

# Product Design

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by Justin Barr Young

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## About me

I'm a design-driven product lead for web and mobile experiences. I specialize in translating complex domains – like cybersecurity and web hosting – into friendly user experiences for startups and enterprise companies alike. For over a decade, I've been working, learning, and mentoring in the sweet spot where design thinking, technology, and business meet.

I've written, talked, and presented on subjects such as Agile design, chatbots, UX sketching, and working as a UX team of one.



**What I'm good at:**

Complex systems

New business domains

Prioritization

Talking to users

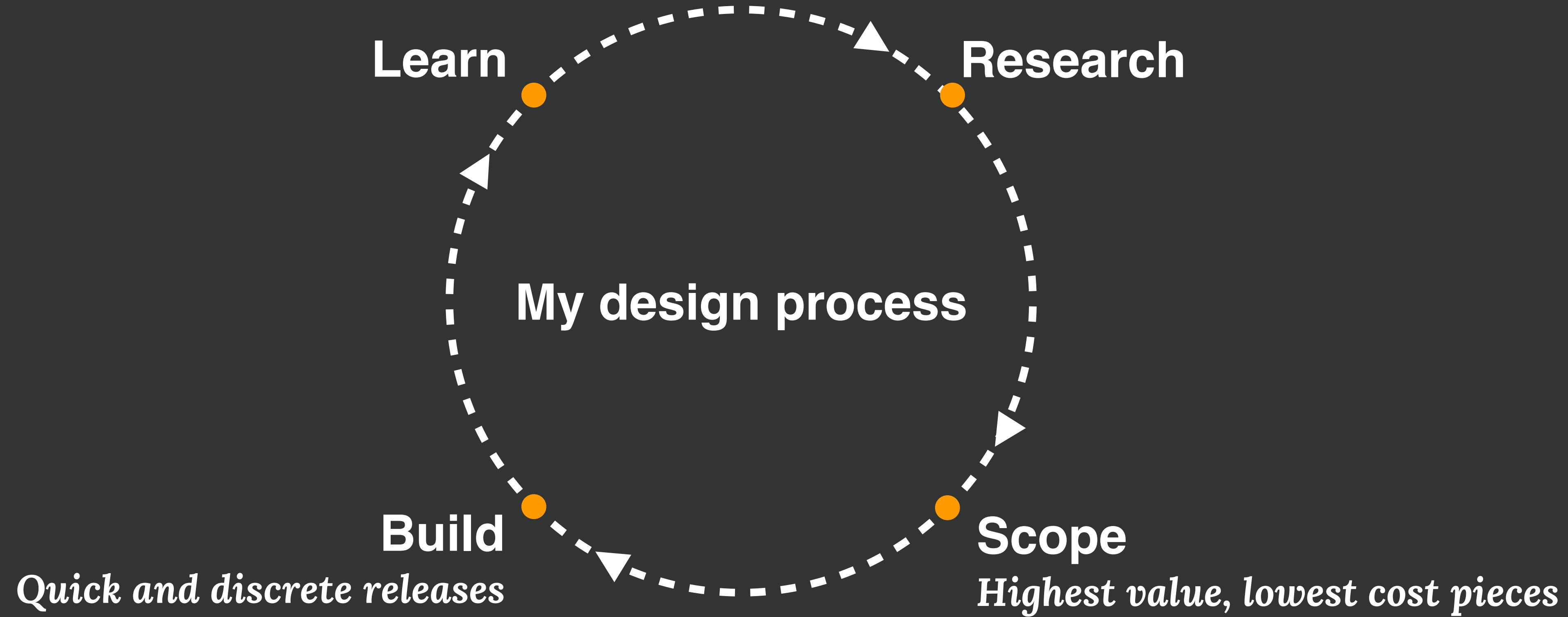
**What I value:**

Cross-functional teamwork

Focusing on business value

Iterative design

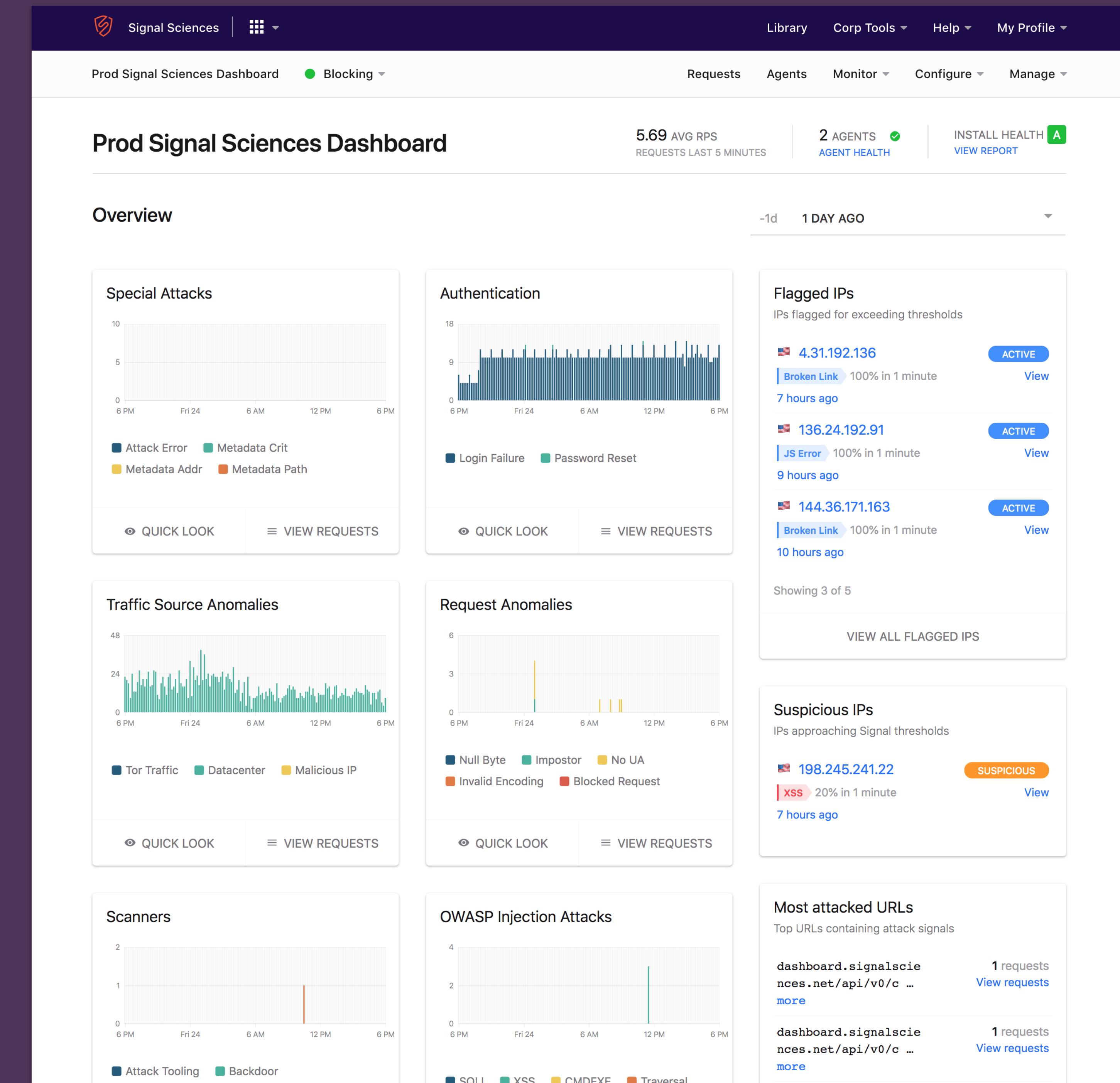
Open and regular feedback



# Signal Sciences

Signal Sciences is a cybersecurity SASS platform that monitors customers' servers and apps for hacking attempts, blocks malicious traffic, and provides security tools.

- Product and design lead
- Enterprise scalability
- Dashboard customization
- Domain management
- 8 major feature launches
- 12% decrease in support tickets
- 70% increase in B2B customers



# Carbon Five

Carbon Five is an Agile design and development consultancy that embeds with startup and enterprise clients to build products and mentor effective teams.

