Bots im Kontext von Spam

Need Captcha Entry Team by urigarin 22.09.08

Posted in Data Entry, Data Processing

Hello, I need captcha Entry team for various captchas site. I can pay $.75-1/1k. If you can do more than huge captchas per day. please bid if you are interested system is much faster all time. … (Budget: $30-250, Jobs: Data Entry, Data Processing)

eco AK Sicherheit
Februar 2009

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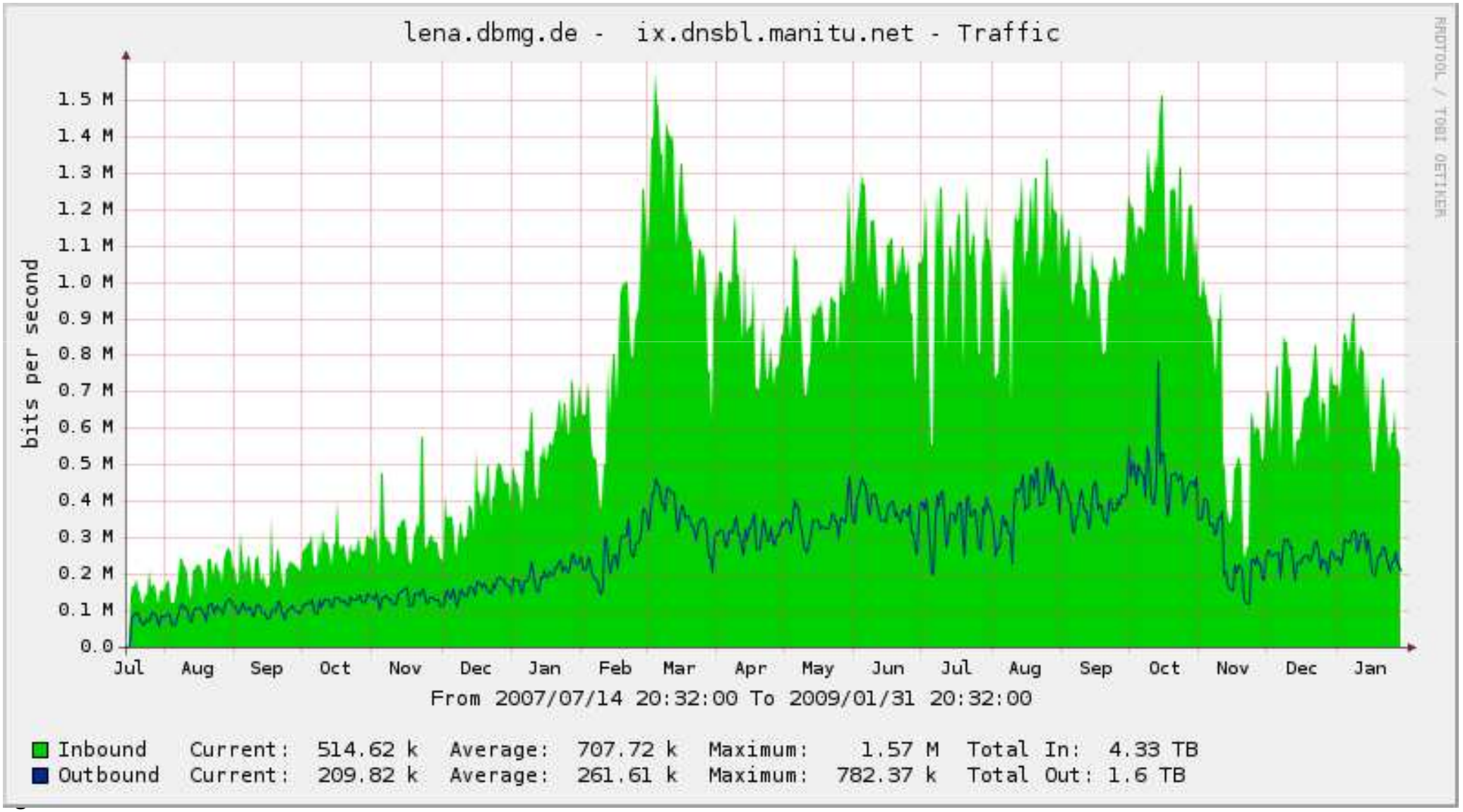
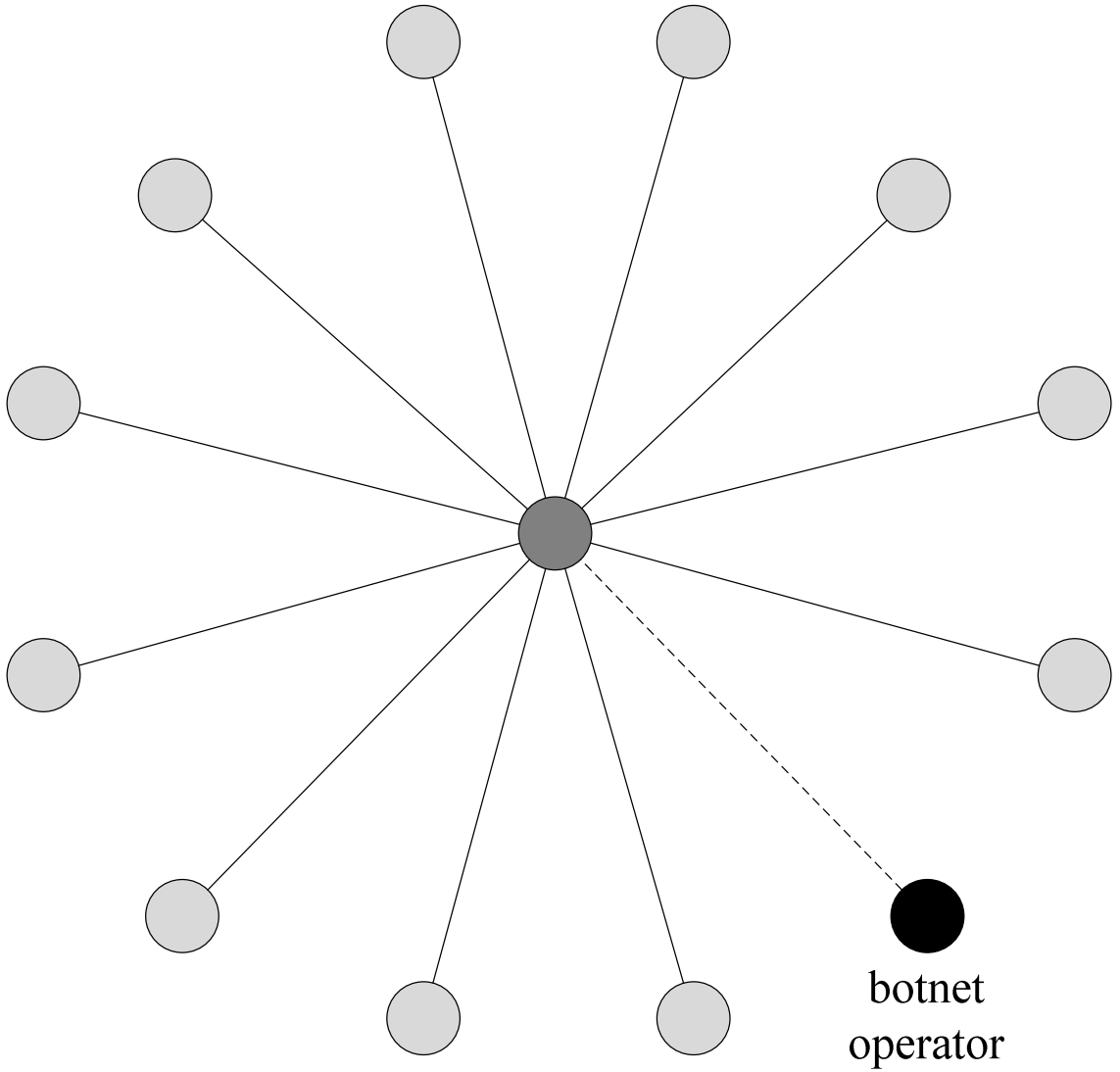
Inhalt

- Einleitung
- **Aktuelle Spam-Entwicklung im Detail**
- Die Tools der Spammer
  „Make money fast – the spammer‘s way“
- Botnet Security Mechanisms
- Fazit

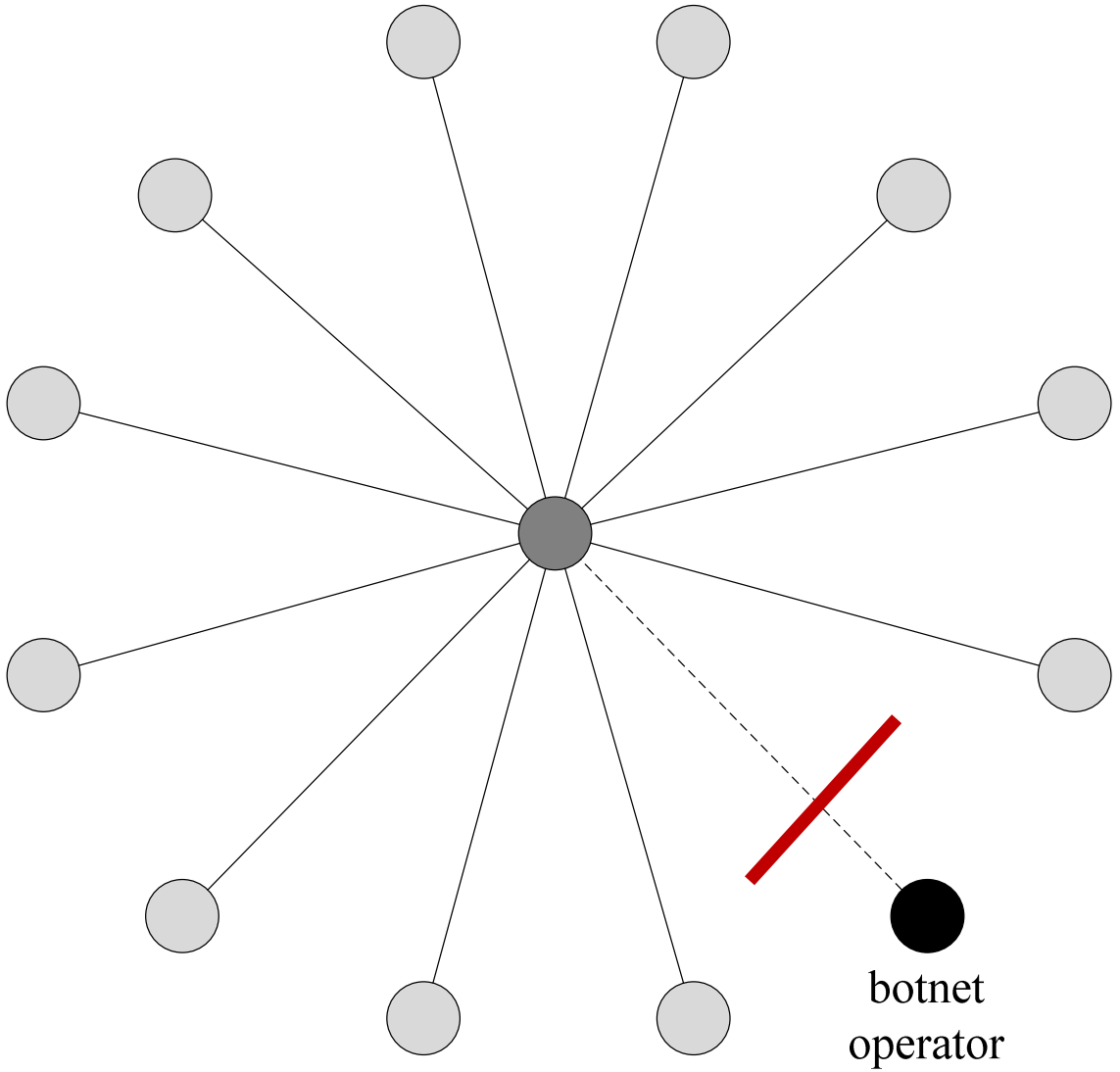
Spam? Wo ist das Problem?



