ENTERPRISE IT LOGGING IN THE CLOUD: ANALYSIS AND APPROACHES

ADNAN SHAOUT & RYAN BANKSTO

Department of Electrical and Computer Engineering, University of Michigan, Dearborn, Michigan, United States

ABSTRACT

As the number of servers and the amount of data stored continues to rise for enterprise information technology (IT) organizations, the amount of data being logged by most organizations far out scales the resources available to store, analyze, and monitor those logs. With the rise of cloud computing as a cost effective infrastructure as a service provider for both storage and compute power, the creation of a widely used cloud based enterprise IT logging solution seems inevitable. In this paper, we identify the challenges of logging data in an enterprise IT environment, perform a literature survey of existing research in the field, identify key components of a successful service, review several existing commercial cloud based logging services and finally propose an architectural framework for our own cloud based enterprise IT logging service.

KEYWORDS: Cloud Computing, Logging, Hadoop, Cloud Architecture, Big Data