

# Network Operators - Online ROI Calculator

## Service Provider Costs for Downtime & Churn

(\*\* input plain numbers only, no leading zeros, commas or letters)

### Input

Number of residential subscribers:	<input type="text" value="2335000"/>
Average monthly revenue per residential subscriber:	\$ <input type="text" value="39.95"/>
Number of business subscribers:	<input type="text" value="1000"/>
Average monthly revenue per business subscriber:	\$ <input type="text" value="39.95"/>
Incremental residential subscriber churn due to downtime:	<input type="text" value="5"/> %
Resulting cost from monthly residential subscriber churn:	\$ <input type="text" value="1000"/>
Incremental business subscriber churn due to downtime:	<input type="text" value="5"/> %
Resulting cost from monthly business subscriber churn:	\$ <input type="text" value="1000"/>

### Result

Hourly revenue loss for residential services:	\$129,560
Hourly revenue loss for business services:	\$55
Cost of churn from residential subscribers:	\$116,750,000
Cost of churn from business subscribers:	\$50,000

- Provide up to 8 pieces of input and automatically receive hourly loss stats and Customer Churn costs

### Network Operators

Residential and/or Business subscribers for VoIP, Broadband or NGN services: avg. 500,000, largest at 2.5 million

Revenue per month for a subscriber service: \$ 40 – 2,500 USD or more

Customer Churn due to downtime averages 5% annually according to PUC and company reports – many times it exceeds 10%

Costs for monthly customer churn is 4x-5x the combined cost of both obtaining and replacing the customer - \$100 avg cost x 2 = \$200 x 5 = \$1,000

# Product Developers: Online ROI Calculator

## Service Provider and Developer Savings Using Mu-4000 in Test & Certification Process

(\*\* input plain numbers only, no leading zeros, commas or letters)

### Input

Test engineer's base salary:  
(not including benefits and other loading)

\$ 100000

Average total hours spent by Service Provider or  
Developer test engineer to find and report bug:

40

Total number of bugs in the release (e.g., service rollout):

100

Percentage of total protocol-related bugs:

60%

### Result

Savings per protocol bug found during Test and Certification stage  
vs finding bugs after deployment in a production network:

\$38,942

- Provide 4 pieces of input and receive cost savings benefits of using Service Analysis in their Software Development Lifecycle (SDLC)
- **Product Vendors**
  - Input the engineering resource base salary e.g. most 5+ year engineers for network product development make \$100,000 USD or more
  - Total number of hours spent by the engineer or network operator customer in finding, isolating and remediating problematic software e.g. 40 hours is a conservative starting point according to NIST
  - Number of bugs in any given major software release is well above 100 documented problems
  - Mu customers report at least 60% of the problems they encounter are service-level traffic variations (protocol mutations) involving weaknesses of the product control, management or forwarding engines