- Design lead for 8 client projects
- Early-stage product validation and prototyping
- Rapid iteration, continuous delivery, and TDD
- Mentored enterprise teams on Agile design transformation
- Managed design backlogs



Carbon Five is a digital product development consultancy. We partner with our clients to create exceptional products and grow effective teams.



charles SCHWAB

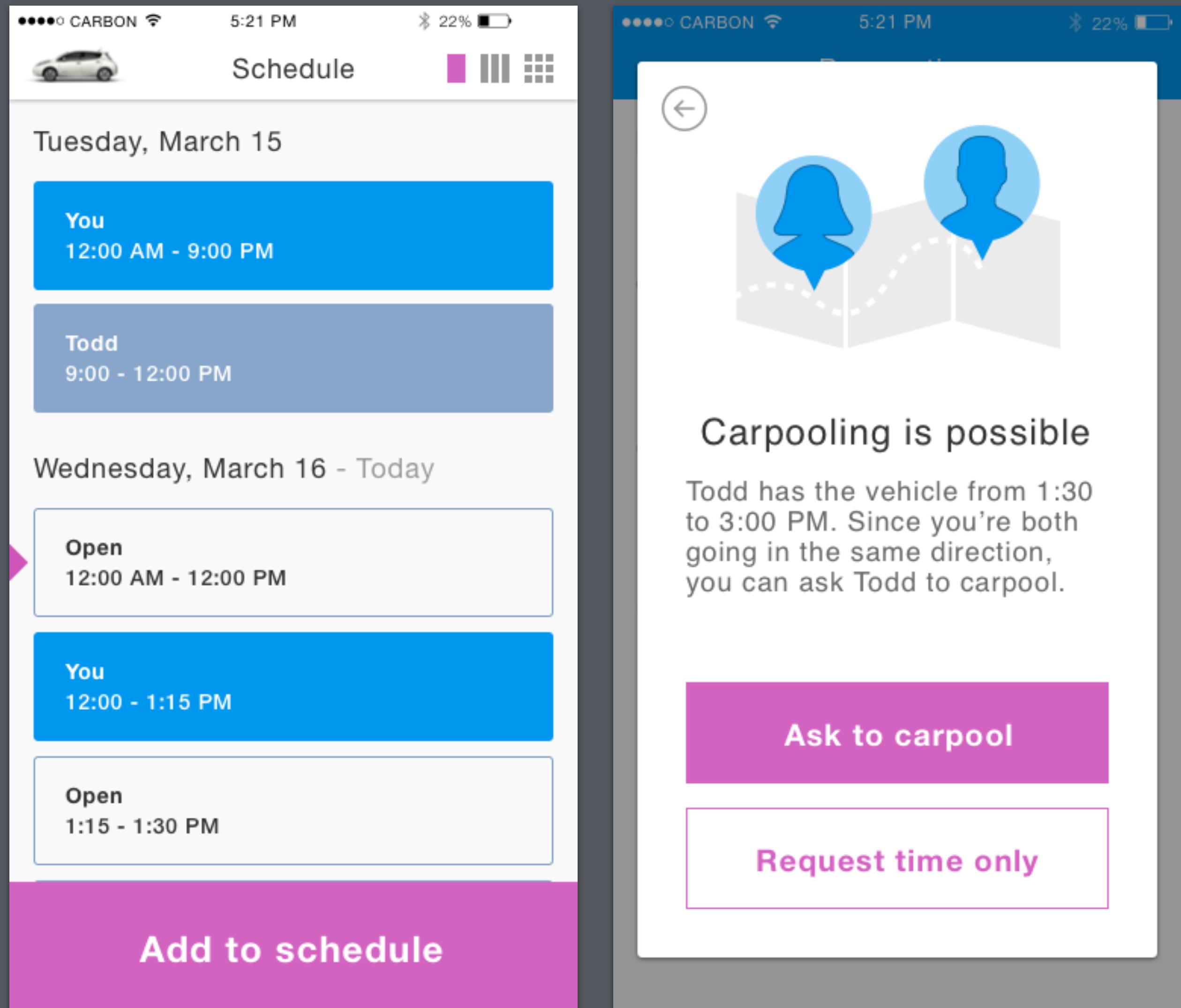


[See what we've done](#)

# Nissan

Carbon Five partnered with Nissan to test an early-stage car sharing product concept. The auto manufacturer wanted to learn how two or more parties might co-own a car.

- Designed real-world experiment
- Recruited 50 families to record schedules and driving habits
- Gave families vehicles and tracked driving behavior for a month
- Built dashboard to analyze data
- Conducted customer interviews
- Prototyped car-sharing app

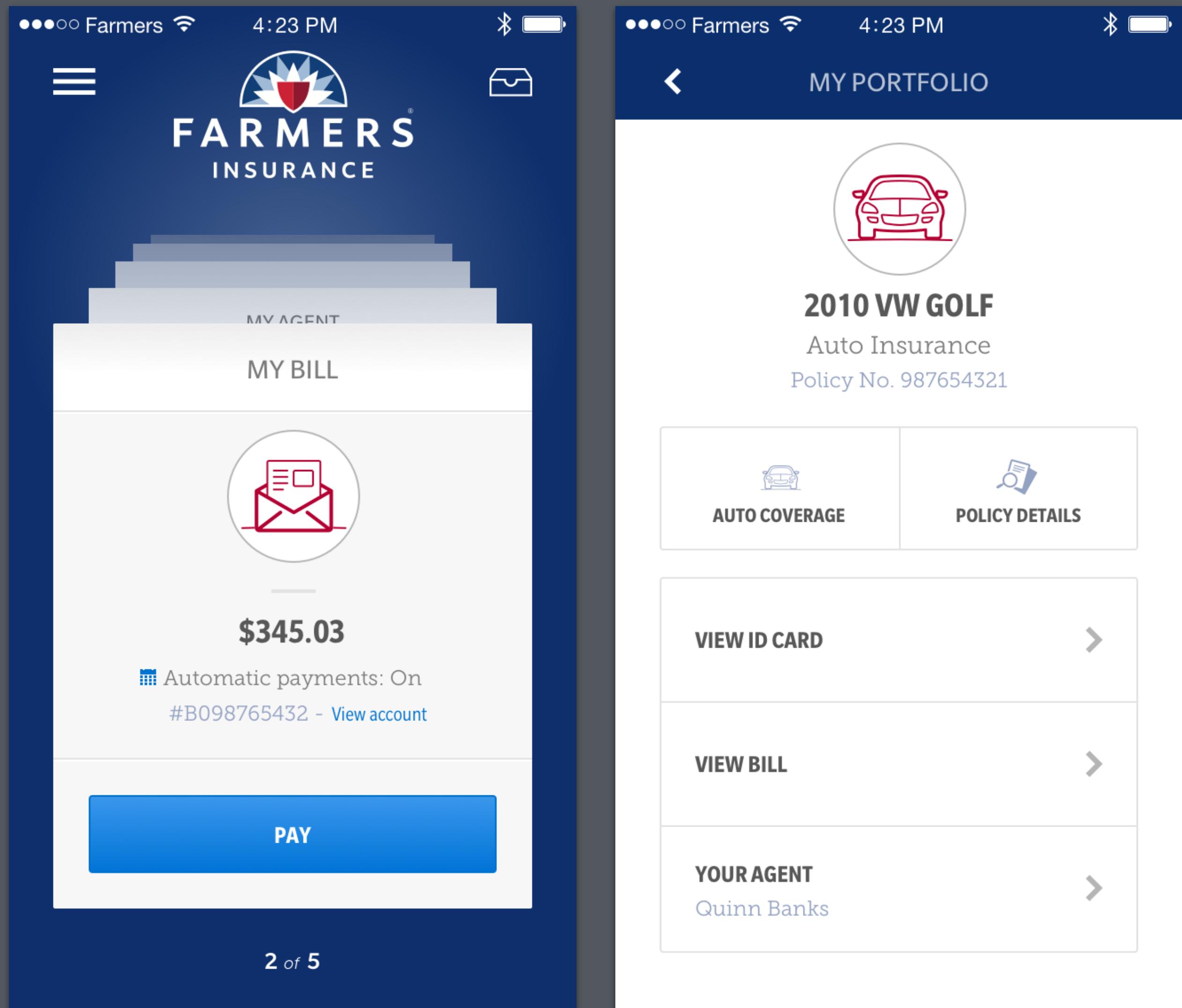


Read the [full case study](#)

# Farmers

Carbon Five partnered with Farmers to rebuild both its Android and iOS apps and train its brand new mobile development team in Agile process.