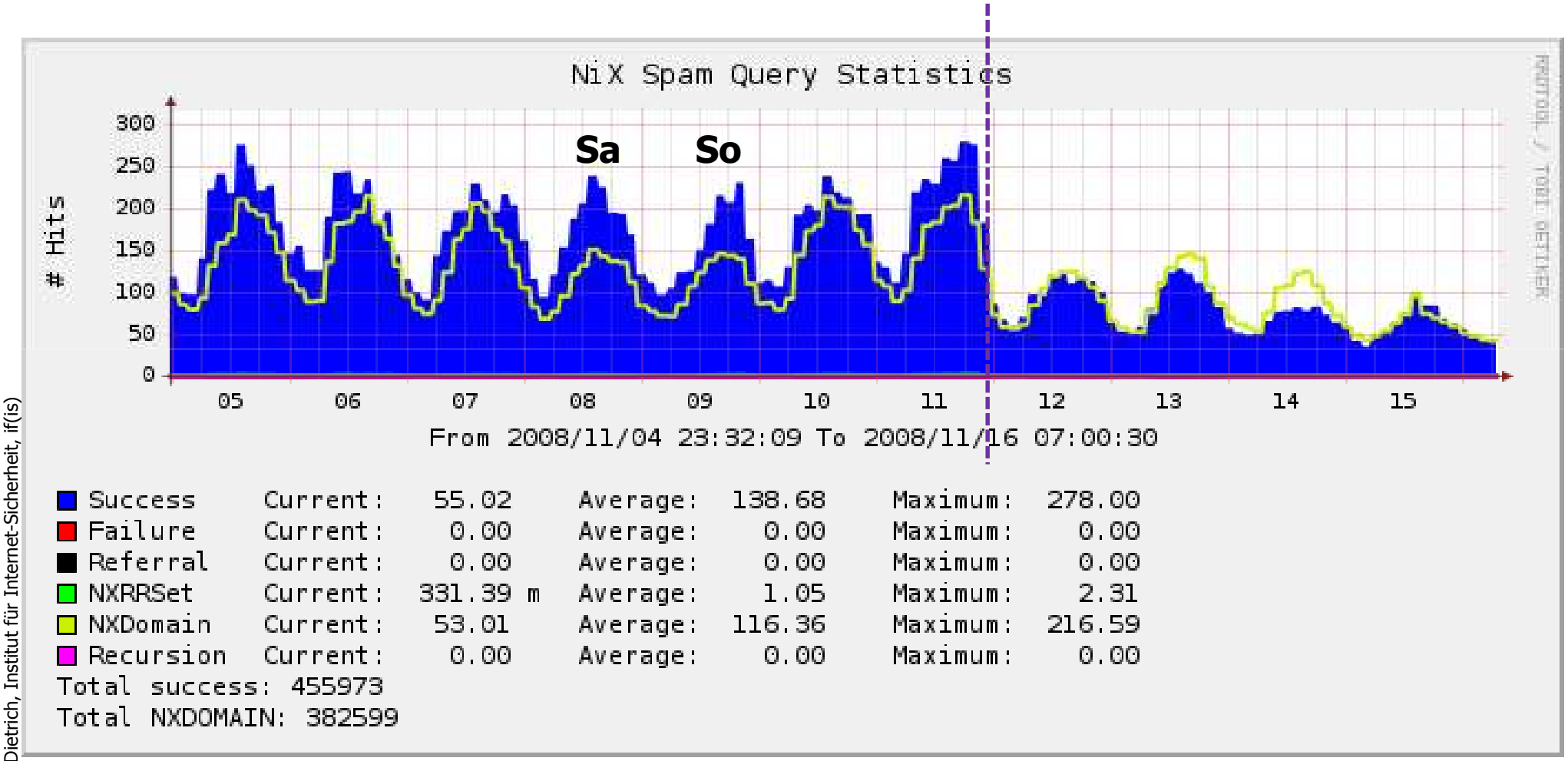
Botnet-Infrastruktur



Botnet C&C abgeschnitten



McColo (US ISP) taken offline 11/11/2008



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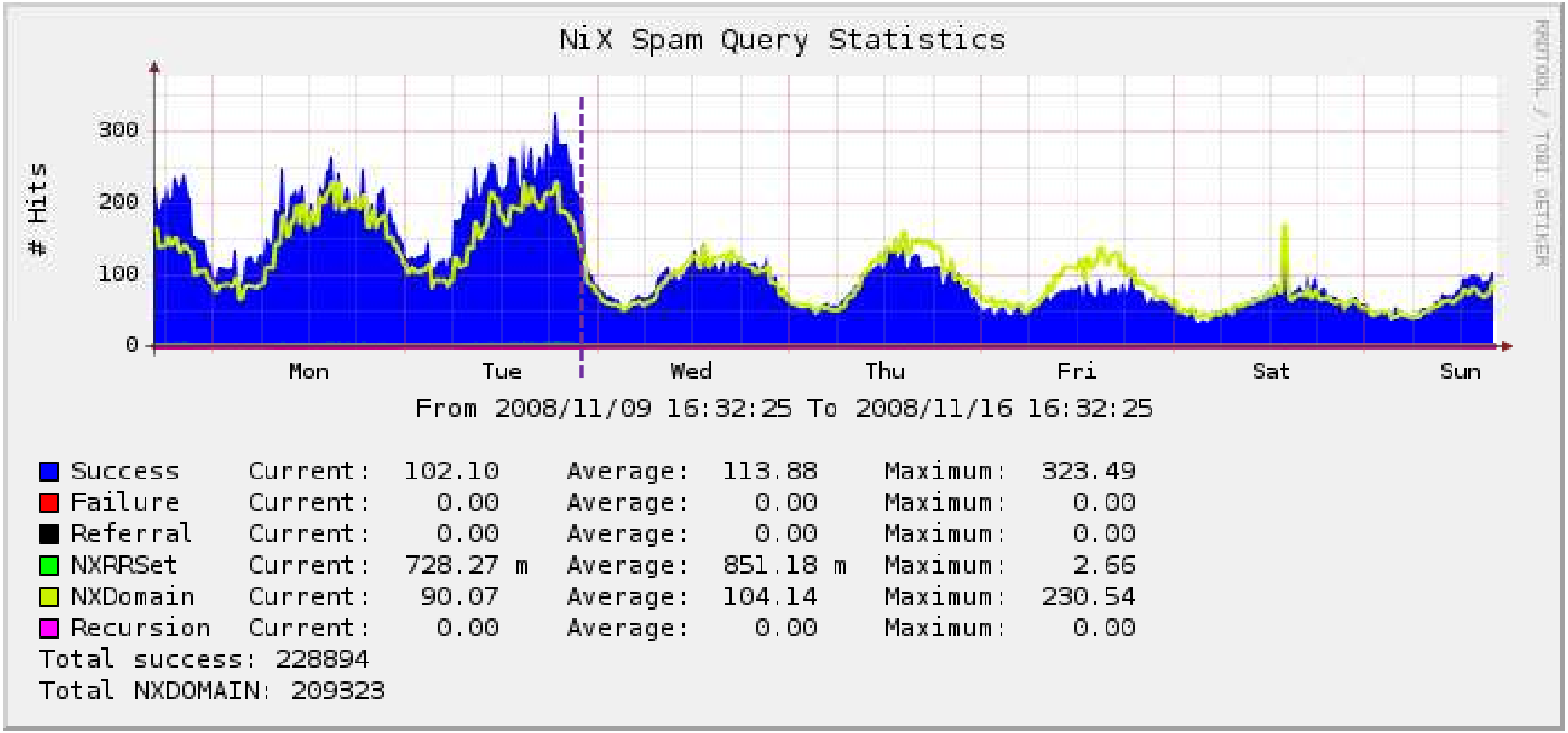
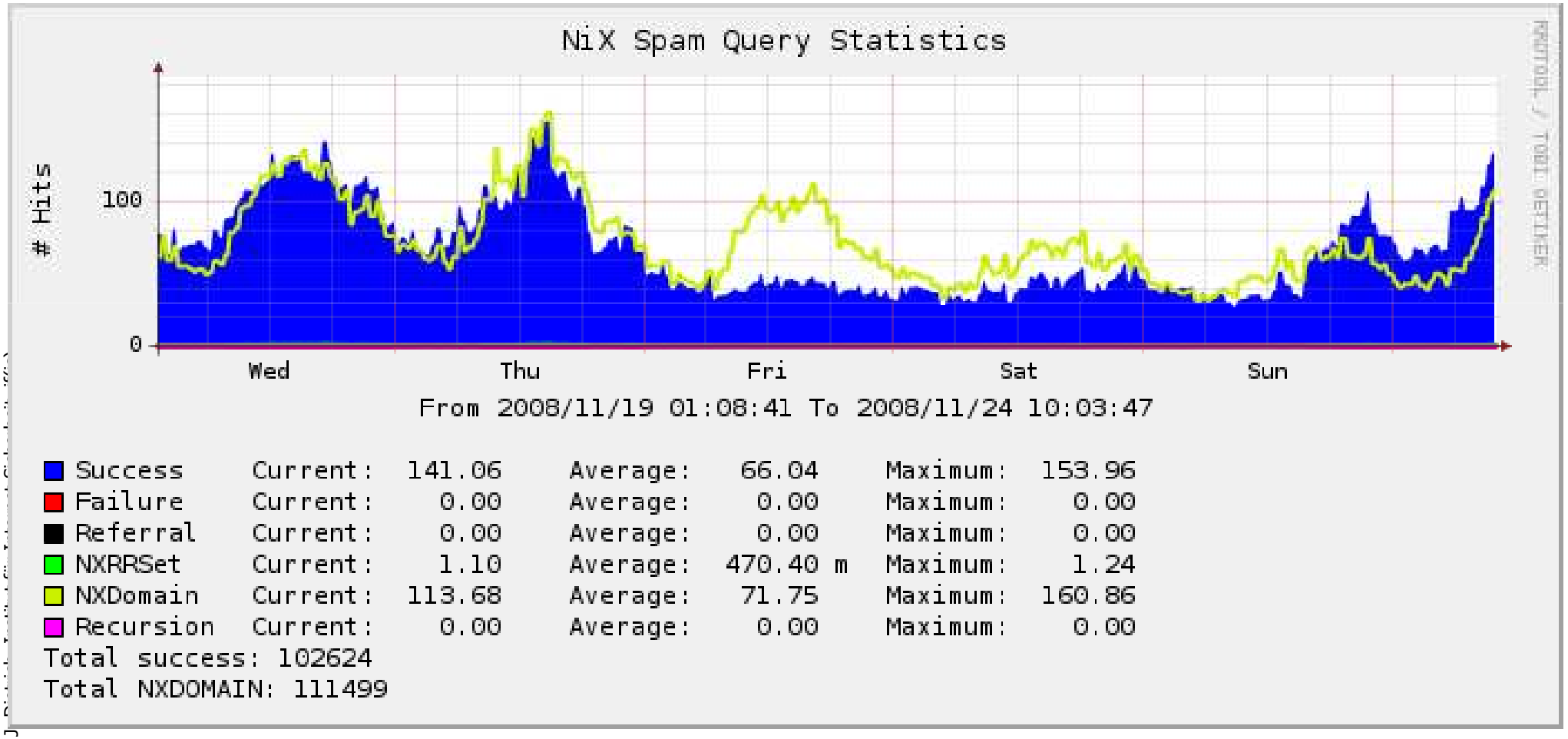
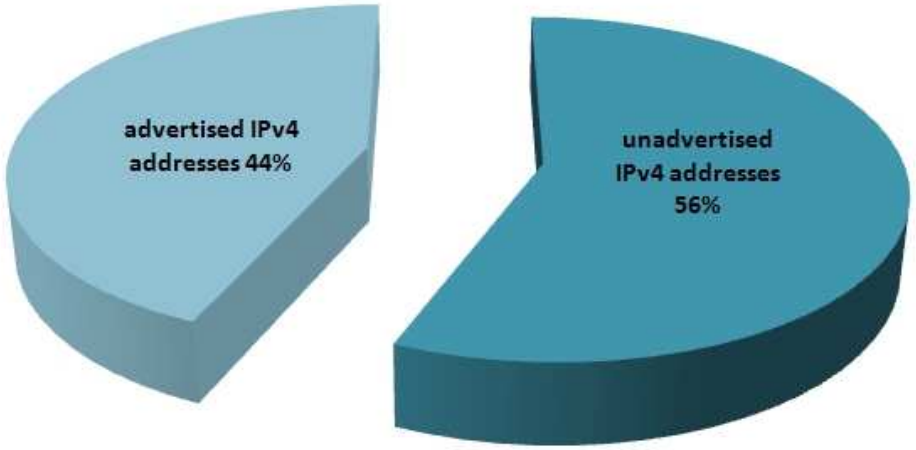


