# Data Profiling Report
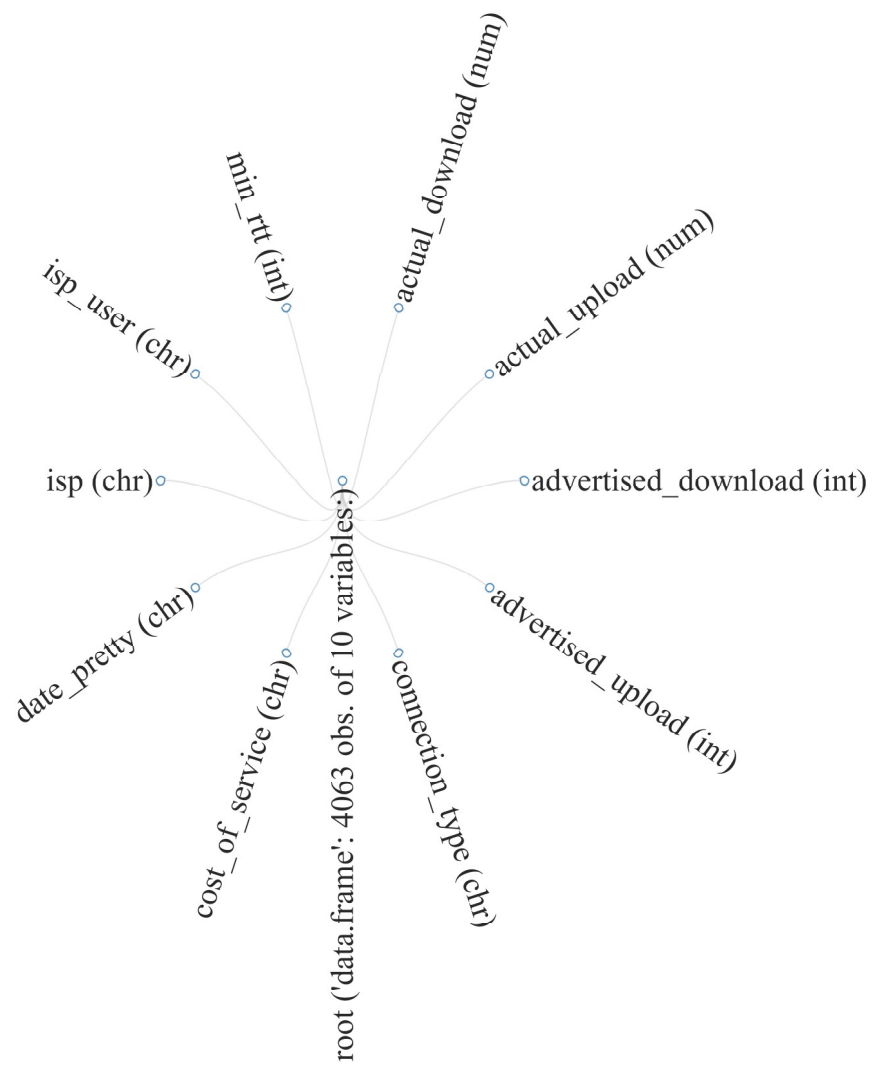
- Basic Statistics
- Data Structure
- Missing Data Profile
- Correlation Analysis

## Basic Statistics

| Name | Value |
| --- | --- |
| Rows | 4,063 |
| Columns | 10 |
| Discrete columns | 5 |
| Continuous columns | 5 |
| All missing columns | 0 |
| Missing observations | 0 |
| Total observations | 40,630 |
| Memory allocation | 599.7 Kb |

## Data Structure

## Missing Data Profile
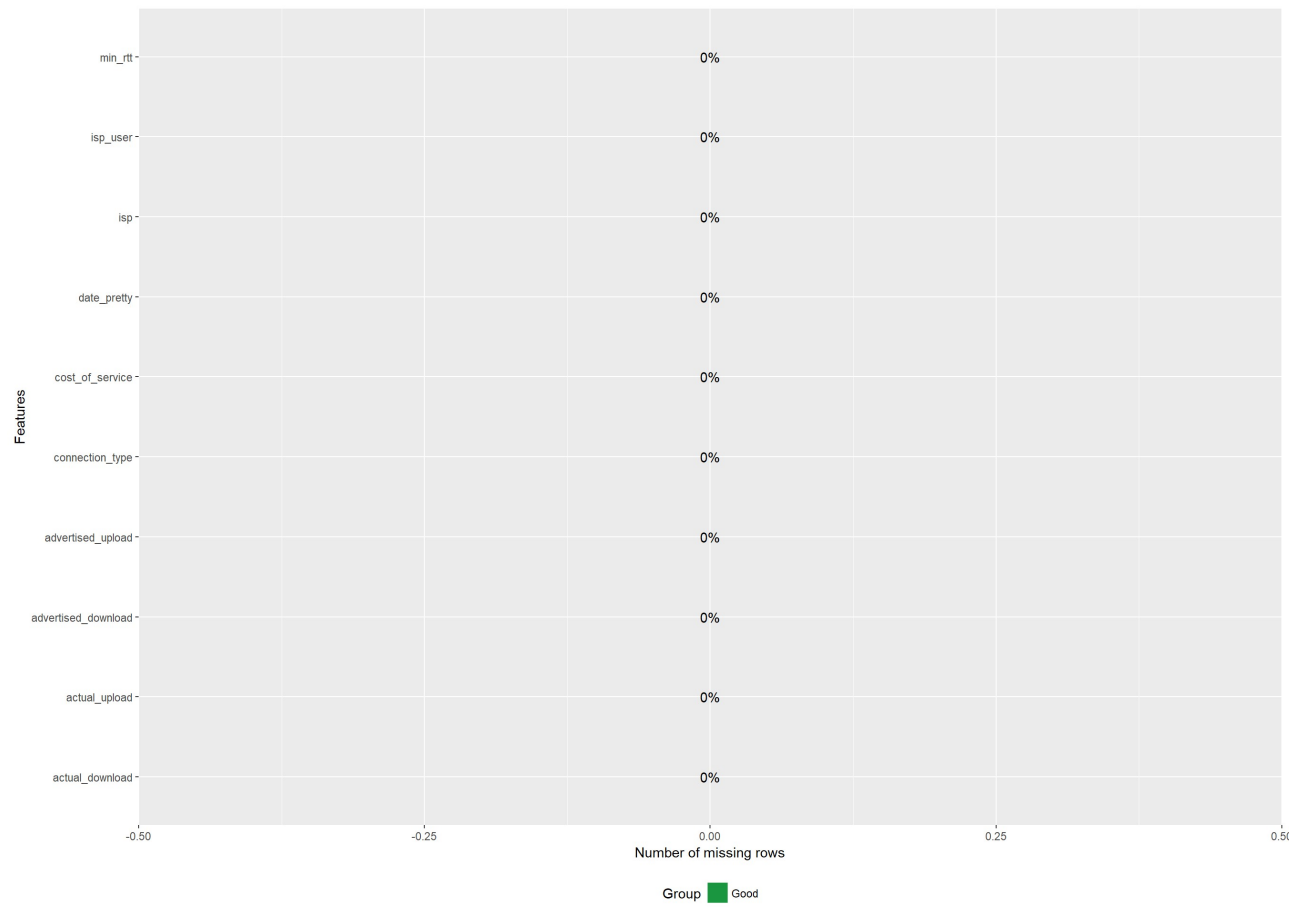
## Correlation Analysis

```
## 3 features with more than 20 categories ignored!
## date_pretty: 4034 categories
## isp: 216 categories
## isp_user: 217 categories
```

