FacebookAnalytics

Exploratory Data Analysis on the dataset of Facebook's Altoona Data Center

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Introduction

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the \mathbf{Knit} button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

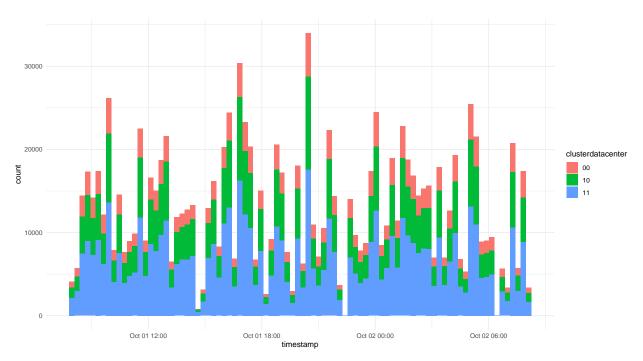


Figure 1: Facebook data center - Traffic characteristics - Database cluster - Overall

n	IPprotocol		##
1137919	6	1	##
760	17	2	##
45	58	3	##
n	IPprotocol		##
1036337	6	1	##

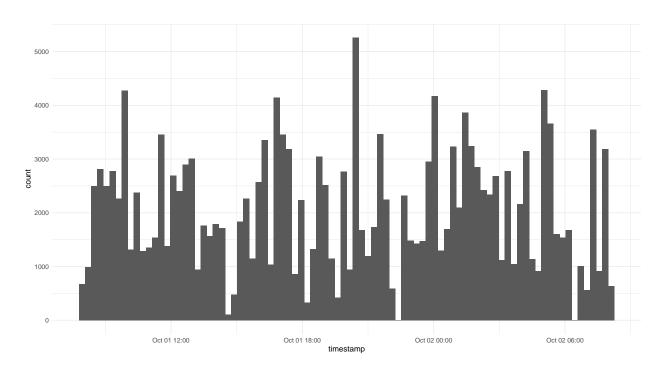


Figure 2: Facebook data center - Traffic characteristics - Database cluster - Intra cluster - Intra datacenter

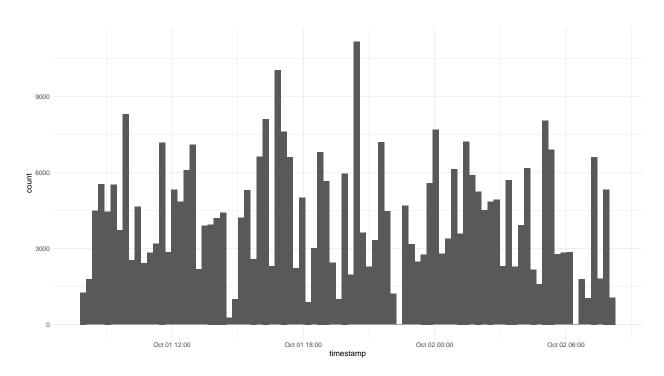


Figure 3: Facebook data center - Traffic characteristics - Database cluster - Inter cluster - Intra datacenter

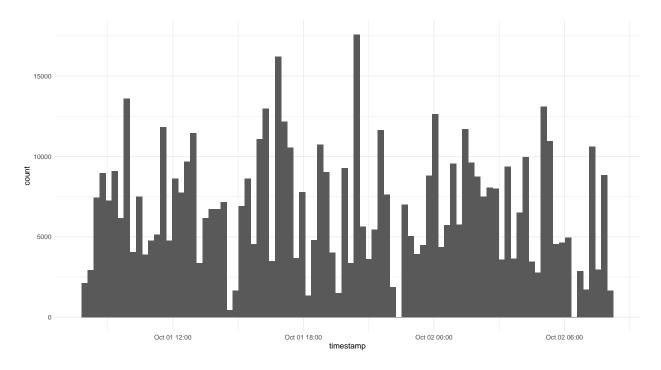


Figure 4: Facebook data center - Traffic characteristics - Database cluster - Inter cluster - Inter datacenter