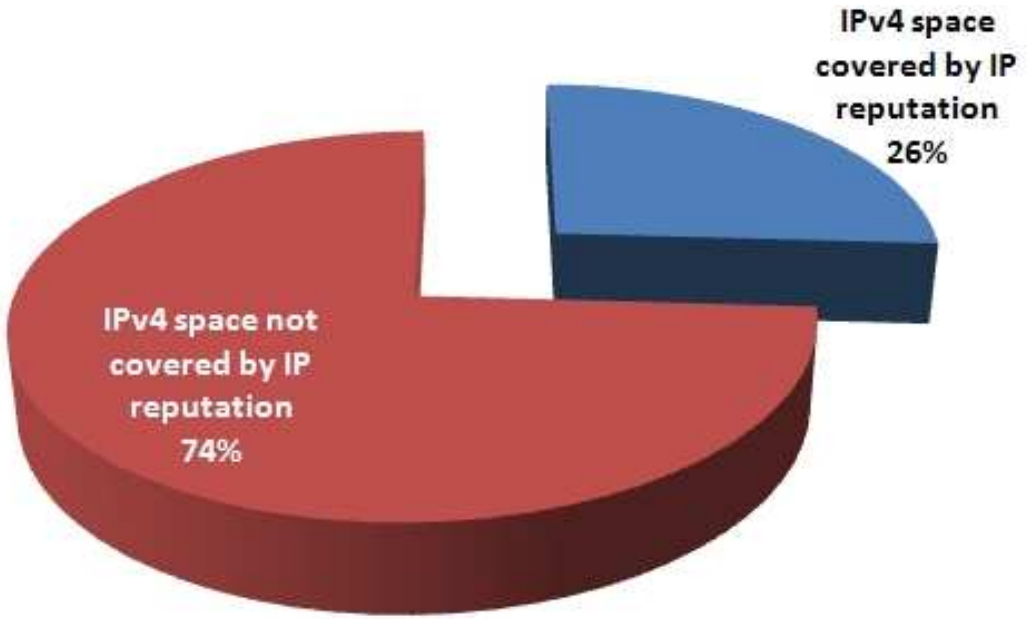
DDoS on InternetX (Schlund NS) 21/11/2008



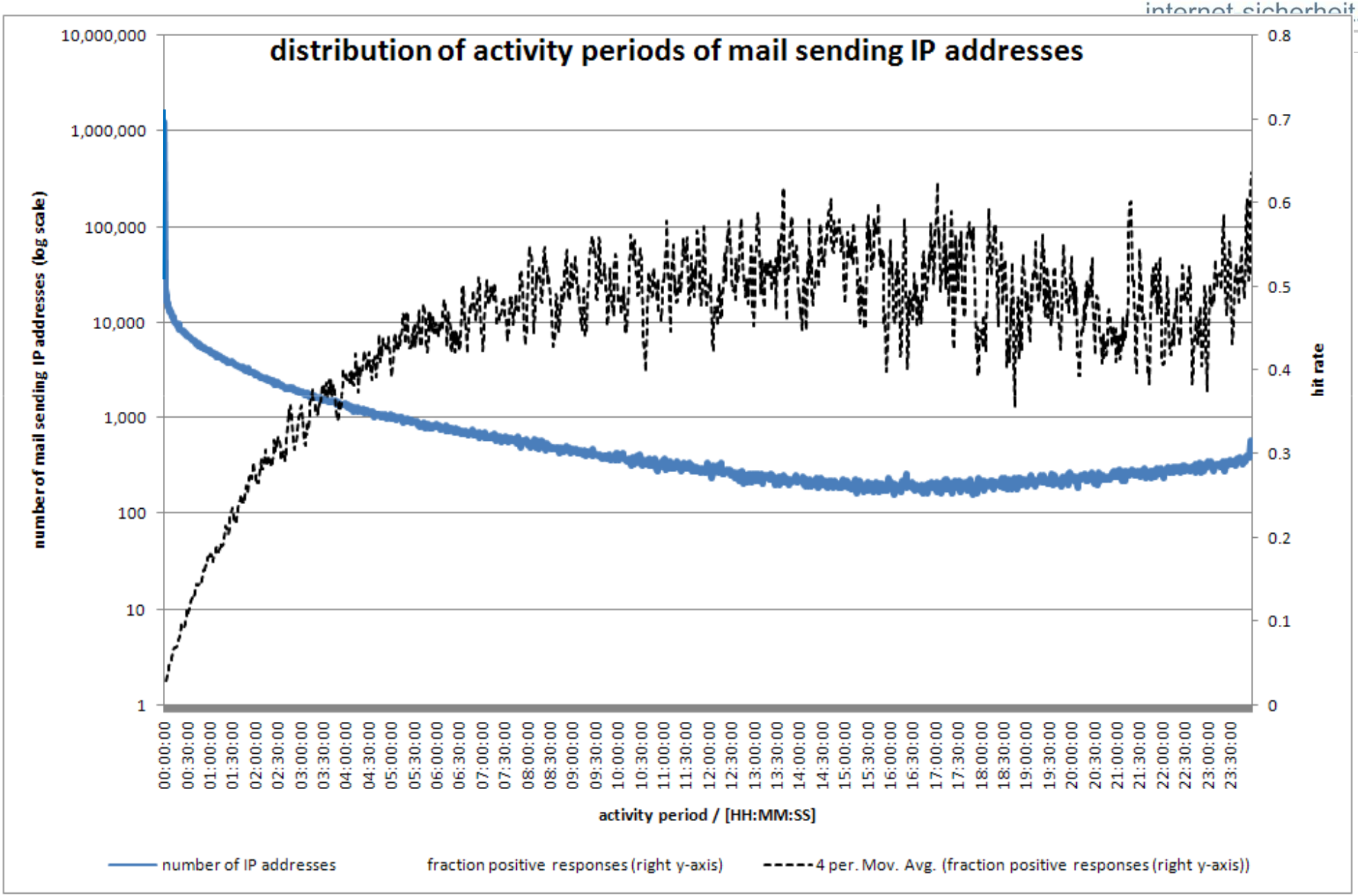
Reputation von IP-Adressen

- Theorie
  - 2^{32} = 4,2 Mrd. IPv4-Adressen
- Praxis
  - **1,872 Mrd. IPv4-Adressen advertised (Routing)**
  - **~75%** der advertised IPv4-Adressen sind **ohne Reputation!**
  - Statistisch: Nur jede 4. advertised IP-Adresse ist „bekannt“

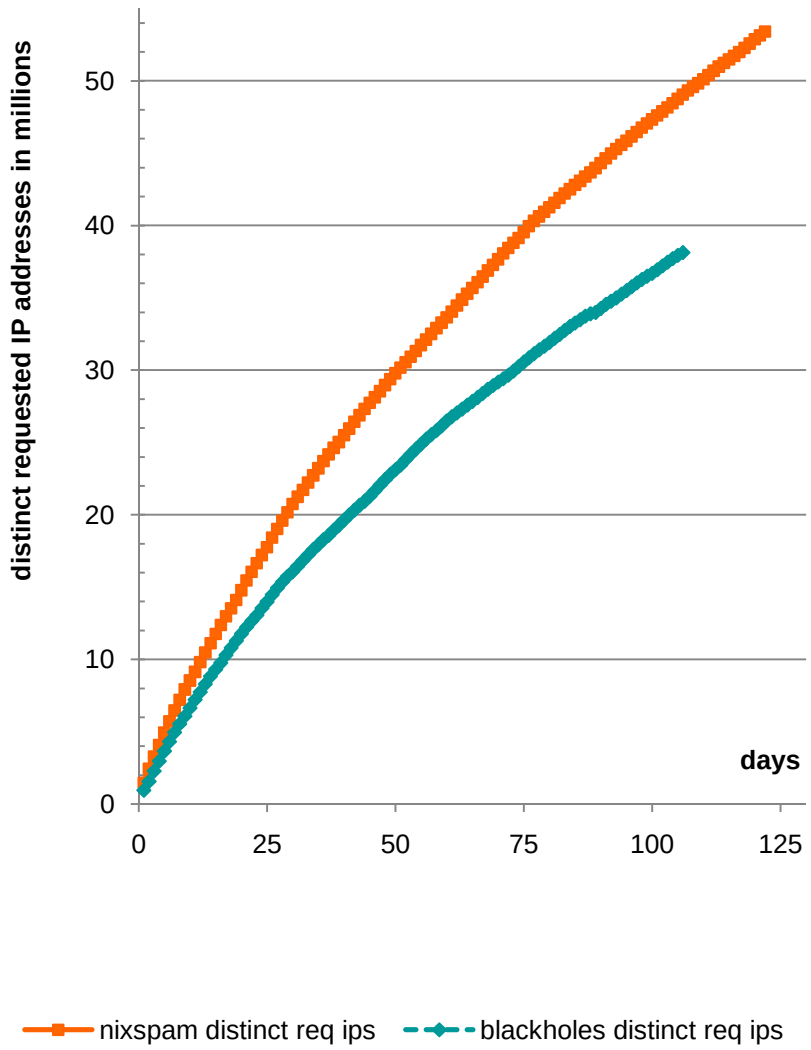




Verteilung der Aktivitätszeiträume von E-Mail-Quellen

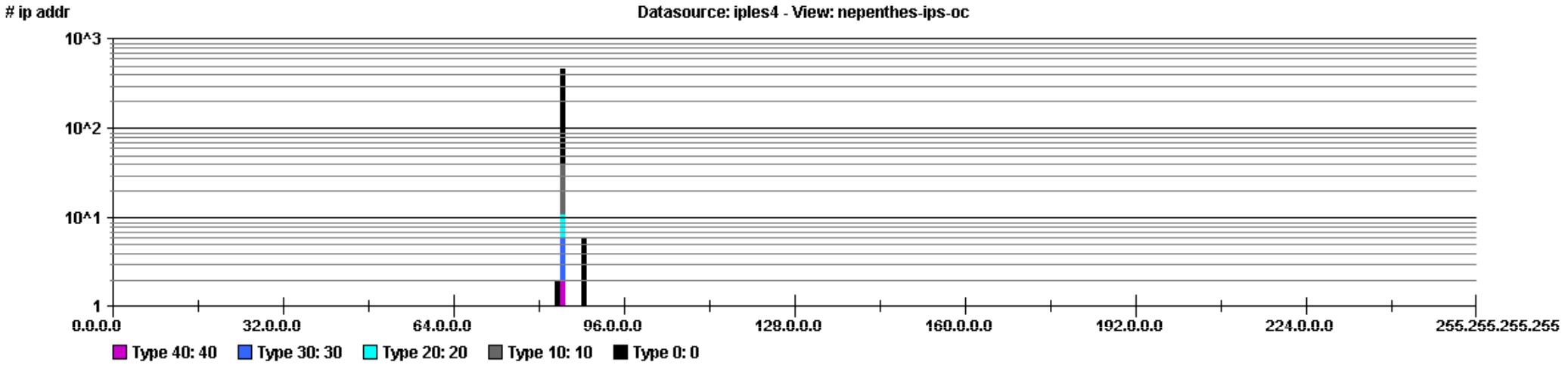


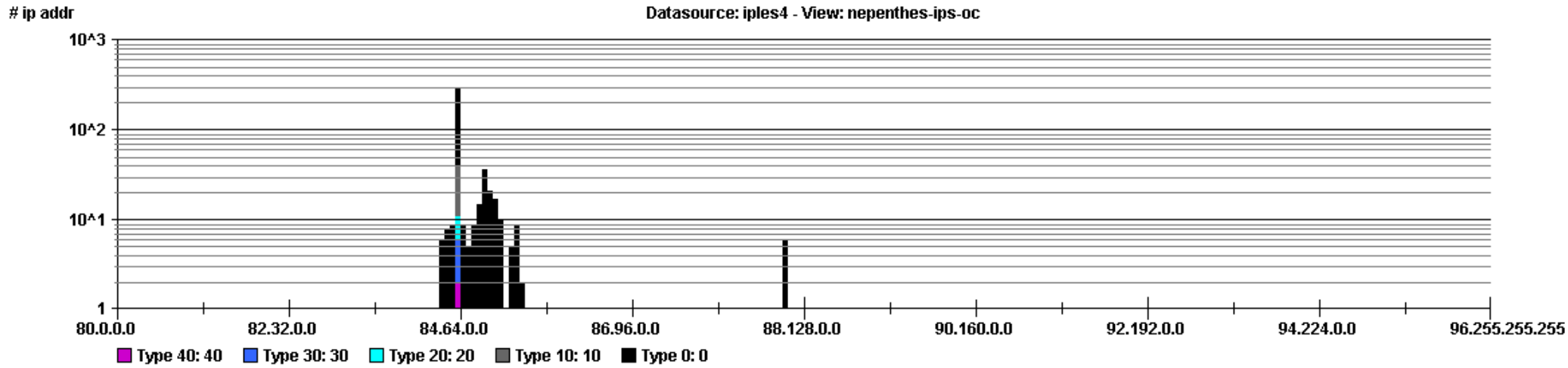
Eindeutigkeit von E-Mail-Quellen



- 125-Tage-Zeitraum zeigt die „Einmaligkeit“ von IP-Adressen
- Mehr als **55 Mio. verschiedene IP-Adressen** von E-Mail-Quellen in 125 Tagen
- **12 Jahre** bis alle 1,8 Mrd. advertised IP-Adressen mind. 1 Mal genutzt wurden
- Orange line = Primärsensor
- Blue line = Sekundärsensor

