Assignment 8.3 Creating Security Telemetry in Applications

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**For this week’s assignment, research “Creating Security Telemetry in Applications” and compose a one-page summary of your findings.**

Telemetry can be a great security tool for an application because it has many powerful features that can be very beneficial to a company. It can also save a company a lot of money by making a breach risk lower with all of the different monitoring that is offered. These tools can also help development teams plan out features for the next release and what to toss that isn’t getting used a much as they though it would. Below I’ll go into more detail on these features and why development teams should really think about adding this to their development tool list.

“Telemetry is the automated communication processes from multiple data sources.” (Sumo Logic.) Telemetry is used to improve the users experience, but also to monitor things like application health, security and performance. (Sumo Logic.) So, having something like this in your tool kit can be very beneficial to the developer and the company. Monitoring should start with computers and servers. When monitoring you should be watching things like the CPU’s usage with its peaks and averages. This way you can tell when something is being over utilized or even under utilized which may be an indication of some sort of problem. (Sumo Logic.) When you see under-utilization, you may have issues with routing where requests aren’t making it through or even different features on an application just not being used. (Sumo Logic.) Another thing to watch is server specific measurements as they will show user requests over time as well as concurrent user activity reported in a graph which will give you a look at the bigger picture.

You must also watch the software to keep things secure as well. When monitoring you application you’ll want some type of dashboard that shows real-time system telemetry and reporting, parsing that will safely work with production systems, a system that will watch your logs for you and keep track of things like usage patterns and security incidents. (Sumo Logic.) Automation tools can also help with a lot of these things and take away some of the manual labor that developers are having to put in. There are automation tools that can help with recovery, risk mitigation and automated detection. One of the big things is security analytics this will help watch for suspicious activities, out-of-band network access, unusual database activities and can even detect hacking events before they can turn into some major like a data breach. (Sumo Logic.) That is just a few reasons why telemetry can be beneficial.

With every great feature also come challenges though. Though Telemetry is a wonderful tool not everyone is in love with the thought of it. The end users can see telemetry as a tool that is being used to spy on them. (Altvater, A.) This meaning that some users will turn it off as soon as they see it running in the background. (Altvater, A.) When it gets turned off any of that information that has been gathered will no longer be transferred back. Depending on the amount of people that notice this and turn it off could make planning future fixes, updates, and other thing in your application a little harder to do. Though this isn’t a major issue its something to keep in mind when your teams are making plans in the future.

To sum it up telemetry security should be very important to any application. It will give you incite on things that you might not be aware of. Its also a way to keep tabs on how well your product is working even though you’re not in the same room with everyone that is using the product. You’ll also be able to answer the questions such as how often a user is using the application, are the users using the features you thought they would and so many more. This will keep you on top of the problems before they become an even larger headache for companies and developers. As you can see this should be used whenever possible because it can defiantly give development teams valuable information about their products.

**Bibliography**

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