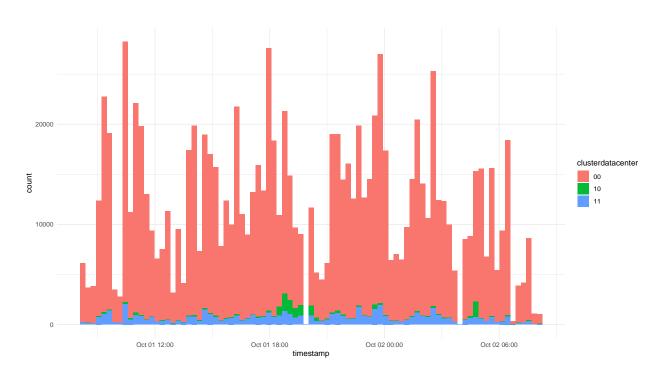


Figure 5: Facebook data center - Traffic characteristics - Hadoop cluster - Overall

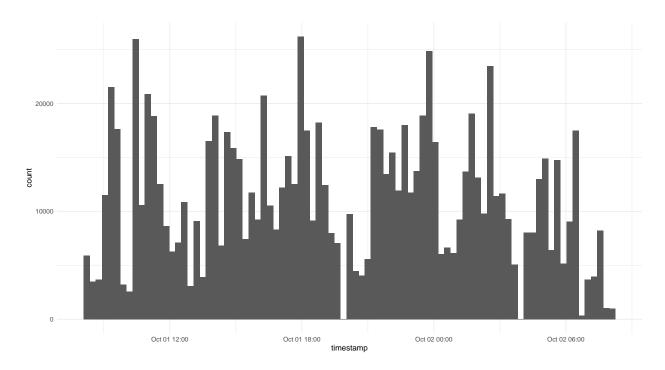


Figure 6: Facebook data center - Traffic characteristics - Hadoop cluster - Intra cluster - Intra datacenter

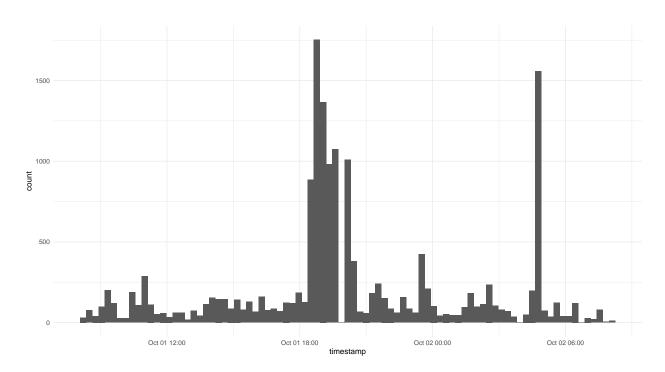


Figure 7: Facebook data center - Traffic characteristics - Hadoop cluster - Inter cluster - Intra datacenter

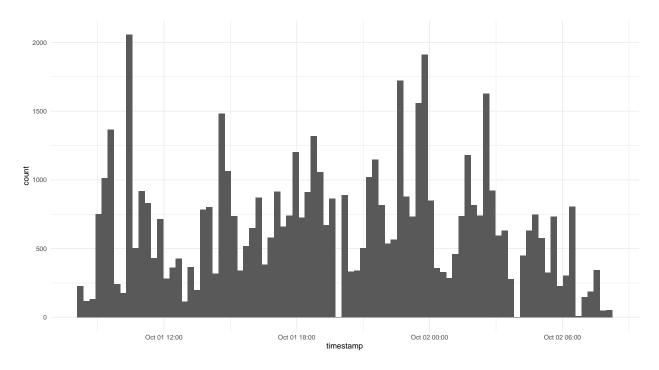


Figure 8: Facebook data center - Traffic characteristics - Hadoop cluster - Inter cluster - Inter datacenter