Infektionsquellen





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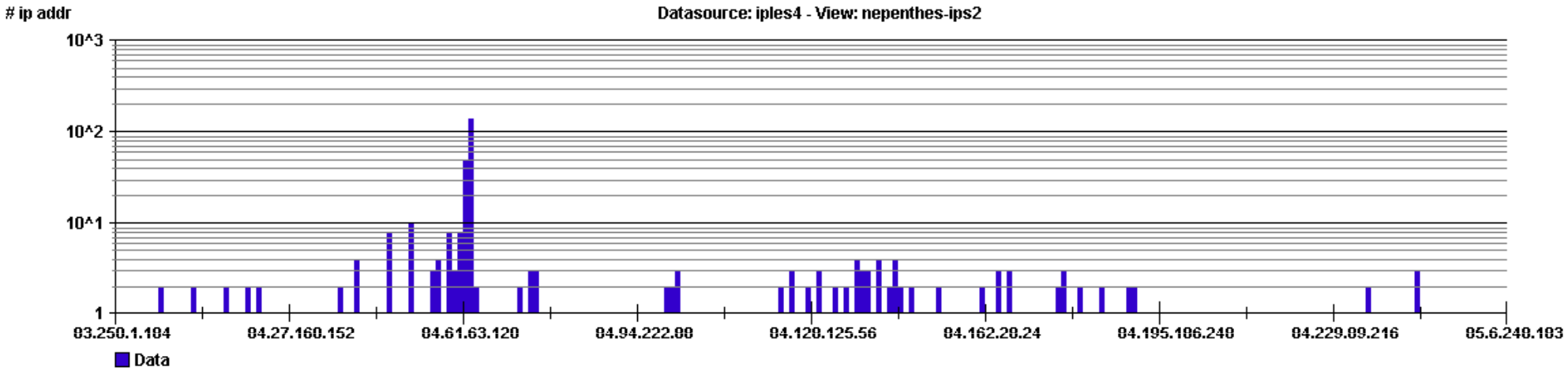

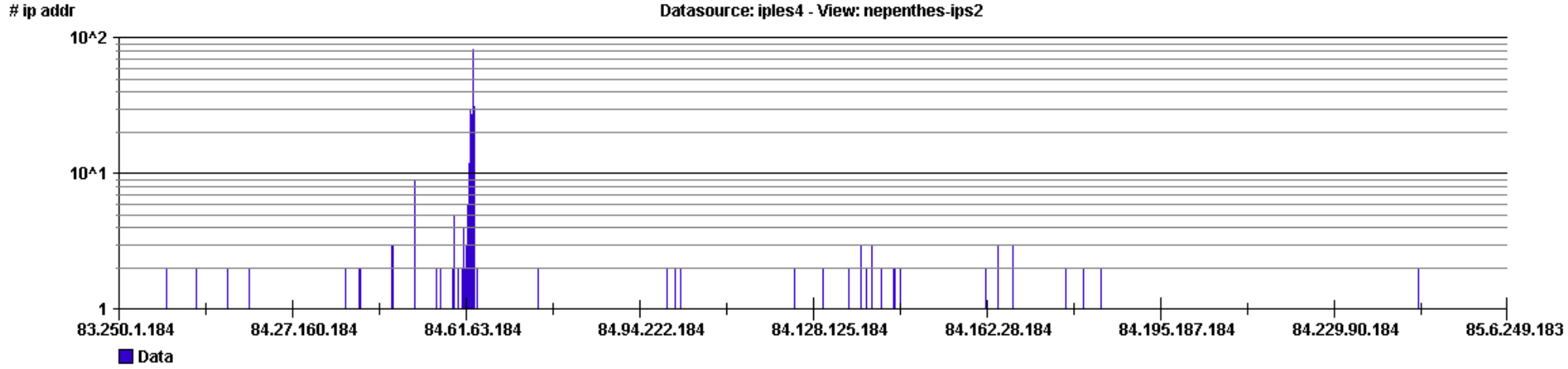

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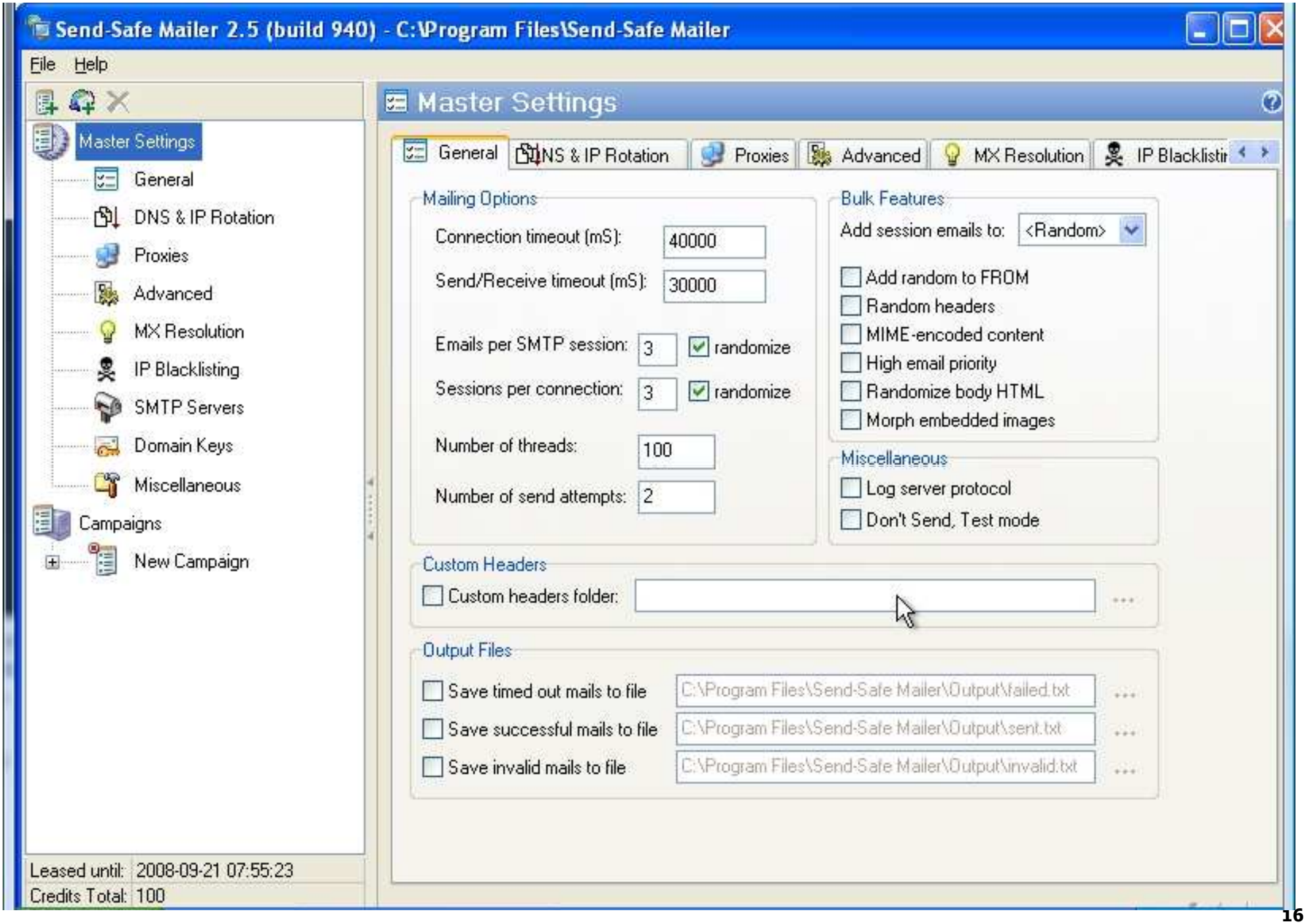