| Features | actual_download | actual_upload | advertised_download | advertised_upload | min_rtt | connection_type_wired | connection_type_wireless.multiple | connection_type_wireless.single | cost_of_service_100_or_above | cost_of_service_25_50 | cost_of_service_50_75 | cost_of_service_75_100 | cost_of_service_dont_know | cost_of_service_less_than_25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cost_of_service_less_than_25 | -0.01 | 0.01 | -0.03 | -0.02 | 0.04 | 0.04 | -0.06 | 0.03 | -0.08 | -0.08 | -0.12 | -0.09 | -0.05 | 1 |
| cost_of_service_dont_know | 0.05 | 0.08 | -0.01 | -0.01 | 0.01 | 0.03 | -0.02 | -0.02 | -0.14 | -0.14 | -0.21 | -0.16 | 1 | -0.05 |
| cost_of_service_75_100 | 0.05 | 0.04 | 0.13 | 0.11 | -0.04 | 0.01 | -0.01 | 0 | -0.24 | -0.24 | -0.35 | 1 | -0.16 | -0.09 |
| cost_of_service_50_75 | -0.09 | -0.09 | -0.12 | -0.09 | -0.02 | -0.02 | 0.02 | 0 | -0.32 | -0.32 | 1 | -0.35 | -0.21 | -0.12 |
| cost_of_service_25_50 | -0.12 | -0.08 | -0.12 | -0.11 | 0.05 | -0.06 | 0.02 | 0.05 | -0.21 | 1 | -0.32 | -0.24 | -0.14 | -0.08 |
| cost_of_service_100_or_above | 0.13 | 0.09 | 0.15 | 0.11 | -0.01 | 0.03 | 0.01 | -0.06 | 1 | -0.21 | -0.32 | -0.24 | -0.14 | -0.08 |
| connection_type_wireless.single | -0.09 | -0.07 | -0.04 | -0.03 | 0.07 | -0.36 | -0.36 | 1 | -0.06 | 0.05 | 0 | 0 | -0.02 | 0.03 |
| connection_type_wireless.multiple | -0.16 | -0.11 | -0.05 | -0.07 | -0.01 | -0.74 | 1 | -0.36 | 0.01 | 0.02 | 0.02 | -0.01 | -0.02 | -0.06 |
| connection_type_wired | 0.23 | 0.16 | 0.08 | 0.09 | -0.04 | 1 | -0.74 | -0.36 | 0.03 | -0.06 | -0.02 | 0.01 | 0.03 | 0.04 |
| min_rtt | -0.17 | -0.09 | -0.06 | -0.05 | 1 | -0.04 | -0.01 | 0.07 | -0.01 | 0.05 | -0.02 | -0.04 | 0.01 | 0.04 |
| advertised_upload | 0.38 | 0.38 | 0.78 | 1 | -0.05 | 0.09 | -0.07 | -0.03 | 0.11 | -0.11 | -0.09 | 0.11 | -0.01 | -0.02 |
| advertised_download | 0.42 | 0.41 | 1 | 0.78 | -0.06 | 0.08 | -0.05 | -0.04 | 0.15 | -0.12 | -0.12 | 0.13 | -0.01 | -0.03 |
| actual_upload | 0.68 | 1 | 0.41 | 0.38 | -0.09 | 0.16 | -0.11 | -0.07 | 0.09 | -0.08 | -0.09 | 0.04 | 0.08 | 0.01 |
| actual_download | 1 | 0.68 | 0.42 | 0.38 | -0.17 | 0.23 | -0.16 | -0.09 | 0.13 | -0.12 | -0.09 | 0.05 | 0.05 | -0.01 |

Features

Correlation Meter
-1.0 -0.5 0.0 0.5 1.0