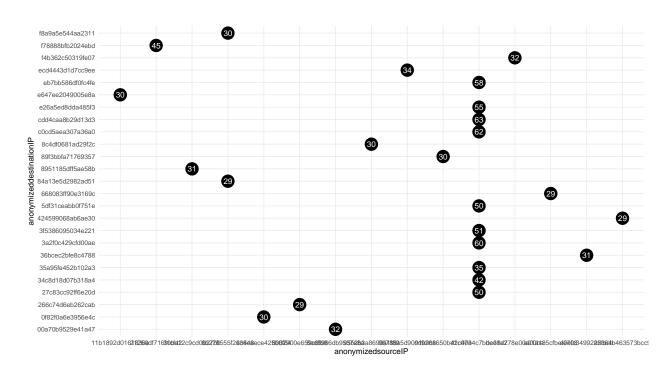


Figure 9: Traffic between source and destination IP - Database Cluster

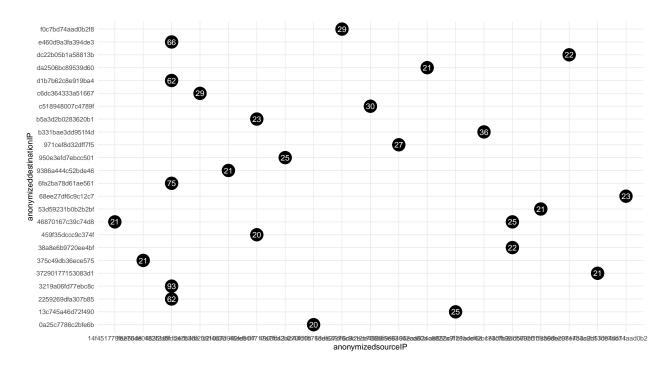


Figure 10: Traffic between source and destination IP - Hadoop Cluster

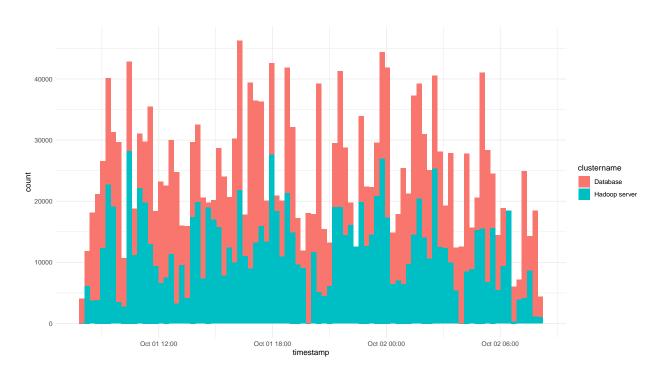
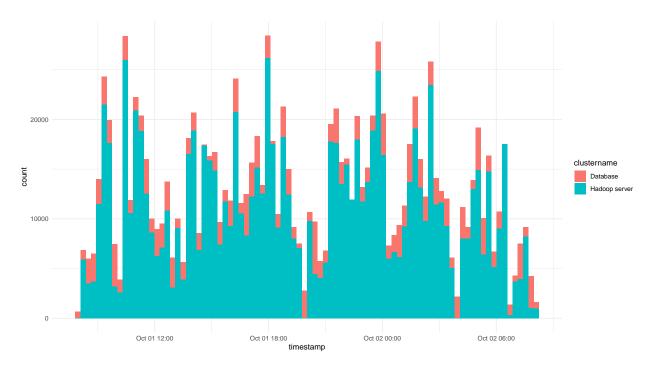


Figure 11: Facebook data center - Traffic characteristics - Database and Hadoop server - Overall



 $Figure\ 12:\ Traffic\ characteristics\ -\ Database\ and\ Hadoop\ server\ -\ Intra\ cluster\ and\ Intra\ datacenter$

