RBS-2019-014

Honey Browser Extension Content Script Improper DOM Handling Browser Action UI Spoofing
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Vendor / Product Information

The Honey Browser Extension for Chrome, Firefox, Safari, and Edge allows users to instantly find and apply coupon codes at checkout for over 30,000 online shopping sites and, according to the vendor, 10,000,000 members utilize the extension.

Vulnerable Program Details

Details for tested products and versions:

Vendor: Honey Science Corporation
Product: Honey Browser Extensions for Chrome, Firefox, Safari, and Edge

Versions:
- Honey Addon for Firefox version 10.8.1 and 11.1.0
- Honey Extension for Chrome 10.8.1, 11.0.2, 11.1.0, 11.1.1, 11.1.2, 11.2.1, and 11.2.2
- Honey Extension for Edge 11.1.1.0
- Honey Extension for Safari 10.9.0

NOTE: Other versions than the one listed above are likely affected.

Credits

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Impact

The browser extension’s content script is used to inject and display UI elements in the Document Object Model (DOM) of the current web page. When a user activates the browser action while visiting a specially crafted web site, a context-dependent attacker can spoof UI elements of the browser extension and conduct phishing attacks.

Vulnerability Details

The Honey browser extensions are activated when a user clicks on the Honey extension logo in the browser toolbar. In general, this triggers the browser action defined in the extension.
manifest and opens a popup window overlay to display extension UI elements. However, the manifest does not specify a window popup, but injects a \texttt{div} tag into the current web page’s Document Object Model (DOM) tree.

```html
<div class="footer">...
</div>
</script>
</script>

```html
<div id="honeyContainer" style="all: initial;" data-reactroot data-reactid="1"
data-react-checksum="-1105540765">...
</div>
</body>
</html>
```

\textit{div tag injected to web page by the Honey extension}

As the website controls the DOM tree, it now can also access all injected UI elements from the Honey extension, i.e. the extension's user interface; including the login form. This allows a specially crafted web page to spoof the Honey extension elements and steal user information.

\textbf{Solution}

Update to the following version:

- Honey Addon for Firefox version 11.3.5
- Honey Extension for Chrome 11.3.0
- Honey Extension for Edge 11.4.2.0

\textbf{References}

- RBS: RBS-2019-014
- VulnDB: 207147

\textbf{Timeline}

- 2018-11-21 Vulnerability discovered
- 2018-12-13 Vulnerability reported to vendor
- 2018-12-14 Vendor acknowledges the vulnerability
- 2019-04-16 Vendor releases fix for Google Chrome extension
- 2019-05-15 Vendor releases fix for Mozilla Firefox extension
- 2019-06-18 VulnDB 207147 added to VulnDB
- 2019-07-31 Publication of this vulnerability report

\footnote{https://www.riskbasedsecurity.com/research/RBS-2019-0XX.pdf}
About Risk Based Security

Risk Based Security offers clients fully integrated security solutions, combining real-time vulnerability and threat data, as well as the analytical resources to understand the implications of the data, resulting in not just security, but the right security.

Company History

Risk Based Security, Inc. (RBS) was established to support organizations with the technology to turn security data into actionable information and a competitive advantage. We do so by enhancing the research available and providing a first of its kind risk identification and evidence-based security management service.

As a data driven and vendor neutral organization, RBS is able to deliver focused security solutions that are timely, cost effective, and built to address the specific threats and vulnerabilities most relevant to the organizations we serve. We not only maintain vulnerability and data breach databases, we also use this information to inform our entire practice.

Solutions

VulnDB - Vulnerability intelligence, alerting, and third party library tracking based on the largest and most comprehensive vulnerability database in the world. Available as feature-rich SaaS portal or powerful API. Vendor evaluations including our Vulnerability Timeline and Exposure Metrics (VTEM), Cost of Ownership ratings, Code Maturity, and Social Risk Scores.

Cyber Risk Analytics - Extensive data breach database including interactive dashboards and breach analytics. Clients are able to gather and analyze security threat and data breach information on businesses, industries, geographies, and causes of loss. It also allows monitoring of domains for data breaches and leaked credentials as well as implementing a continuous vendor management program with our PreBreach data.

YourCISO - Revolutionary service that provides organizations an affordable security solution including policies, vulnerability scans, awareness material, incident response, and access to high quality information security resources and consulting services.

Vulnerability Assessments (VA) and Pentesting - Regularly scheduled VAs and pentests help an organization identify weaknesses before the bad guys do. Managing the most comprehensive VDB puts us in a unique position to offer comprehensive assessments, combining the latest in scanning technology and our own data. Detailed and actionable reports are provided in a clear and easy to understand language.