- Created style guide that was compatible across both operating systems and every design size
- Established Design Ops practices
- Knowledge transfer to developers
- Mentored junior designers
- Did not visually design the app



Read the [full case study](#)

# Media Temple

Media Temple is a web hosting and cloud solutions provider.

- Principal UX Designer
- Started as a UX Engineer
- 5 products launched and improved UX across 8 others
- Redesigned and rebuilt award-winning website and account dashboard with over 1 million combined monthly users
- Contributed to custom responsive framework and component library
- 50 branded marketing initiatives

Hello, Justin.

Account Number: 228719

**BILLING**

**MONITORING**

Monitor up to 5 domains

jay-bee-why.com

Response Time over last hour (GMT):

See all monitoring reports »

**Security**

jay-bee-why.com

Malware scan

Site vulnerability scan

Spam scan

Last scan: Jul 20

Manage Security »

**ADD-ON SERVICES**

| Service Name | Service Type | Plan | Renewal Date | ADMIN |
|--------------|--------------|------|--------------|-------|
| CloudFlare   | All          | Free | N/A          | ADMIN |

**CLOUDTECH SERVICES**

| Hosting Service               | Parent Service       | Plan  | Renewal Date |
|-------------------------------|----------------------|-------|--------------|
| Security Pack for Always-On   | fully-managed-ux.com | \$0   | Aug 4, 2015  |
| CloudTech Always-On Essential | fully-managed-ux.com | \$199 | Aug 4, 2015  |

**WANT FREE HOSTING?**

Looking for free hosting? You get one more month's free hosting for every person you refer. [Learn more.](#)

# Case study

# Events feature

I redesigned Signal Sciences' Events feature, which lists and describes hacking attempts against a customer's service.

- Introduced usability and navigation improvements
- Focused on event narrative and providing context
- Created industry-first “attack timeline” feature
- Aligned business logic, UI, and data model
- Highlighted Signal Sciences' value to customers

The screenshot shows the 'Events' page within the Signal Sciences platform. At the top, there's a navigation bar with links for Overview, Requests, Agents, Monitor, Configure, Site Settings, and Blocking. A green dot icon next to 'Blocking' indicates it's the active tab. Below the navigation is a breadcrumb trail: Sites > MySite > Monitor > Events. The main area is titled 'Events' and features a map of Eastern Europe and Russia showing various monitoring points. On the left, a sidebar contains a 'Filter by Signal, Status, or IP' input field and a list of recent events:

| IP Address  | Signal         | Status  |
|-------------|----------------|---------|
| 80.11.22.33 | xss            | ACTIVE  |
| 80.11.22.33 | Traversal      | ACTIVE  |
| 80.11.22.33 | Attack tooling | ACTIVE  |
| 80.11.22.33 | xss            | EXPIRED |
| 80.11.22.33 | Attack tooling | EXPIRED |
| 80.11.22.33 | xss            | EXPIRED |
| 80.11.22.33 | xss            | EXPIRED |

To the right of the events list is a detailed view for the first event (80.11.22.33). It shows the status as ACTIVE, the IP as 111.111.11.11, and the signal as XSS. It also notes that action taken is blocking all requests from this IP. A message states that requests will be monitored for 24 hours until the flag is lifted on January 15, 2017, at 04:59pm. Buttons for 'Remove flag now', 'Whitelist IP', and 'Blacklist IP' are available. Below this is a 'Timeline' section with a series of icons and corresponding log entries:

- Flag icon: IP was flagged with XSS and Traversal on the Network. Within the last 24 hours.
- Eye icon: IP marked Suspicious on this site with XSS. January 15, 2017, 4:52 PM GMT.
- Link icon: 10 requests tagged XSS from this IP within 10 minutes. 100% of site threshold (View Rule).
- Flag icon: Flag applied to IP. January 15, 2017, 4:48 PM GMT.

# Problems:

- Navigation didn't provide enough contextual information to be useful
- Details of event were out of order and hard to parse
- Business logic relationships were not clear: *what's the relationship between an “event,” a “flag,” and an “attack”?*
- Valuable and proprietary insights into an attack were a competitive advantage but poorly articulated

The screenshot shows a web-based application interface for monitoring network activity. At the top, there are navigation links: Dashboards, Configurations, Blocking, Help Center, and Luxury Retreats. The main area is titled "Luxury Retreats / Events". A sub-section titled "Events Last 30 days" displays a list of 27 events, each showing an IP address, the action taken (flagged), and the time it was flagged. To the right of this list, detailed information is provided for the first event, which flagged the IP 149.210.238.145. This includes the reason (105 relevant tags across 105 requests from this IP in 60 sec.), the tool used (Attack Tooling at 100%), and the actions taken (blocked 2420 requests). Other sections like "Who we flagged" and "When we flagged it" also provide specific details.

| Events Last 30 days         |                          |
|-----------------------------|--------------------------|
| 27 events                   |                          |
| 149.210.238.145 was flagged | Flag lifted 20 hours ago |
| 84.80.32.46 was flagged     | Flag lifted 20 hours ago |
| 173.239.220.3 was flagged   | Flag lifted 21 hours ago |
| 173.239.232.23 was flagged  | Flag lifted 22 hours ago |
| 89.248.163.3 was flagged    | Flag lifted 2 days ago   |
| 173.239.232.39 was flagged  | Flag lifted 2 days ago   |
| 149.210.238.145 was flagged | Flag lifted 2 days ago   |
| 10.7.1.31 was flagged       | Flag lifted 2 days ago   |
| 84.80.32.46 was flagged     | Flag lifted 2 days ago   |
| 173.239.232.51 was flagged  | Flag lifted 2 days ago   |
| 173.239.232.48 was flagged  | Flag lifted 3 days ago   |
| 173.239.232.59 was flagged  | Flag lifted 3 days ago   |
| 127.0.0.1 was flagged       | Flag lifted 4 days ago   |
| 172.111.138.61 was flagged  | Flag lifted 4 days ago   |
| 87.160.55.179 was flagged   | Flag lifted 4 days ago   |
| 104.236.212.244 was flagged | Flag lifted 4 days ago   |
| 94.203.179.152 was flagged  | Flag lifted 4 days ago   |
| 87.160.55.60 was flagged    | Flag lifted 4 days ago   |
| 87.160.58.16 was flagged    |                          |

**149.210.238.145 was flagged**  
Flag lifted 20 hours ago.

**Who we flagged**  
149.210.238.145  
149-210-238-145.colo.transip.net

- Mozilla/5.00 (Nikto/2.1.6) (Evasions:None) (Test:map\_codes)
- Mozilla/5.00 (Nikto/2.1.6) (Evasions:None) (Test:Port Check)
- Mozilla/5.00 (Nikto/2.1.6) (Evasions:None) (Test:getinfo)

**Why we flagged it**  
We saw 105 relevant tags across 105 requests from this IP in 60 sec.  
Attack Tooling 100%

**When we flagged it**  
We flagged this IP on Jun 13, 2017 at 20:22 UTC.  
The flag was lifted 24 hours later on Jun 14, 2017 at 20:22 UTC.