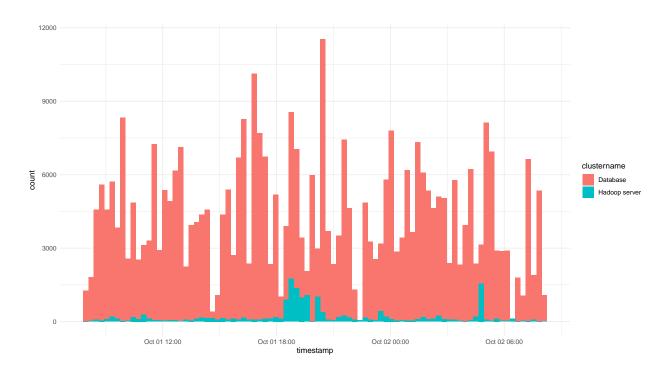


Figure 13: Traffic characteristics - Database and Hadoop server - Inter cluster and Intra datacenter

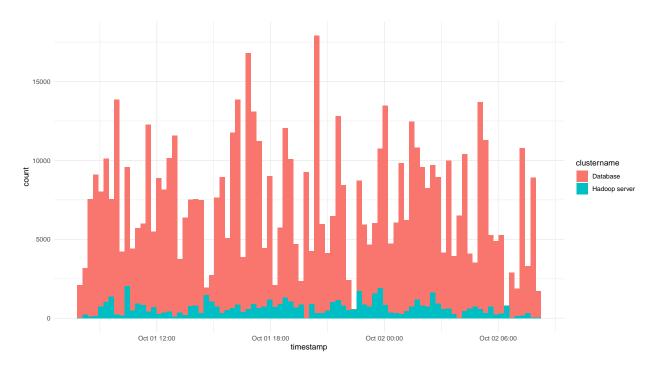


Figure 14: Traffic characteristics - Database and Hadoop server - Inter cluster and Inter datacenter