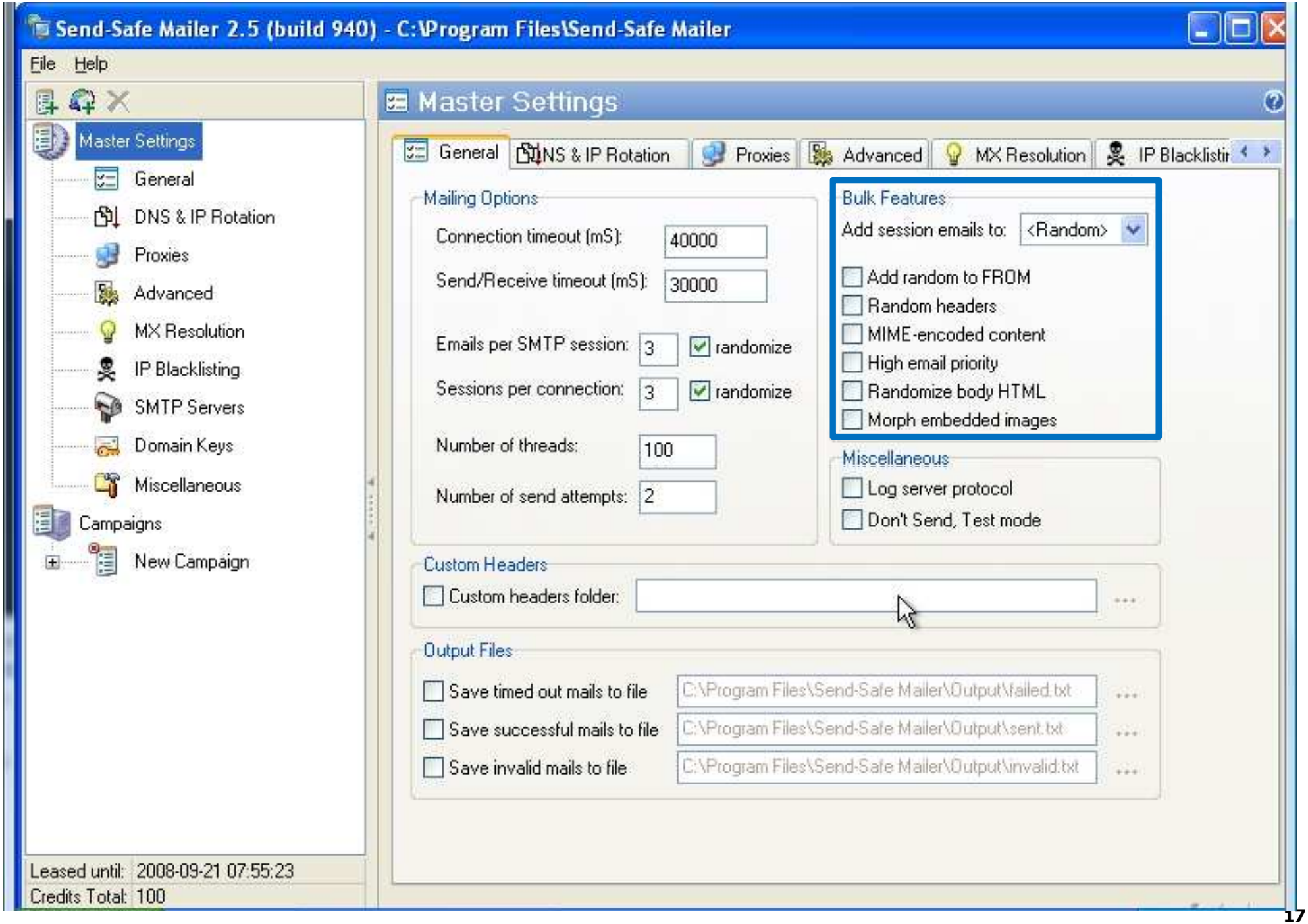

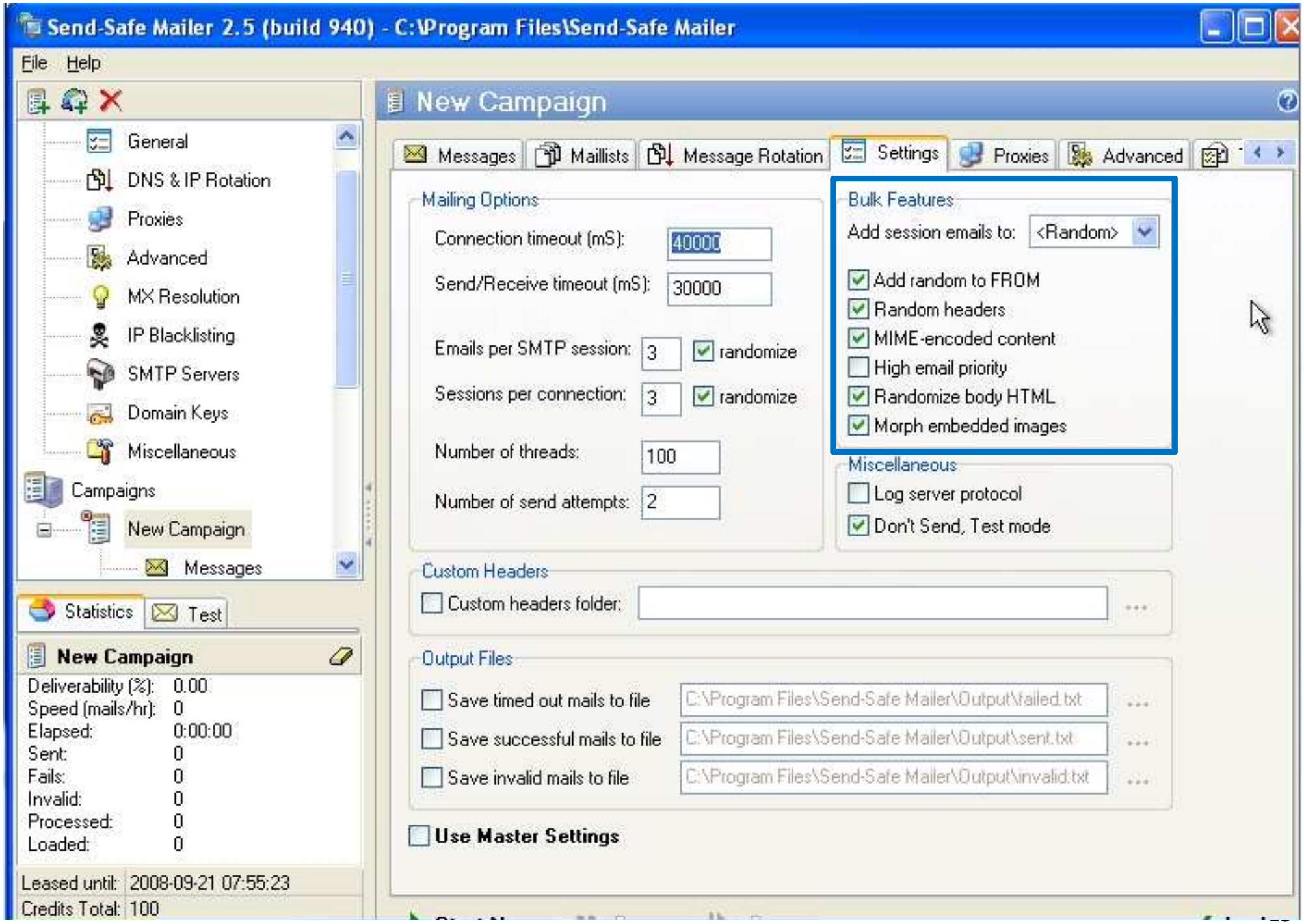

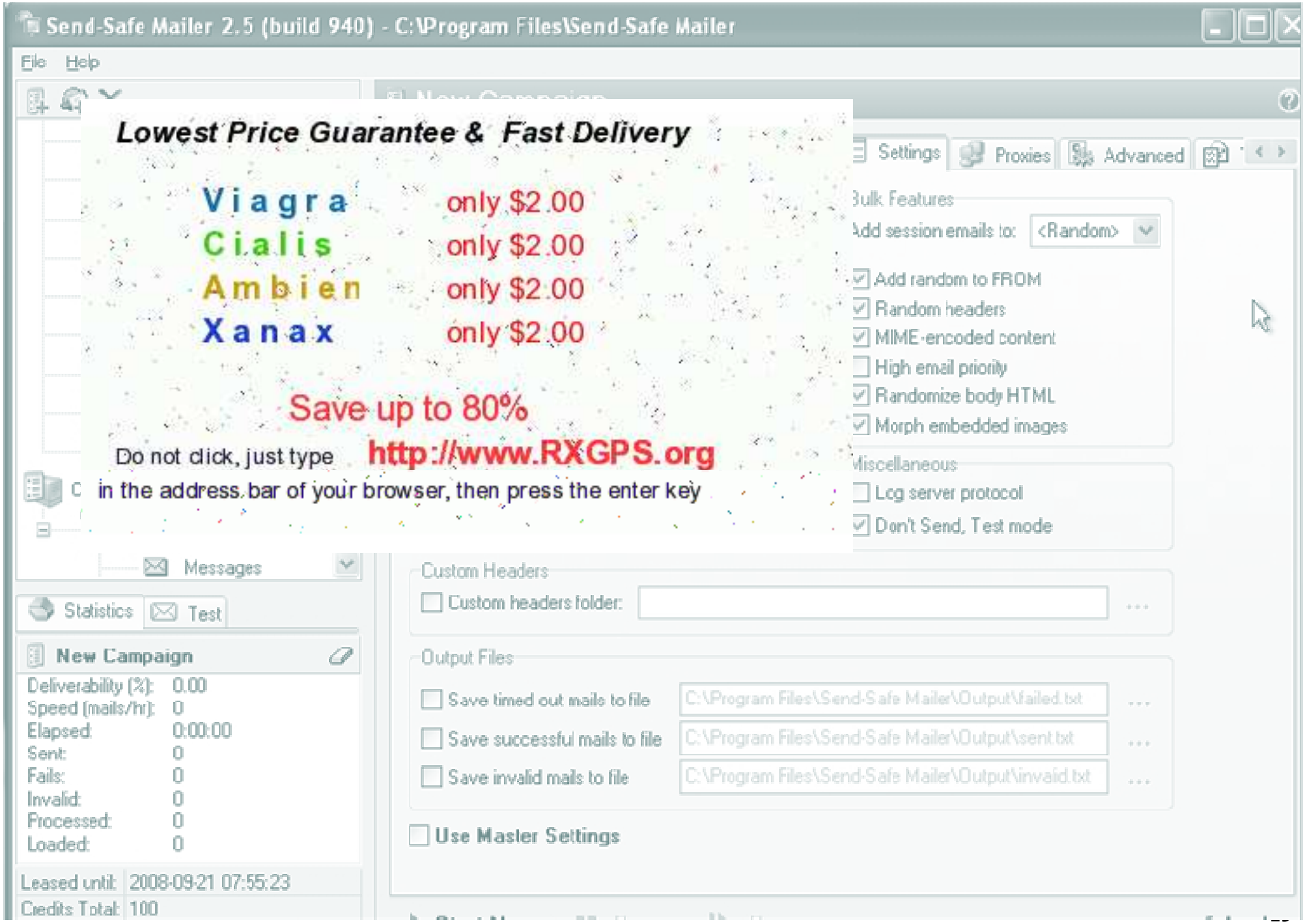