**What actions did we take**  
While this IP was flagged, we blocked 2420 requests.

## New summary component

**Status:** ACTIVE

**IP:** — 192.168.0.100

**Signal:** | Attack Tooling

**Action taken:** 51 requests blocked from this IP while flagged

Requests will be monitored for 23 hours until the flag is lifted on June 2, 2018, 4:10 PM PDT

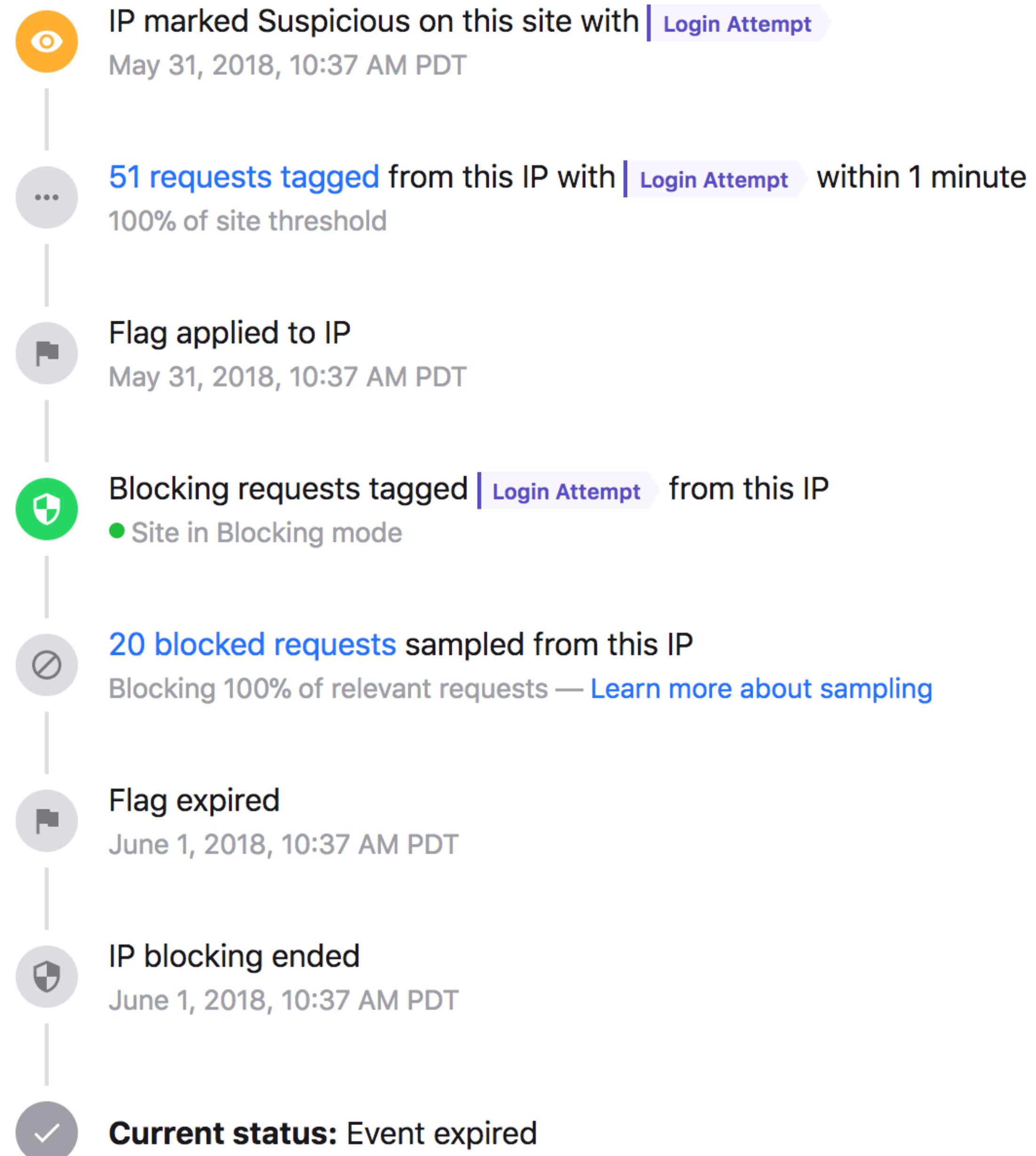
## Updated navigation and status model

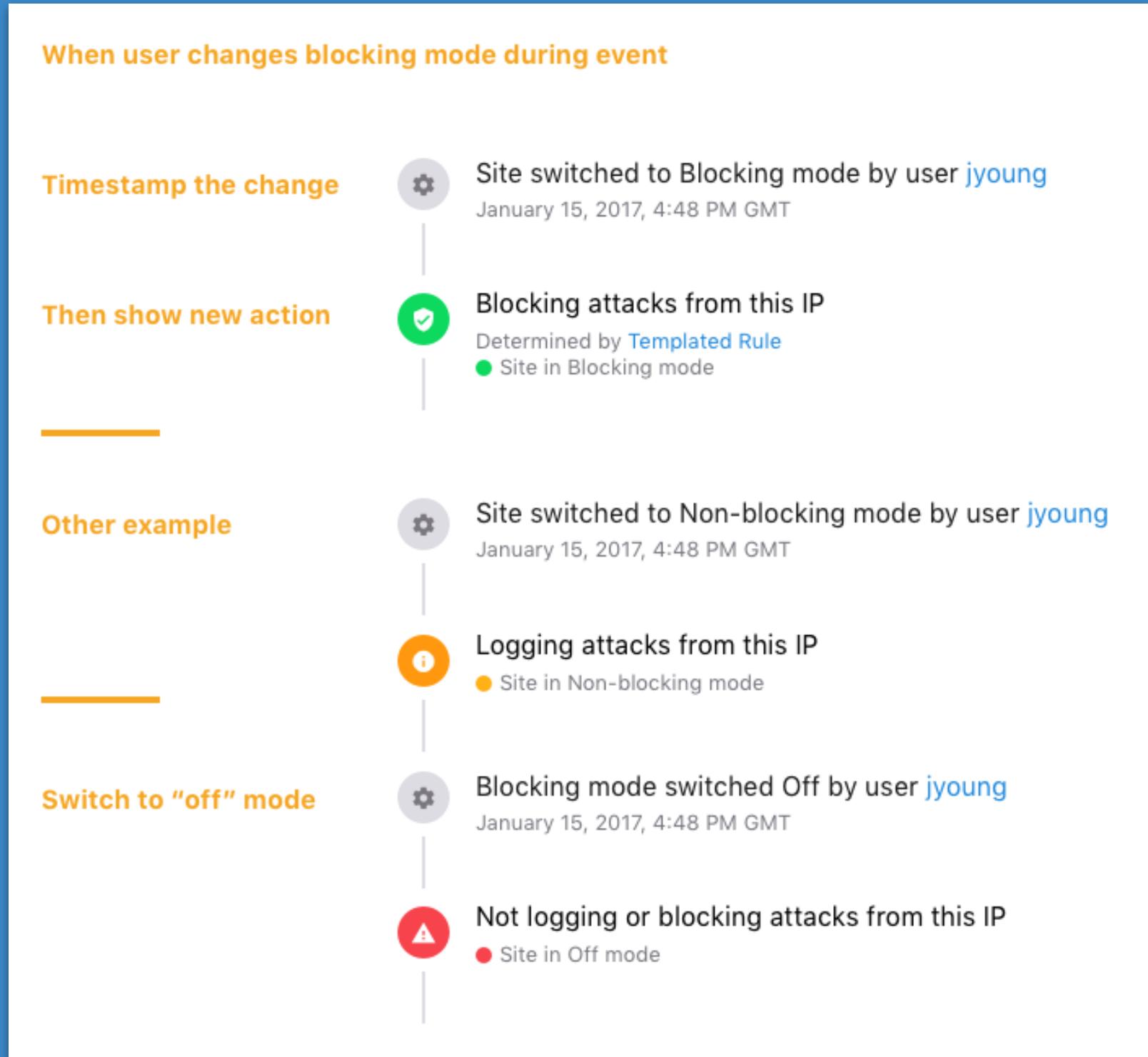
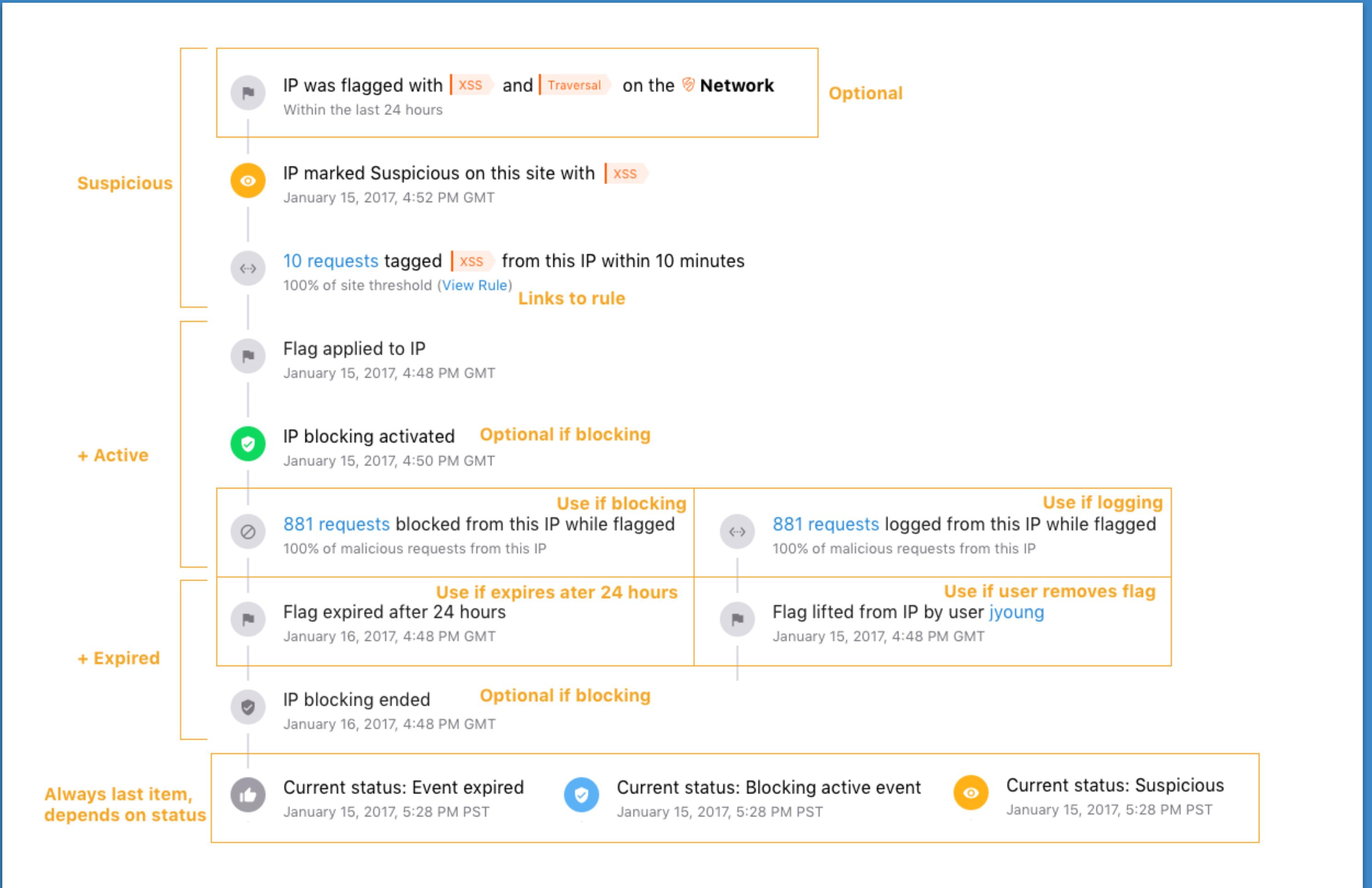
|  |             |
|--|-------------|
|  80.11.22.33   | ACTIVE      |
| Traversal   XSS  | 6 hours ago |
|  72.221.42.17 | EXPIRED     |
| XSS  | 7 hours ago |
|  63.13.33.45  | SUSPICIOUS  |
| Login Attempt  | 8 hours ago |