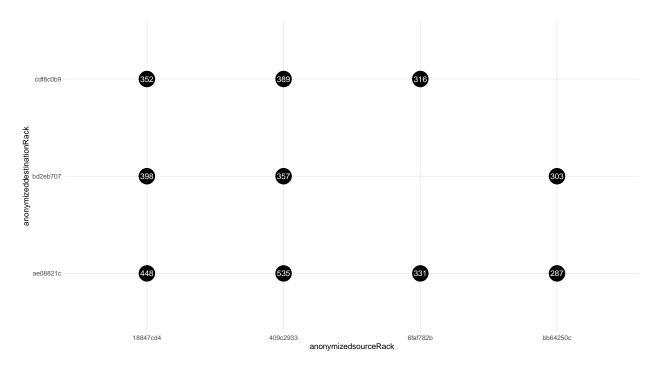


Figure 15: Traffic between source and destination Rack - Database Cluster

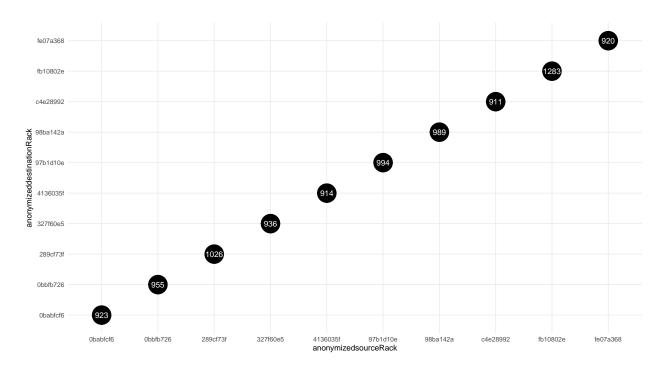


Figure 16: Traffic between source and destination Rack - Hadoop Cluster

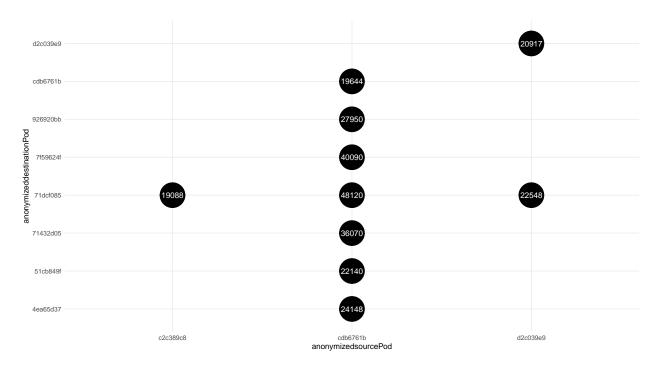


Figure 17: Traffic between source and destination Pod - Database Cluster

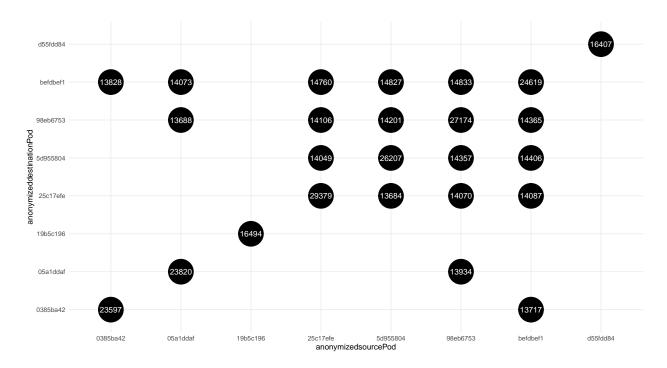


Figure 18: Traffic between source and destination Pod - Hadoop Cluster

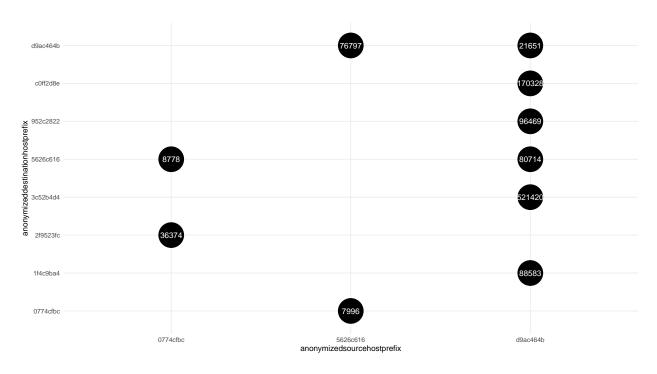


Figure 19: Traffic between source and destination hostprefix - Database Cluster

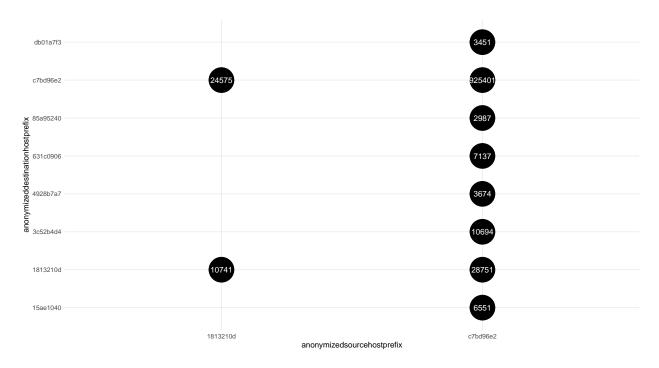


Figure 20: Traffic between source and destination host prefix - Hadoop Cluster $\,$

