

Is Your Retail App Ready for Black Friday Traffic?

Your Retail App Holiday Readiness Timeline

The holiday shopping season, particularly Black Friday and Cyber Monday, brings both immense opportunity and significant risk for retail businesses.

There is zero margin for error. Preparing for these traffic spikes is nearly a year-round task for most commercial retail apps and websites. This workbook plan provides a timeline for your team to follow as you prepare for your retail apps' peak traffic periods.



Milestone 1:

6 Months Out



Strategic Planning

At the six-month mark, your focus should be on developing a comprehensive plan that addresses all aspects of holiday readiness. There are many tradeoffs to consider, though. How much infrastructure should the team stand up and at what cost? The more you spend on additional infrastructure, the more your margins are squeezed. **What is the right balance of margin and risk tolerance?** These conversations go beyond an engineering meeting; they are company-wide conversations.

1 Establish traffic targets based on historical data

Review and analyze last year's Black Friday/Cyber Monday traffic patterns

- Consider year-over-year growth projections
- Aim to test for 5x your anticipated peak traffic

3 Executive alignment

Create a concise (2-3 page) plan document that describes the team's strategy for peak traffic preparation

- Gather all stakeholders for review and sign-off
 - Ensure system architects and platform engineers are involved
- Secure executive sponsorship for your strategy

2 Document regional traffic patterns

Identify which geographic regions your traffic comes from

Map your browser and device mix (mobile vs. desktop)

Consider regional holiday variations if you serve international markets

4 Infrastructure scaling strategy

Design your approach to scaling up and down infrastructure

- Balance cost management with capacity needs
- Plan for regional failover (e.g., between AWS regions)

Risk Management

1 Identify any system changes since last year

New components (analytics platforms, payment systems, etc.)

- Removed components
- Modified infrastructure

Third-party dependency review

Map all external service dependencies

Determine which can be made asynchronous

Identify critical vs. non-critical third-party services

Milestone 2:

4 Months Out



Disaster Recovery Testing

This is the time to imagine the worst-case scenario and what your team would do in this situation. While it's unlikely for an entire app to go down, degraded services and experience can have severe effects on revenue. As you prepare, plan a chaos testing blitz to simulate various failure scenarios:

1 Tiered recovery scenarios

Site degradation response

Complete outage recovery

Data loss recovery

2 Regional failover testing

Simulate failure of a primary data center

Ensure traffic can shift to backup regions

Measure performance impact during regional failover

Backup validation

Verify data backup procedures

Practice restoration processes

Document and time the recovery process

Prepare a Static Site

While a static site won't be able to provide inventory updates and other key details, it will continue to allow your users to purchase items from your website or app.

Create a bare-minimum static version of your site

Focus on revenue-critical paths only

Minimize dynamic content

Include monetization even on error pages (404, 500)

2 Confirm vital elements with marketing teams

Determine which content must be included in the static version

Create processes for updating static content when needed

3 Te

Test static site performance

Ensure the static site can handle extreme load

Validate that revenue paths function correctly

Test the process for switching to the static site

Milestone 3:

3 Months Out



Code Management and Feature Planning

Restricting the deployment of new features will help you minimize risk when introducing a new bug into production. This doesn't mean that development teams stop innovating and building during this time—just that new features don't get deployed until after the peak holiday season.

- Begin restricting new feature development
 - Categorize features by risk level:

LOW RISK: New content on existing pages

New analytics events

New payment methods and authentication systems 2 Implement a feature flag for deployments

Ensure all new features can be toggled off independently

Test the disabling/enabling process

Document decision-making protocols for feature disablement

3 Performance optimization

Implement and validate code minification

Review and optimize image delivery

Reduce payload sizes across the application

Milestone 3:

1 Month Out



The following schedules represent a lead-up to Black Friday, but you can alter them to accommodate any peak traffic spike throughout the year.

Code Freeze Schedules

1 Implement tiered deployment restrictions

October 1:

Director-level approval for feature flag activation

November 1:

VP-level approval for feature flag activation

November 15:

VP-level approval for any code deployments

2 Testing environment management

Continue deploying new features to testing environments

Maintain separation between production and testing

Plan for post-holiday code consolidation

Final Performance Testing

1 Full-system testing under load

Test with 5x last year's peak traffic

Simulate realistic user patterns and regional distribution

Monitor all system components under load

2 Browser and device testing during load

Run real browser tests on platforms like Sauce Labs during load tests

Verify page performance and user experience under stress

Validate all revenue paths work correctly

Milestone 4:

2 Weeks Out



Final Preparations

- 1 Update and validate the static site
 - Refresh content for current promotions
 - Test the failover mechanism
 - Ensure all team members know how to trigger the switchover

- 2 Monitoring setup
 - Deploy dashboards in visible locations
 - Configure alerting systems
 - Ensure proper instrumentation with tools like Sauce Labs error reporting

- 3 Team scheduling
 - Plan for all-hands coverage during peak periods
 - Establish clear escalation paths
 - Ensure everyone knows their responsibilities

Milestone 5:

During Peak Holiday Traffic



Operational Management

1 Active monitoring

Watch dashboards for anomalies

Monitor performance across regions

Track user behavior patterns

2 Rapid response protocols

Establish clear thresholds for intervention

Use feature flags to disable problematic features

Implement failover procedures when necessary

3 Partner monitoring

For affiliate businesses, monitor partner site performance

Prepare contingencies for partner outages

Milestone 6:

Post-Holiday Analysis



Operational Management

- 1 Celebrate successes
 - Acknowledge what went well
 - Recognize team contributions
- 3 Traffic pattern review
 - Analyze actual vs. projected traffic
 - Identify unexpected patterns or user behaviors
 - Note changes in device or browser mix

- 2 Incident analysis
 - Perform root cause analysis for any issues
- Document findings and recommendations
- 4 Planning for next year
 - Begin documenting lessons learned
 - Identify areas for improvement
 - Update forecasting models



Key Considerations Throughout the Process

Revenue Path Focus

- Prioritize testing and stability for direct revenue-generating paths
- Ask for each feature: "If this breaks during Black Friday, would we take down the site to fix it?" (The answer may often be no here)
- Be selective about what gets through testing during high-risk periods

Infrastructure Optimization

- Balance between sufficient capacity and cost management
- · Implement infrastructure scaling mechanisms
- Consider cross-cloud provider failover for maximum redundancy (if budget allows)

Team Collaboration

- Include all relevant stakeholders (engineering, product, marketing, content)
- Ensure clear communication channels
- Document and share responsibilities

Regional and Global Considerations

- Account for region-specific holidays and shopping patterns
- Test from the actual regions your traffic comes from
- · Consider cultural differences in shopping behaviors

Takeaways

By following this comprehensive timeline and focusing on the most critical elements of your system, you can significantly reduce the risk of outages or performance issues during the high-stakes holiday shopping season. Remember that preparation is an ongoing process that should evolve based on your specific business needs and past experiences.

Learn more about how Sauce Labs helps retailers provide frictionless shopping experiences

Retail testing solutions



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