## Attack timeline:

- **Industry-first**
- **No competitors have this**
- **Makes variety of data easier to parse**
- **Narrative format makes Signal Sciences value explicit**
- **Complex feature at the nexus of business logic, UI, and backend data model**

### Timeline





| Updates to Current Status when event is Active: |  |
|---|--|
| <b>Blocking</b>                                 | <b>Current status:</b> Blocking active event                     |
| <b>Logging</b>                                  | <b>Current status:</b> Logging active event                      |
| <b>Agent mode = off</b>                         | <b>Current status:</b> Allowing all requests                     |
| <b>Whitelisted IP</b>                           | <b>Current status:</b> Allowing all requests from Whitelisted IP |
| <b>Blacklisted IP</b>                           | <b>Current status:</b> Blocking all requests from Blacklisted IP |

# Multiple changes during implementation

During development, we adapted to the requirements of the legacy data model and strived to render it clearly to users

# Results:

- Higher engagement rates via analytics and bug reports
- Qualitatively better usability
- Multiple marketing wins
- Highlighted during sales demos

# Missed opportunities:

- Event filter was de-prioritized
- Event map was de-prioritized
- Differences between design and production due to component library restrictions

The screenshot displays a web application interface for network monitoring and security. At the top, the header includes the company logo, the site name "Ben Corp / still-stream-15119.herokuapp.com", and navigation links for Help Center, Corp Tools, and My Profile.

The main content area is divided into several sections:

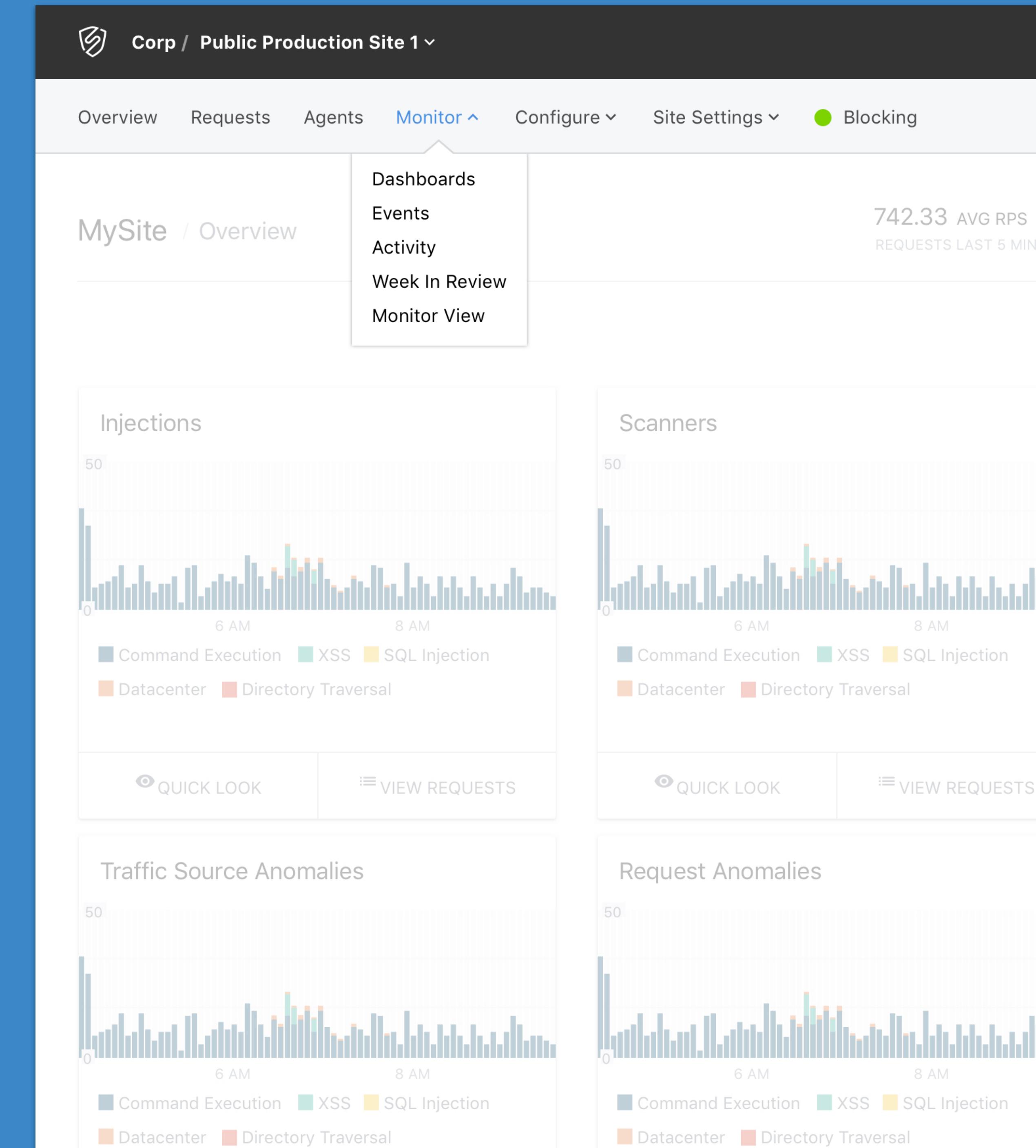
- Events:** A list of recent events over the last 30 days. The events are categorized by IP address and signal type:
  - 192.168.0.100: Attack Tooling (ACTIVE, 3 minutes ago)
  - 192.168.0.204: Attack Tooling (EXPIRED, yesterday)
  - 192.168.0.203: Login Attempt (EXPIRED, yesterday)
  - 192.168.0.205: Attack Tooling (EXPIRED, 15 days ago)
  - 192.168.0.204: Login Attempt (EXPIRED, 15 days ago)
  - 192.168.0.207: Attack Tooling (EXPIRED, 18 days ago)
  - 192.168.0.206: Registration Attempt (EXPIRED, 18 days ago)
  - 192.168.0.205: Registration Attempt (EXPIRED, 18 days ago)
  - 192.168.0.205: Registration Attempt (EXPIRED, 21 days ago)
  - 192.168.0.204: Login Attempt (EXPIRED, 21 days ago)
- Blocking requests from flagged IP**: A summary box for the flagged IP 192.168.0.100.
  - Status: ACTIVE
  - IP: 192.168.0.100
  - Signal: Attack Tooling
  - Action taken: 51 requests blocked from this IP while flagged
  - Notes: Requests will be monitored for 23 hours until the flag is lifted on June 2, 2018, 4:10 PM PDT
- Timeline**: A chronological log of events related to the flagged IP:
  - IP marked Suspicious on this site with Attack Tooling (June 1, 2018, 4:10 PM PDT)
  - 51 requests tagged from this IP with Attack Tooling within 1 minute (100% of site threshold)
  - Flag applied to IP (June 1, 2018, 4:10 PM PDT)
  - Blocking malicious attacks from this IP (Site in Blocking mode)
  - 51 requests blocked from this IP while flagged (Blocking 100% of malicious requests)
  - Current status: Blocking active event
- Details**: A summary section for the flagged IP 192.168.0.100.
  - IP ADDRESS: 192.168.0.100