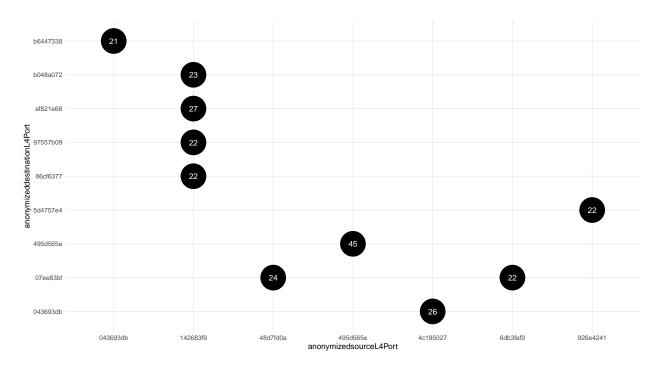


Figure 21: Traffic between source and destination L4 port - Database Cluster

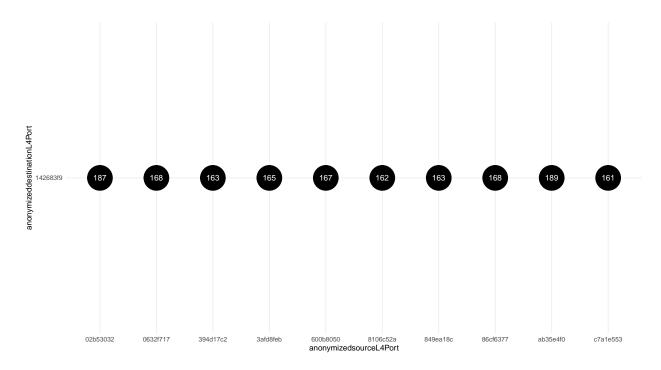
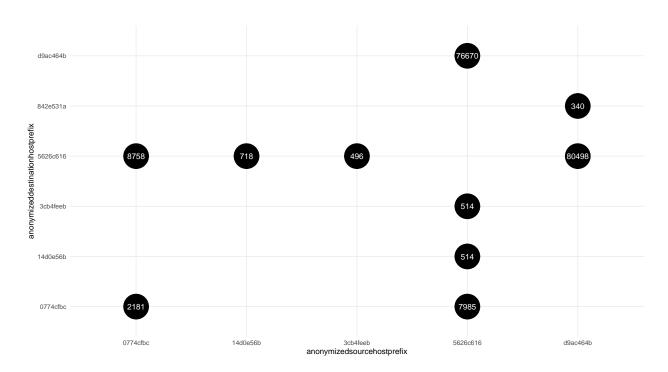
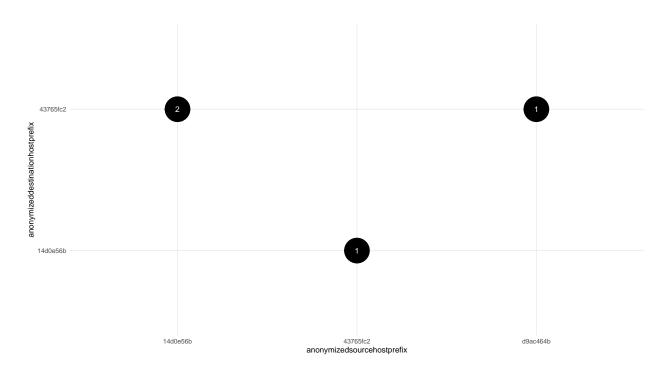


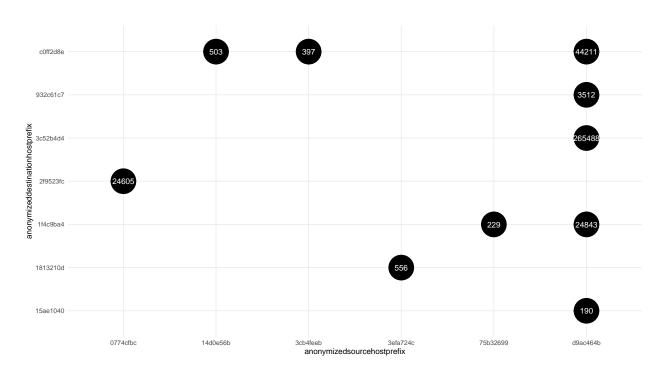
Figure 22: Traffic between source and destination L4 port - Hadoop Cluster



 $Figure\ 23:\ Source\ and\ destination\ hostprefix\ -\ Database\ Cluster\ -\ Intracluster\ -\ Intradatacenter\ -\ TCP$



 $Figure\ 24:\ Source\ and\ destination\ hostprefix\ -\ Database\ Cluster\ -\ Intracluster\ -\ Intradatacenter\ -\ UDP$