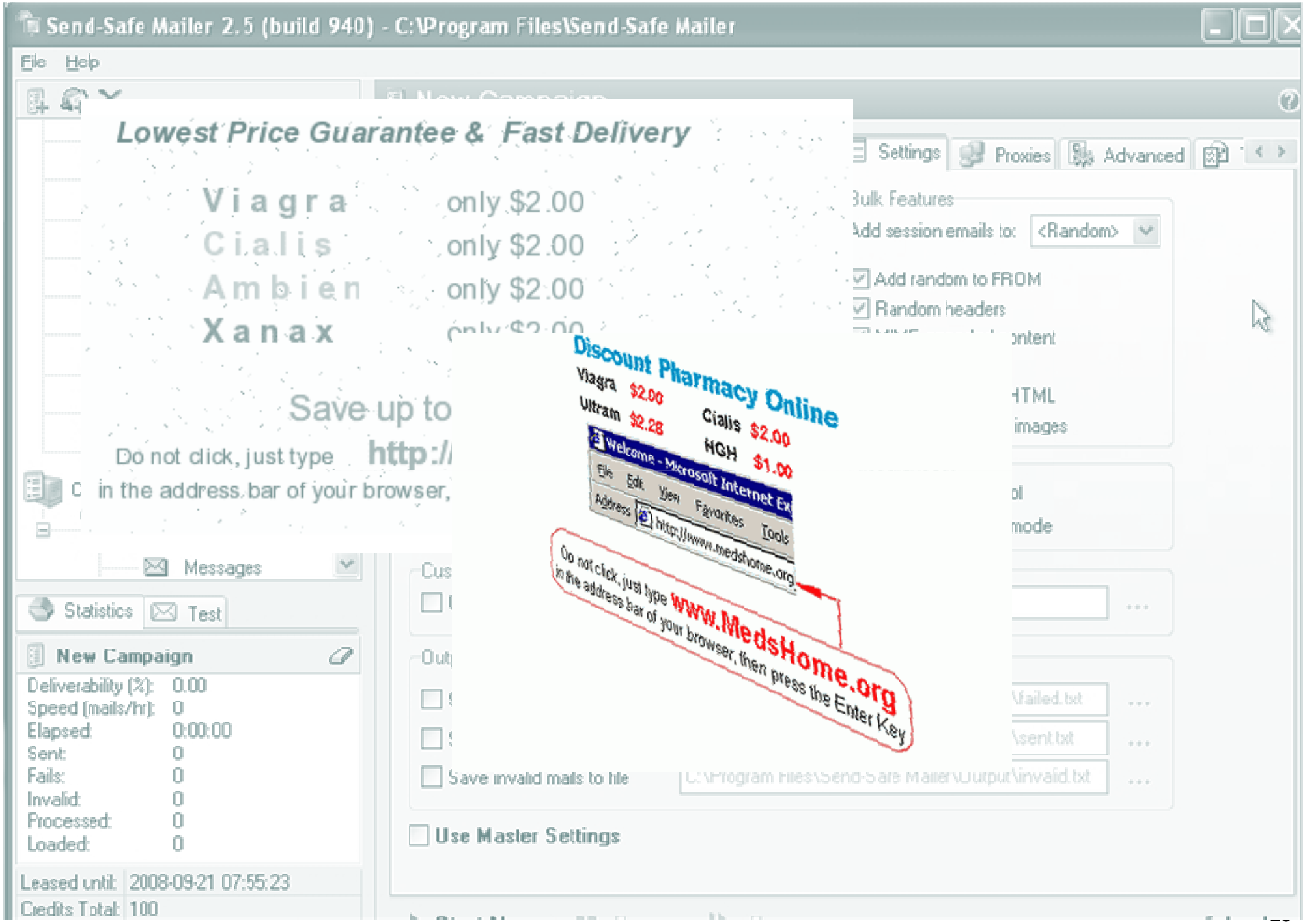

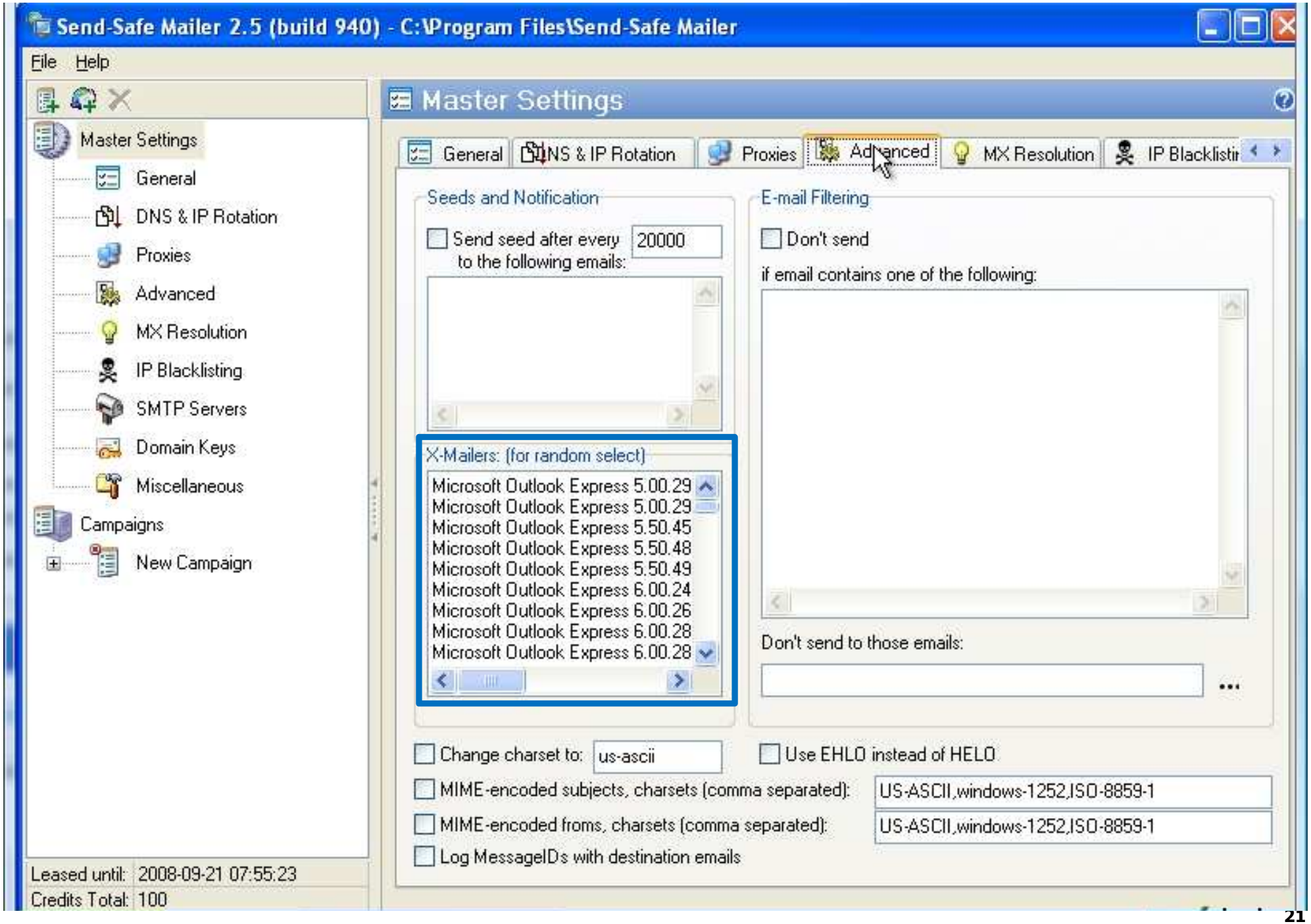

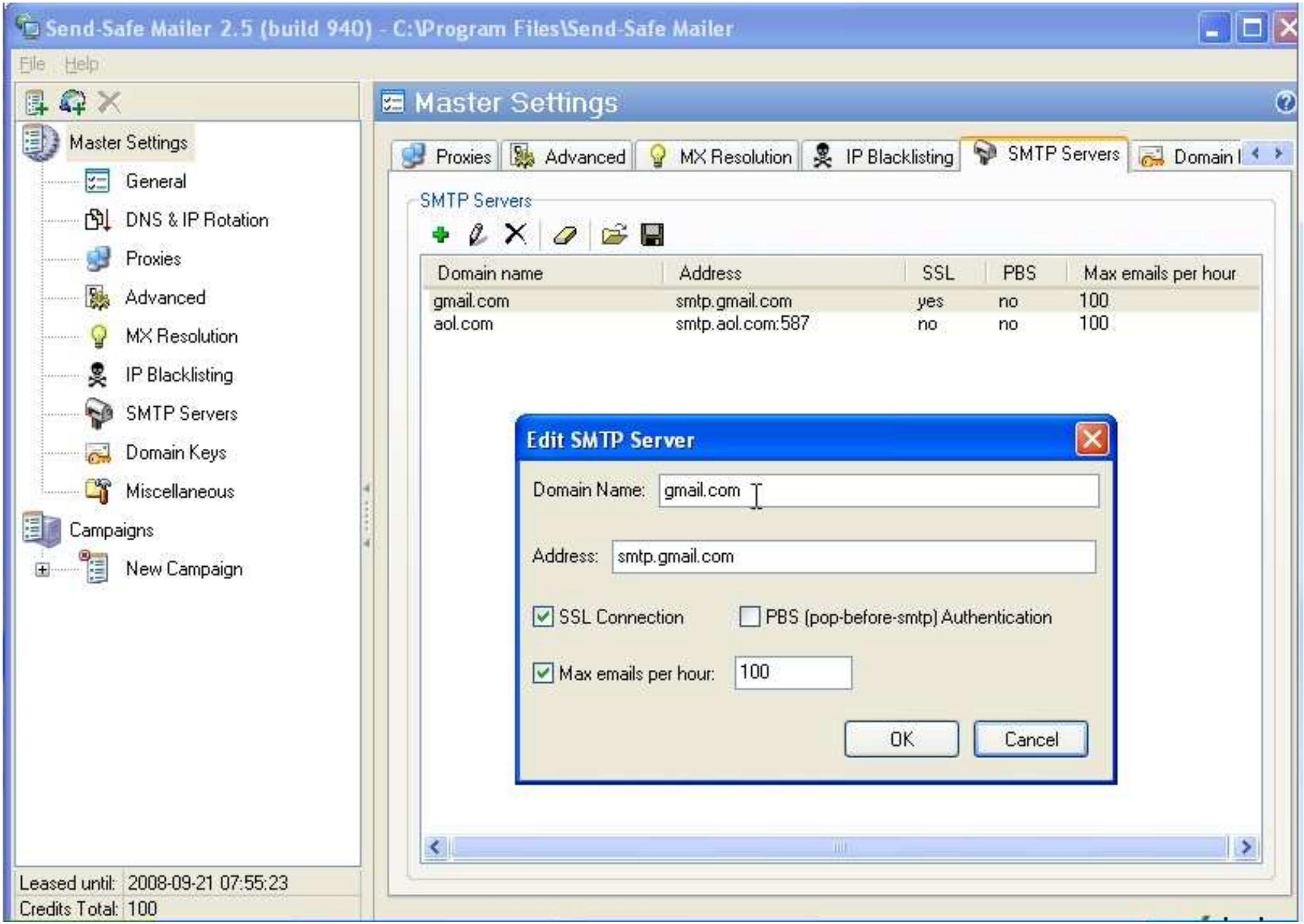

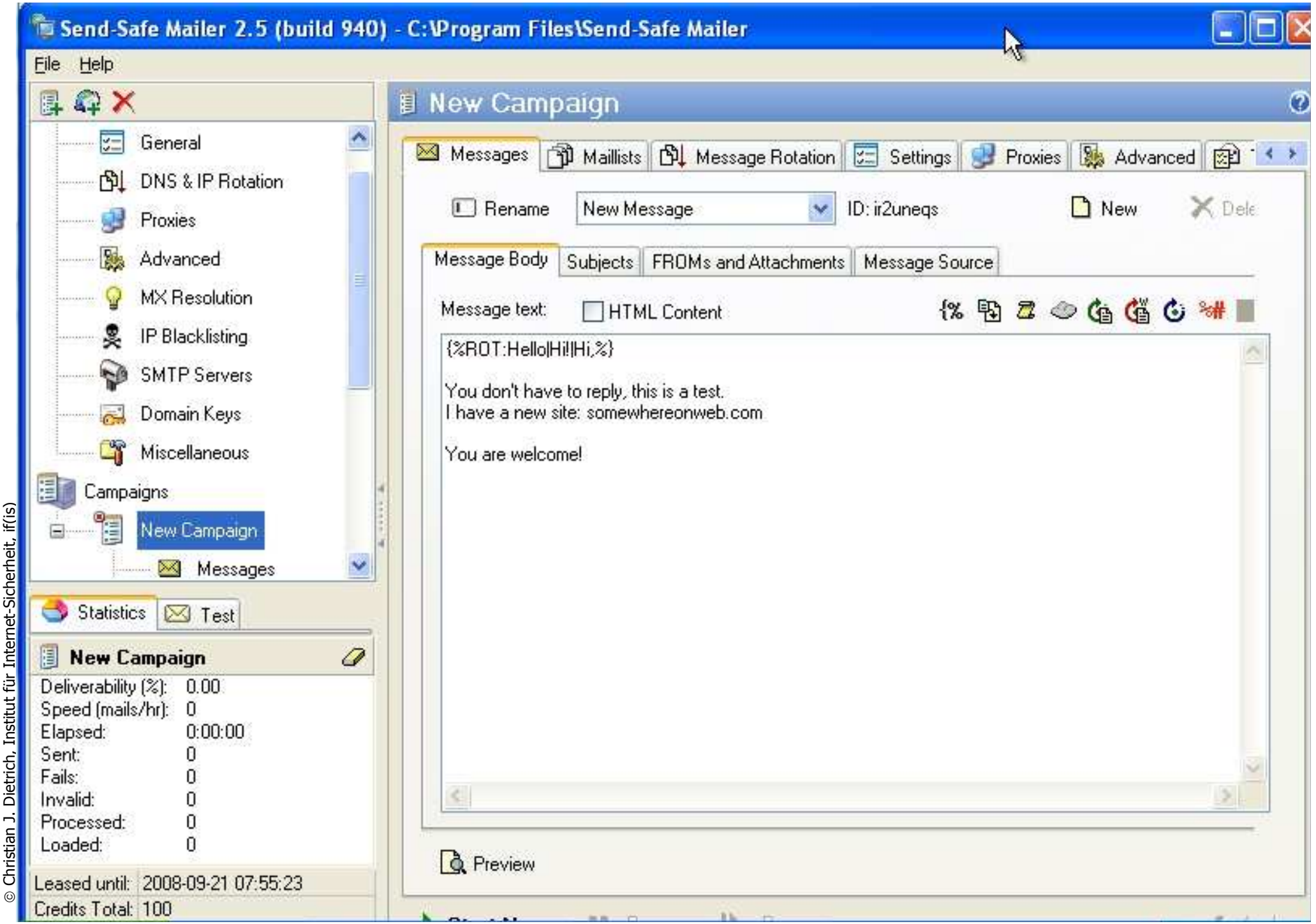