# Case study

# Navigation redesign

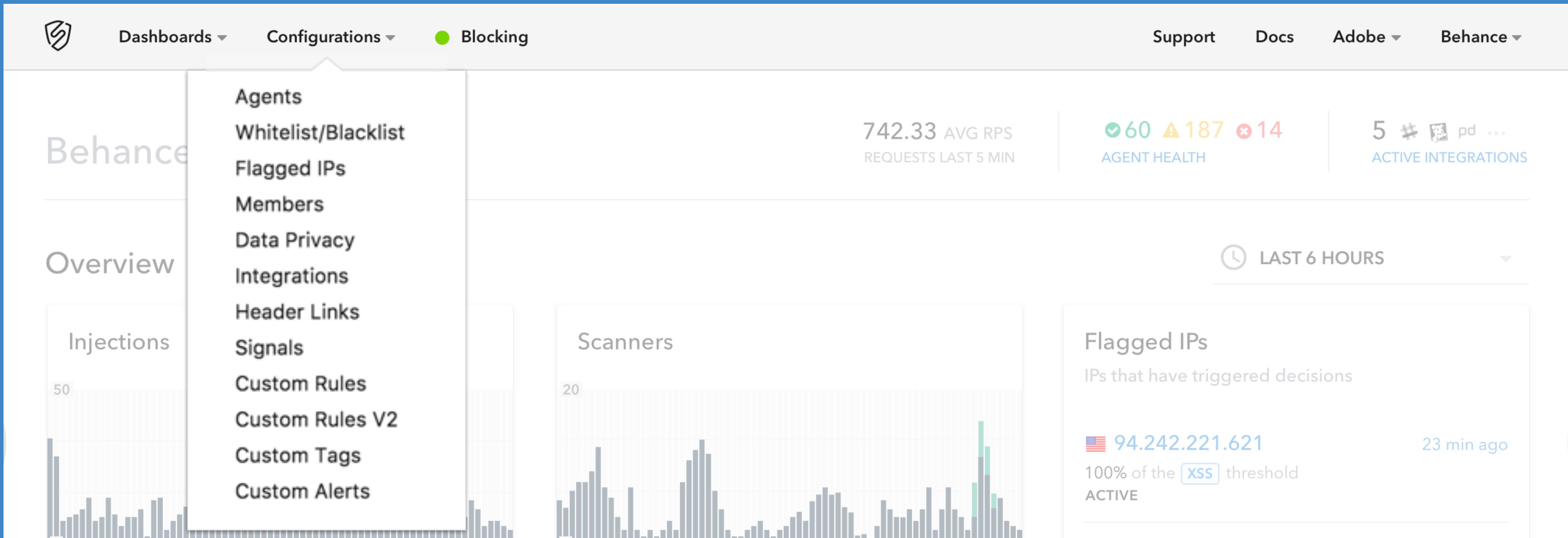
I redesigned Signal Sciences' dashboard navigation.

- Reorganized menu items into more intuitive groupings
- Improved access to most-used features
- Redesigned to reflect how Signal Sciences organizes customer properties
- Identified highest-value enterprise “power users”
- Prepared dashboard to scale for enterprise
- Established new analytics tracking standards



# Problems:

- Items were crammed into non-intuitive menus
- Most-visited pages were hard to find and access
- Wasn't clear whether the user was in the “site” context or the “corp” context
- Difficult and slow to switch between customer sites



| <input type="checkbox"/> | Event Label <span>?</span>  | Total Events <span>?</span><br>↓     | Unique Events <span>?</span>         | Event Value <span>?</span> | Avg. Value <span>?</span>              |
|--------------------------|-----------------------------|--------------------------------------|--------------------------------------|----------------------------|--|
|                          |                             | 7,217<br>% of Total: 26.40% (27,333) | 4,197<br>% of Total: 29.48% (14,236) | 0<br>% of Total: 0.00% (4) | 0.00<br>Avg for View: <0.01 (-100.00%) |
| <input type="checkbox"/> | 1. overview-link            | 1,659 (22.99%)                       | 809 (19.28%)                         | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 2. agents-link              | 1,345 (18.64%)                       | 580 (13.82%)                         | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 3. requests-link            | 1,036 (14.35%)                       | 495 (11.79%)                         | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 4. whitelist-blacklist-link | 339 (4.70%)                          | 223 (5.31%)                          | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 5. signals-link             | 306 (4.24%)                          | 168 (4.00%)                          | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 6. events-link              | 247 (3.42%)                          | 150 (3.57%)                          | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 7. dashboards-link          | 242 (3.35%)                          | 189 (4.50%)                          | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 8. custom-alerts-link       | 209 (2.90%)                          | 132 (3.15%)                          | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 9. members-link             | 208 (2.88%)                          | 135 (3.22%)                          | 0 (0.00%)                  | 0.00                                   |
| <input type="checkbox"/> | 10. corp-link               | 165 (2.29%)                          | 131 (3.12%)                          | 0 (0.00%)                  | 0.00                                   |