 $Figure\ 25:\ Source\ and\ destination\ hostprefix\ -\ Database\ Cluster\ -\ Intercluster\ -\ Intradatacenter\ -\ TCP$

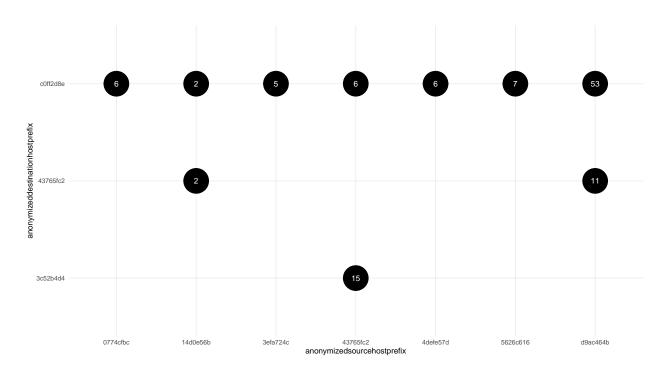


Figure 26: Source and destination hostprefix - Database Cluster - Intercluster - Intradatacenter - UDP

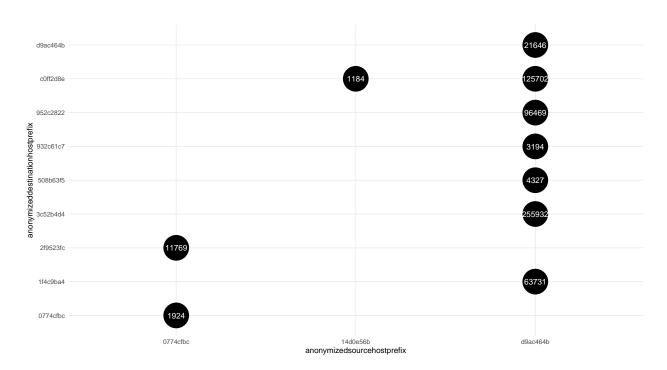
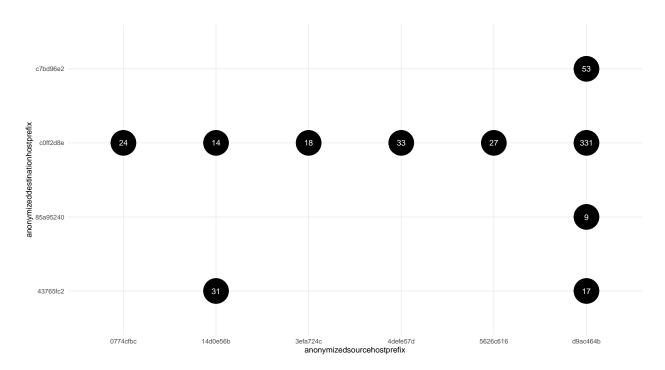


Figure 27: Source and destination hostprefix - Database Cluster - Intercluster - Interdatacenter - TCP



 $Figure\ 28:\ Source\ and\ destination\ hostprefix\ -\ Database\ Cluster\ -\ Intercluster\ -\ Interdatacenter\ -\ UDP$

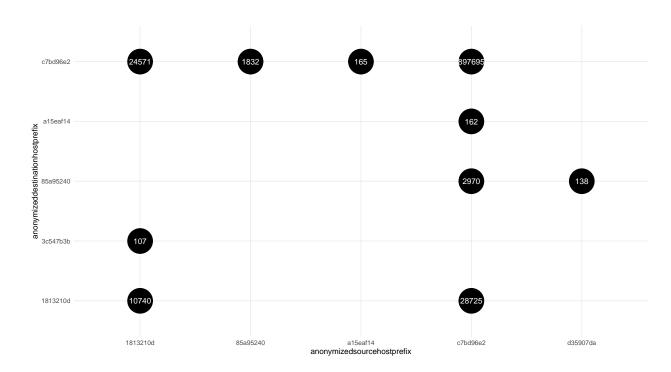


Figure 29: Source and destination hostprefix - Hadoop Cluster - Intracluster - Intradatacenter - TCP