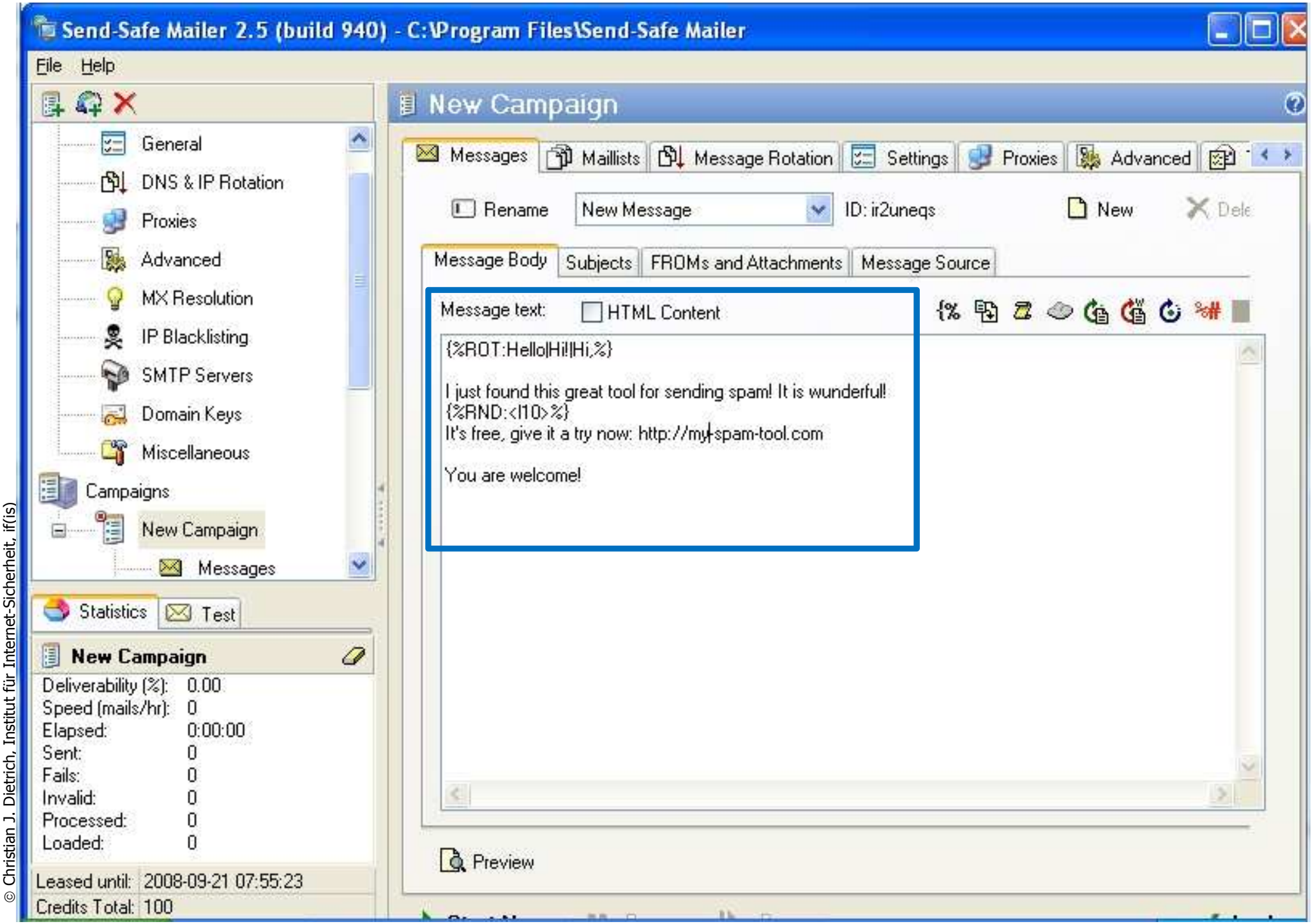

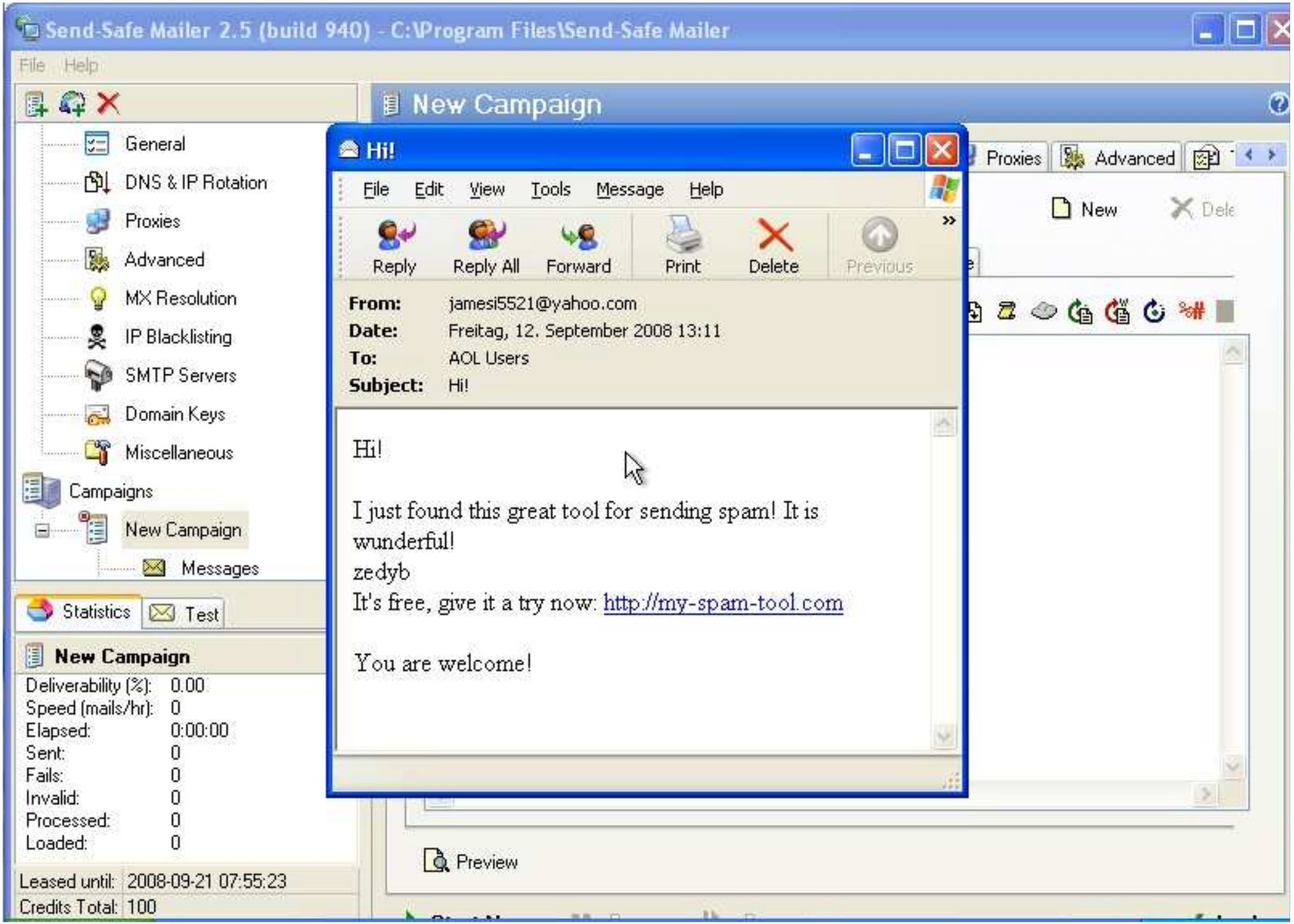

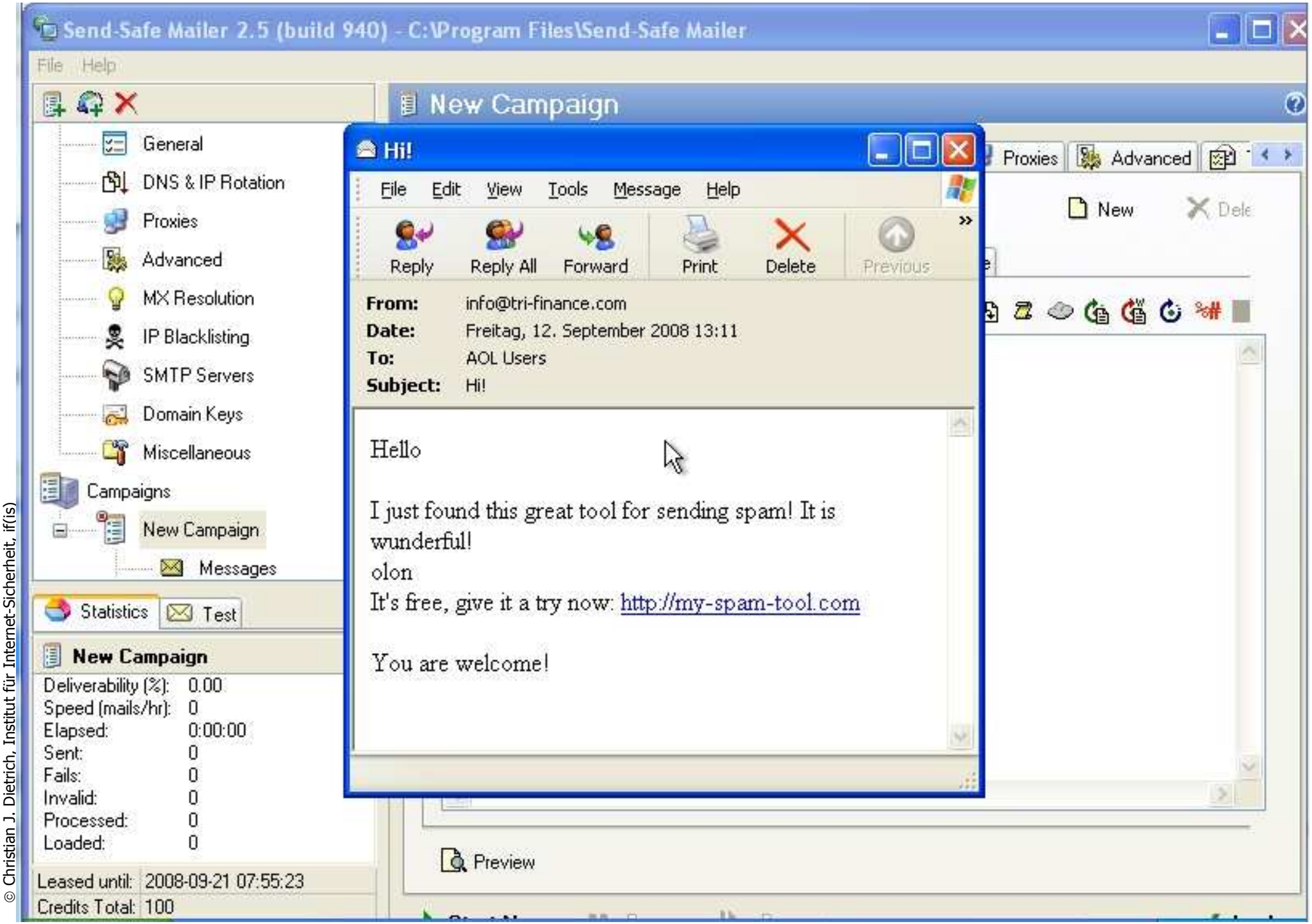