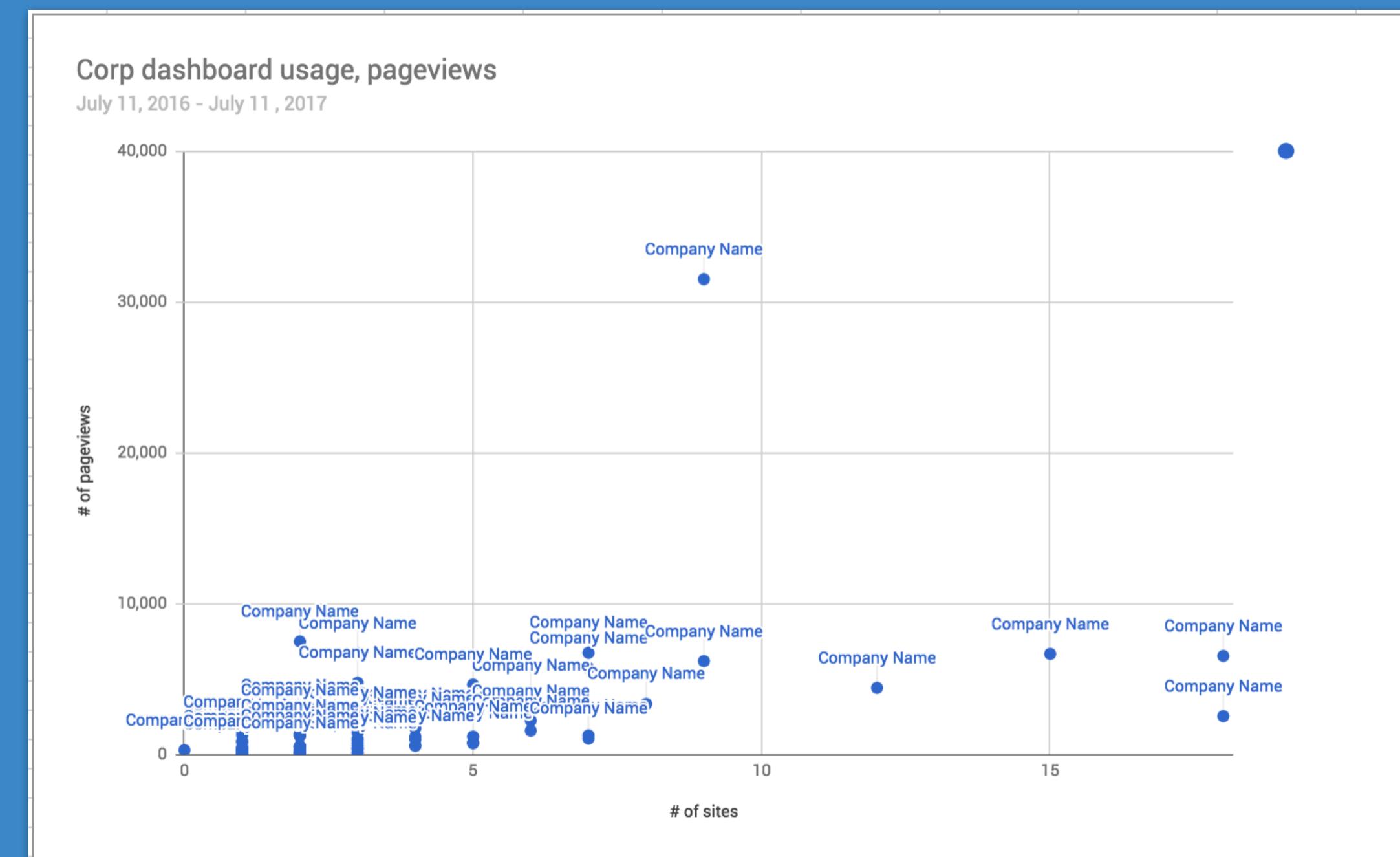
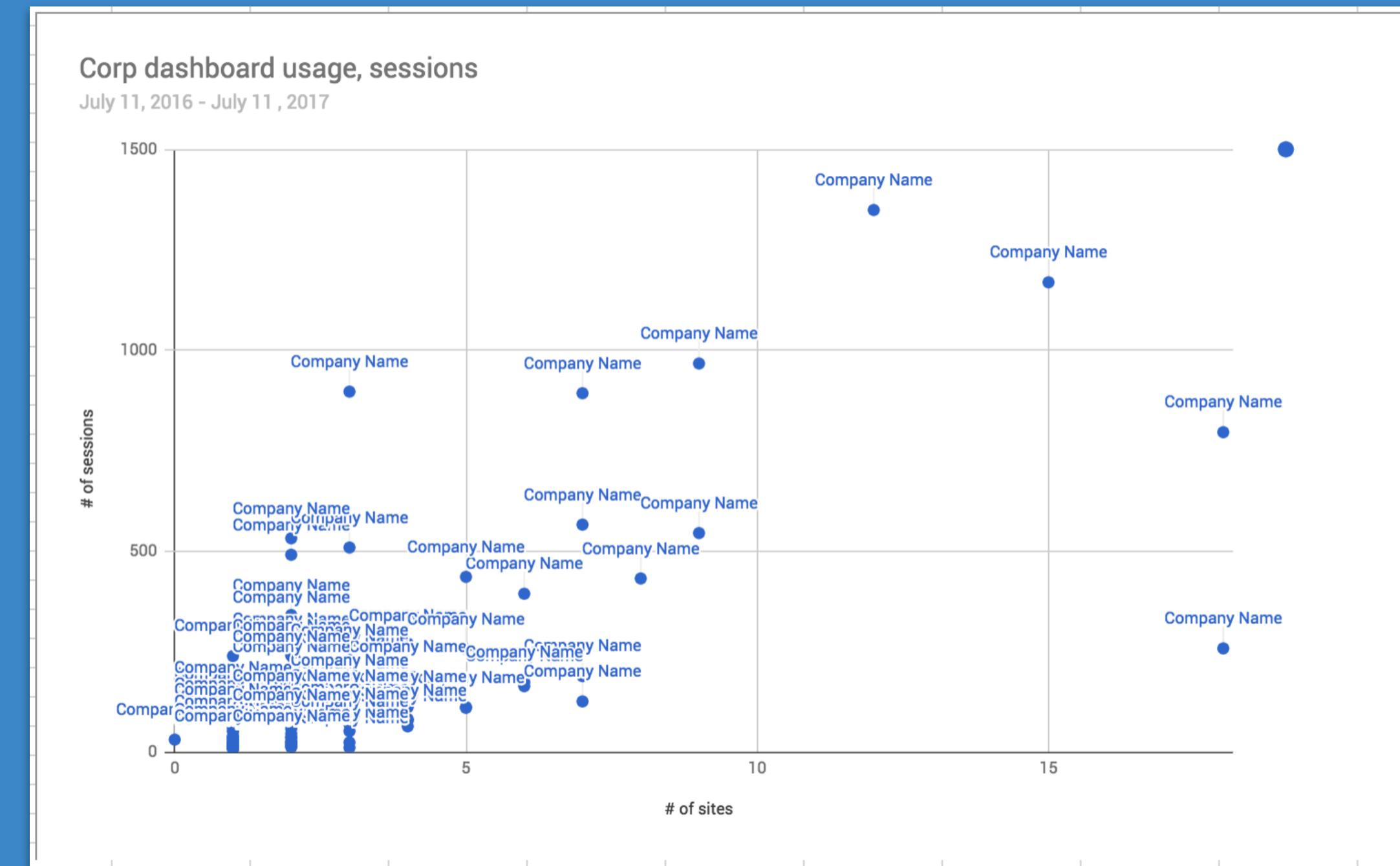
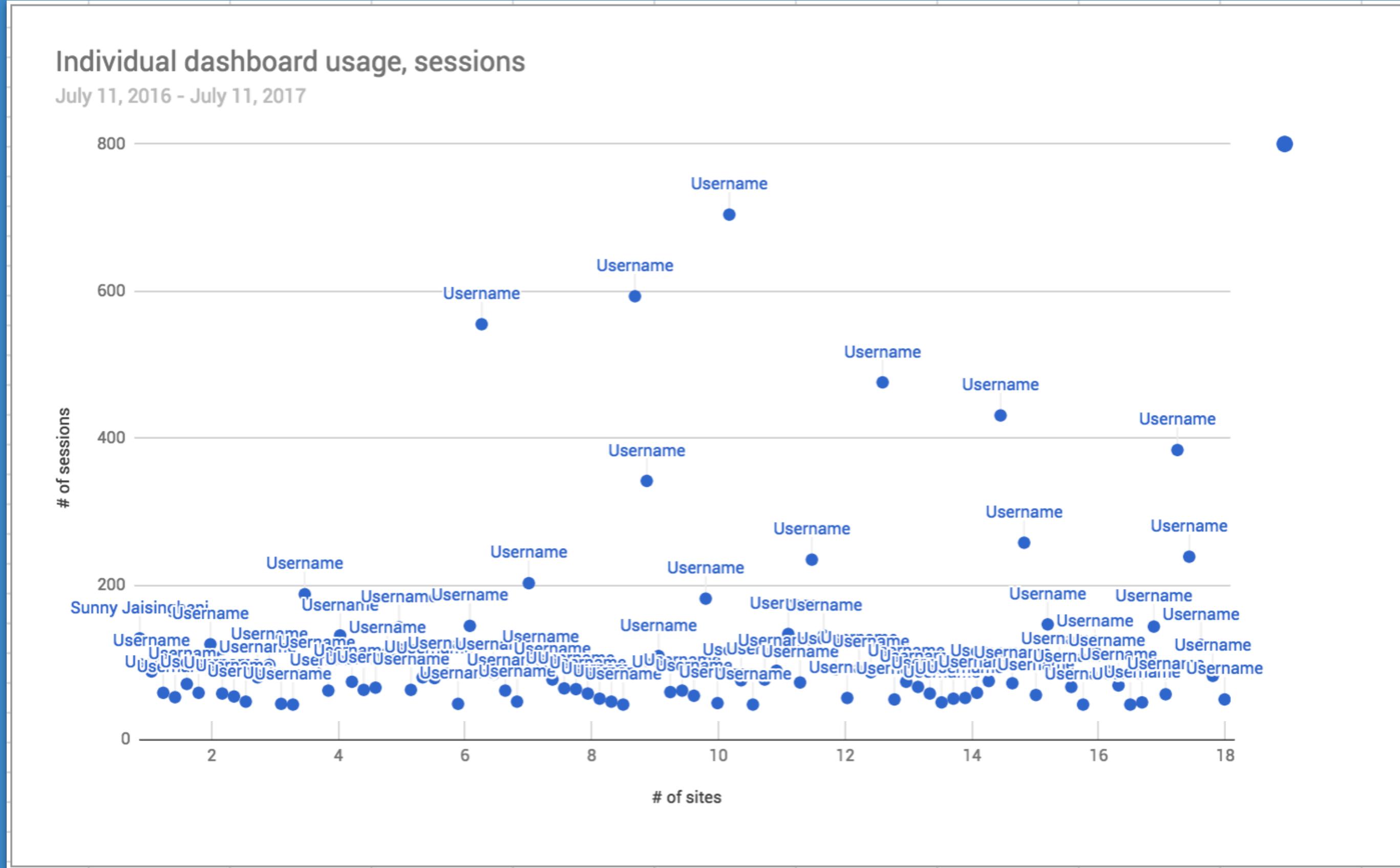
## Identified most-used pages