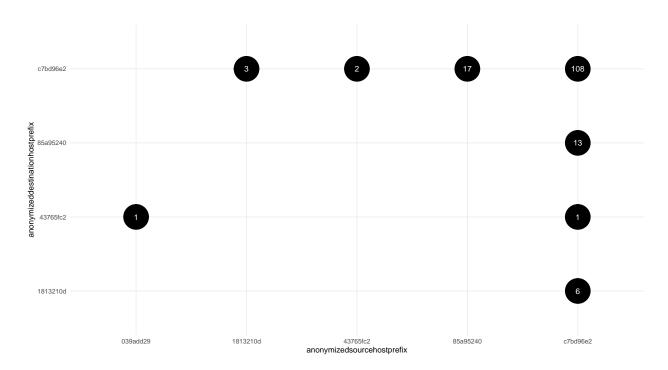


Figure 30: Source and destination hostprefix - Hadoop Cluster - Intracluster - Intradatacenter - UDP

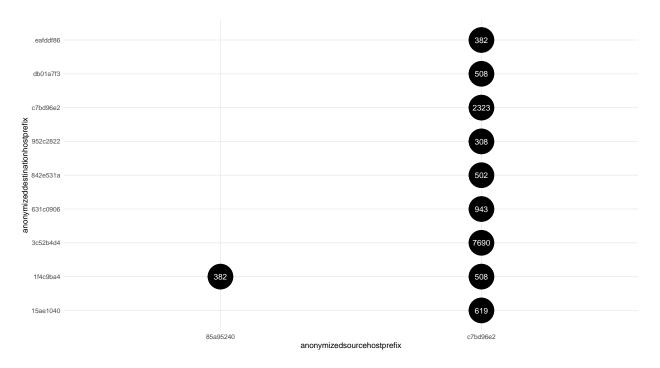


Figure 31: Source and destination hostprefix - Hadoop Cluster - Intercluster - Intradatacenter - TCP

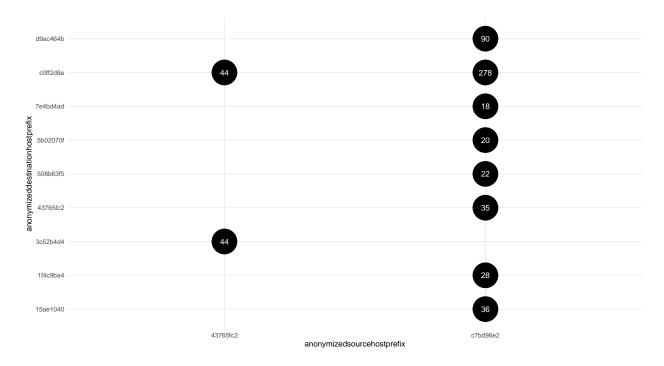


Figure 32: Source and destination hostprefix - Hadoop Cluster - Intercluster - Intradatacenter - UDP



Figure 33: Source and destination hostprefix - Hadoop Cluster - Intercluster - Interdatacenter - TCP

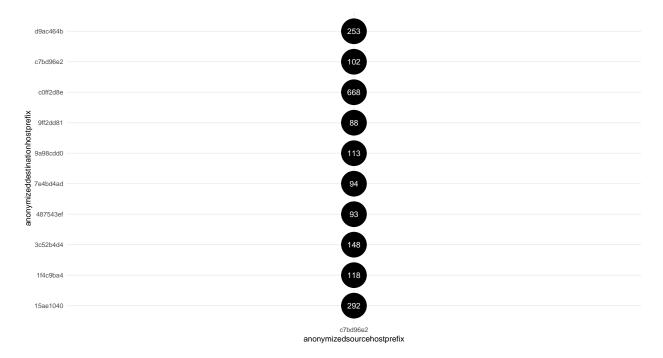


Figure 34: Source and destination hostprefix - Hadoop Cluster - Intercluster - Interdatacenter - UDP

2 17 5150 ## 3 58 50