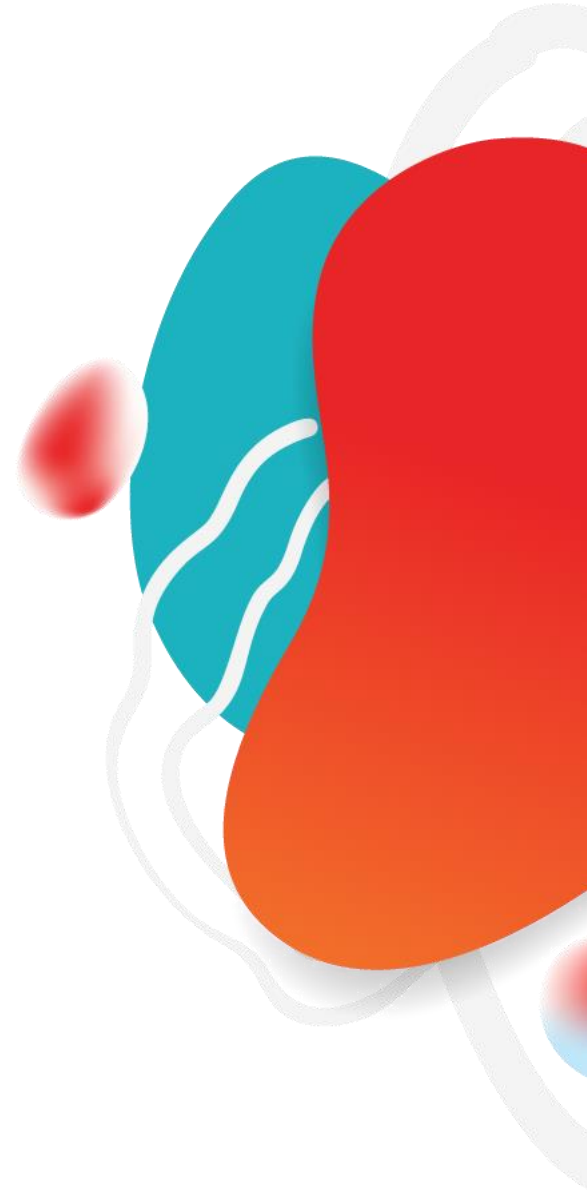




Best Practices

- Test in Non-Production Environment
- Perform Updates on New Server
- Leverage the Upgrade Compatibility Tool
- Automate as much testing as possible
- Develop With Upgrades in Mind
- Understand 3rd Party Modules
- Annual Inventory and Site Cleanup

Resources





Resources

- [Adobe Commerce 2.4 Upgrade Guide](#)
- [Beta Program](#)
- [Release Schedule](#)
- [Upgrade Plan Checklist](#)
- [Upgrade Compatibility Tool](#)
- [Application Testing Guide](#)
- [Security Scan Tool](#)

Resources

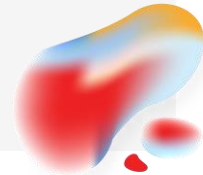
Release Strategy

- [Release Strategy Blog](#)
- [Lifecycle Policy](#)
- [Release Schedule](#)
- [Release Strategy FAQ](#)
- [Release Types DevDocs](#)
- [Partner Enablement Recording](#)
- [Marketplace Compatibility Policy](#)



Planning

- [2.4.4 Beta Program Devblog](#)
- [2.4.4 Platform Changes](#)
- [Upgrade Plan Checklist](#)
- [Upgrade Best Practices Guide](#)



Upgrade Compatibility Tool

- [UCT Devblog](#)
- [UCT Devdocs](#)
- [Installation Instructions](#)
- [PHPStorm & UCT](#)



Resources

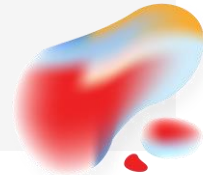
Security

- [Security Scan Tool](#)
- [About security patch releases blog](#)



Technical

- [2.4 Release notes](#)
- [Upgrade Overview Devdocs](#)
- [Software Availability](#)
- [Backward compatible Development](#)
- [Accessing Pre-Releases](#)
- [Versioning Schema](#)
- [Quality Patch Tool](#)



Technical (contd.)

- [Hotfixes Knowledgebase](#)
- [Adobe Commerce Marketplace](#)
- [Post-Launch Steps](#)





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