- Established analytics tracking standards to capture data
- *page-name, component-action, target-component*

| Navigation Bar  |  |                                     |  |  |  |
|---|--|-------------------------------------|--|--|--|
| <a href="#">Dashboard</a><br><a href="#">Overview</a><br><a href="#">Dashboards</a><br><a href="#">Search</a><br><a href="#">Monitor View</a><br><a href="#">Events</a><br><a href="#">Activity</a><br><a href="#">Week in Review</a> | <a href="#">Configurations</a><br><a href="#">Whitelist/Blacklist</a><br><a href="#">Flagged IPs</a><br><a href="#">Members</a><br><a href="#">Data Privacy</a><br><a href="#">Integrations</a><br><a href="#">Header Links</a><br><a href="#">Signals</a><br><a href="#">Members</a><br><a href="#">Custom Rules</a><br><a href="#">Custom Rules V2</a><br><a href="#">Custom Tags</a><br><a href="#">Custom Alerts</a> | <a href="#">Non-blocking toggle</a> | <a href="#">Help Center</a><br><a href="#">Guides &amp; FAQ</a><br><a href="#">API Docs</a><br><a href="#">Support</a> | <a href="#">[Corp name]</a><br><a href="#">Reports</a><br><a href="#">Manage Sites</a><br><a href="#">Manage Users</a> | <a href="#">[Site name]</a><br><a href="#">Reports</a><br><a href="#">Manage Sites</a><br><a href="#">Manage Users</a> |
|   |  |                                     |  |  |  |
|   |  |                                     |  |  |  |
|   |  |                                     |  |  |  |
|   |  |                                     |  |  |  |
|   |  |                                     |  |  |  |
|   |  |                                     |  |  |  |
|   |  |                                     |  |  |  |

# Re-grouped features

| Label                         | Description  |
|-------------------------------|--|
| Overview                      | Your home base where you can find site-based graphs of requests and attack trends, alerts, and links to more detailed information. |
| Graphs of Signals             | A collection of graphs that each visualize a tag's prevalence across all traffic.  |
| Requests                      | View and search through a list of all requests to your site.   |
| Monitor View                  | A read-only mode to visualize high-level request and attack data meant for displaying on large monitors.                           |
| Events                        | A list of events across the dashboard, like a notification of a suspicious IP being flagged.                                       |
| Activity                      | A list of all activity across the dashboard, like flagged IPs and changes to settings by a user.                                   |
| Week In Review                | A report of traffic and attack trends across your site for the last 7 days.  |
| Agents                        | A list of all agents on your servers and their current status.   |
| Whitelist/Blacklist           | View and edit a list of all IPs whose traffic has been permanently blocked or allowed.   |
| Flagged IPs                   | A list of specific IPs which are currently being monitored for malicious traffic.  |
| Members                       | Add and view users that have administrative privileges on a site.  |
| Data Privacy                  | Edit what data from your requests is visible or redacted prior to being sent to our platform.                                      |
| Integrations                  | Connect to third-party services like Slack or Jira in order to view notifications and information.                                 |
| Header Links                  | Set up links to cross-reference our request data in other third-party services you use.  |
| Signals                       | View the rules that determine how requests are tagged and what actions are taken by our platform.                                  |
| Custom Tags                   | Create custom tags to categorize specific request types.   |
| Custom Alerts                 | Create custom alerts based on the presence and rate of custom tags.  |
| Turn Blocking Mode On and Off | Toggle Blocking Mode on and off with a single click.   |
| Guides & FAQ                  | See guides for installing, using, and troubleshooting our platform.  |
| API Docs                      | In-depth technical instructions on connecting to and using our platform's API.   |



**Identified “power users” to test with  
(Customer names redacted)**

# Results:

- Introduced two-level nav that aligns with property hierarchy: top-level is corp-level features, bottom level is site-level features
- Moved most-used items, like **Requests**, to the front
- Nav item event analytics now reflect nav item depth
- Re-bucketed remaining nav items into new categories that reflect purpose
- New site switcher is explicit about corp/site heirarchy and includes on-the-fly filter
- Launched with zero customer complaints or support tickets despite no prior usability tests

The figure consists of three vertically stacked screenshots of a software application's interface, illustrating the evolution of its navigation system.

- Top Screenshot:** Shows a flat navigation bar with links: Overview, Requests, Agents, Monitor (with a dropdown arrow), Configure, Site Settings, and Blocking. The "Blocking" link is highlighted with a green dot.
- Middle Screenshot:** Shows the same navigation bar, but the "Monitor" link is now expanded, revealing a dropdown menu with options: Dashboards, Events, Activity, Week In Review, and Monitor View. The "Monitor" link itself is also highlighted with a green dot.
- Bottom Screenshot:** Shows a navigation bar with "Corp / Public Production Site 1" selected. Below it is a "Sites" section with a "Filter" input field and a list of sites: Staging Site 1, Staging Site 2, Public Production Site 1 (which has a green checkmark next to it), and Public Production Site 2.

# Thanks!

August 2018

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