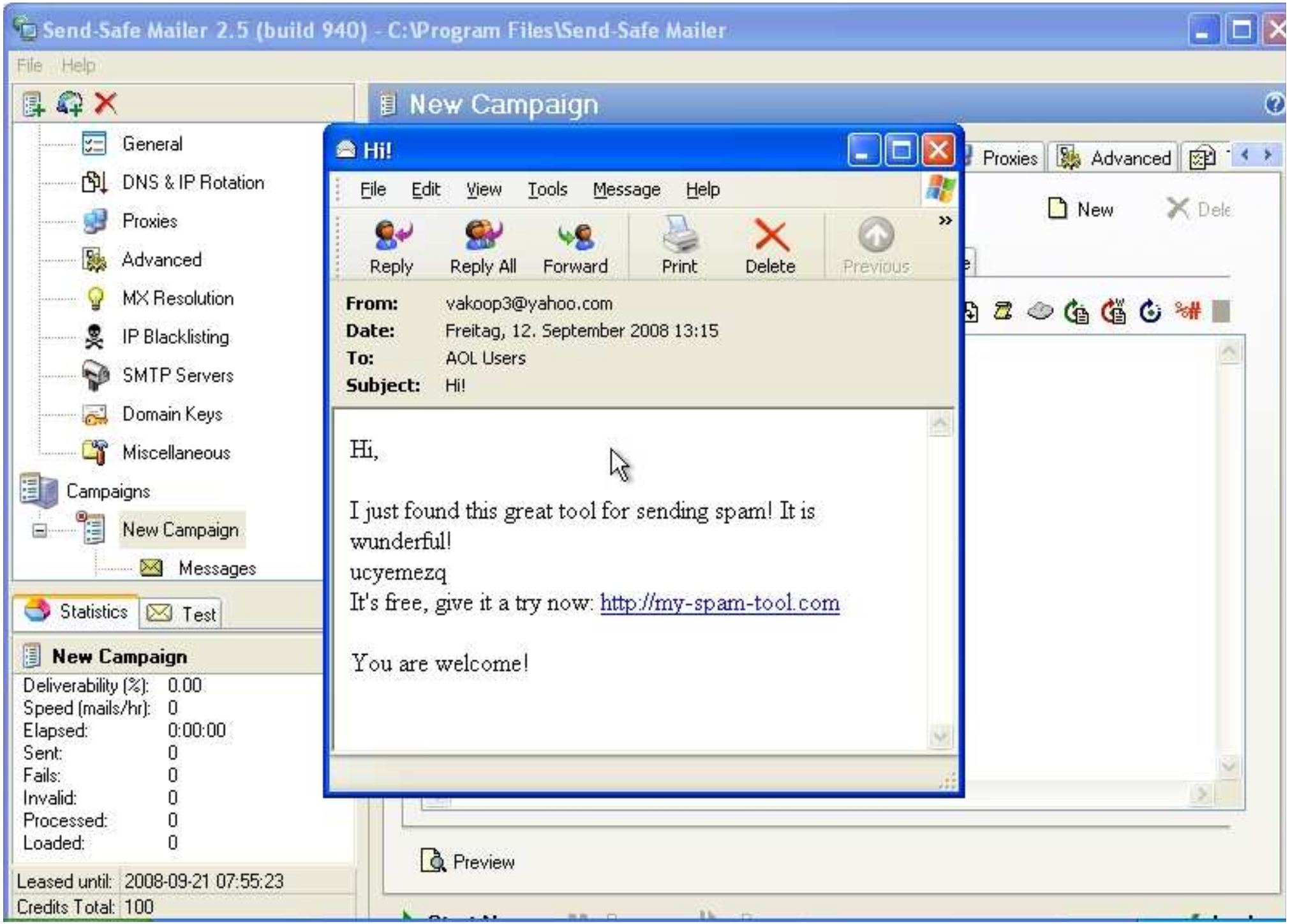

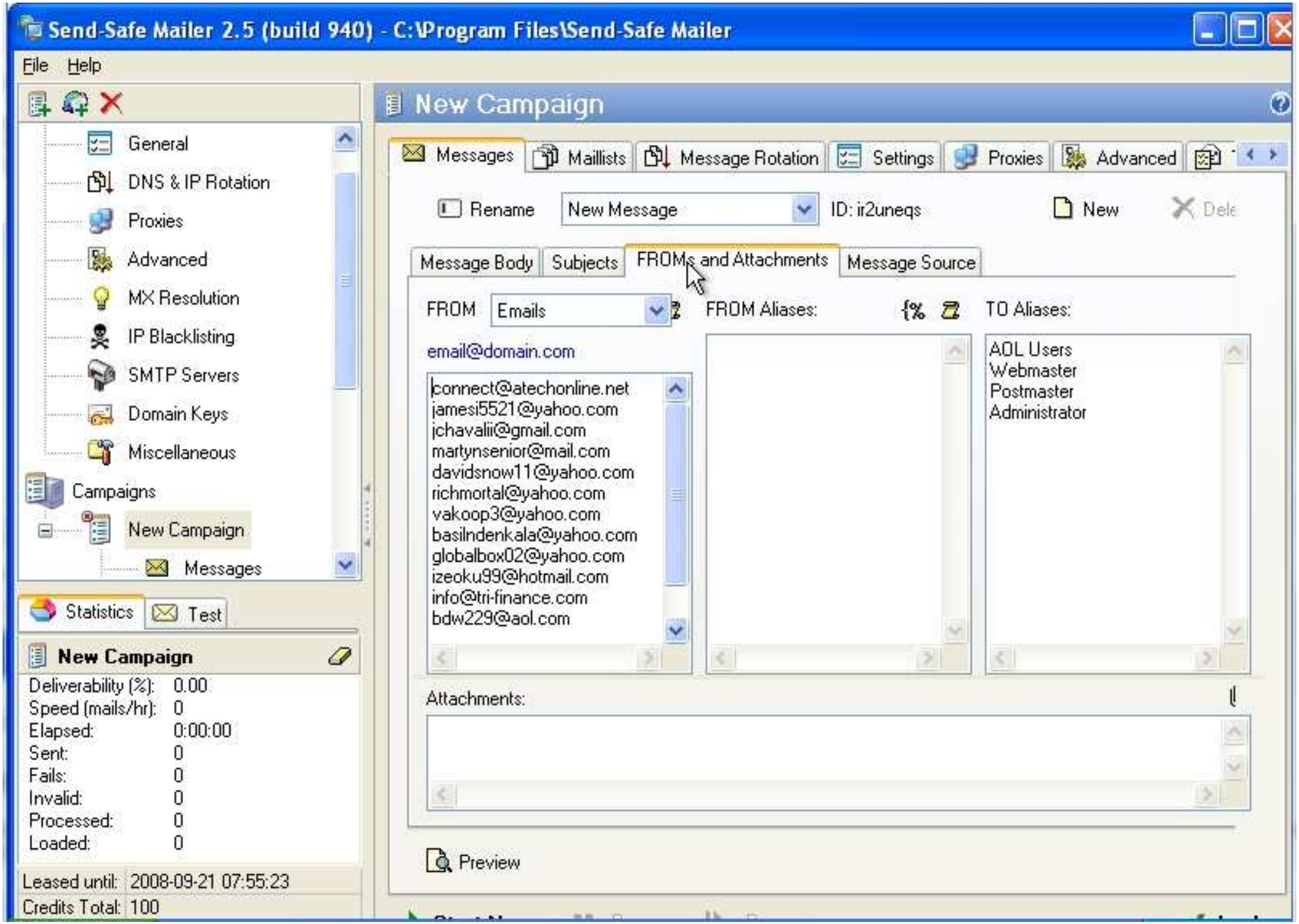

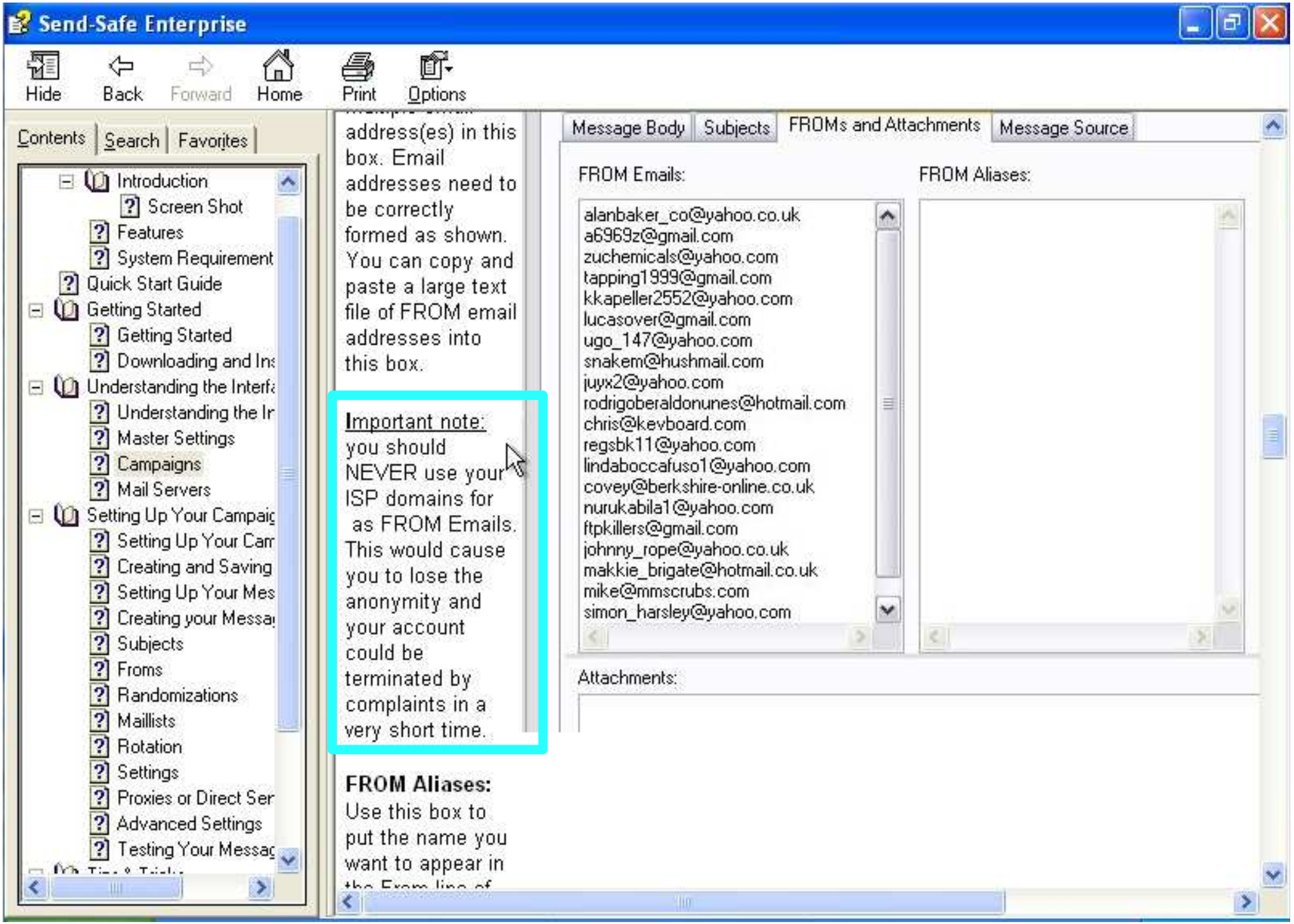

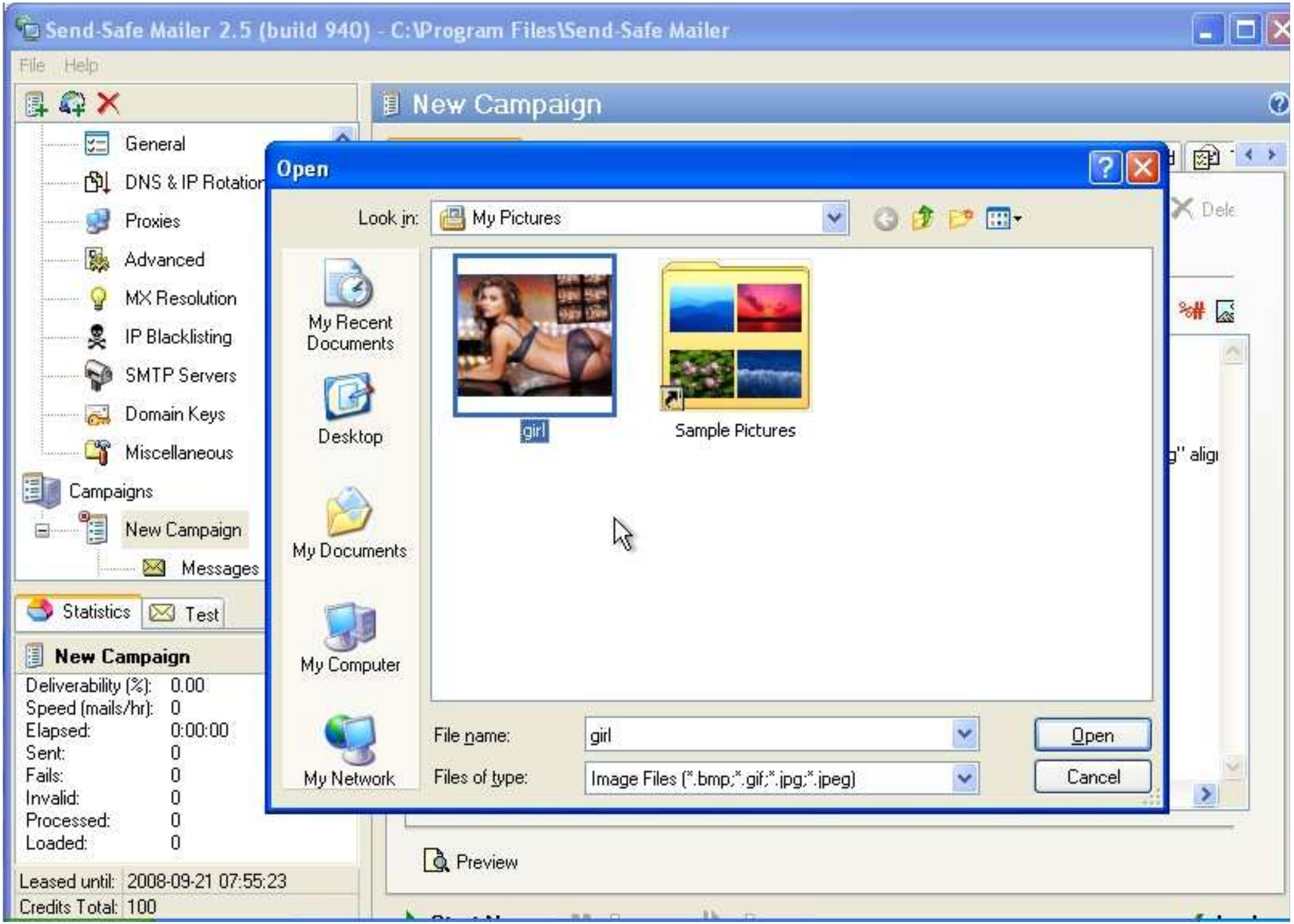

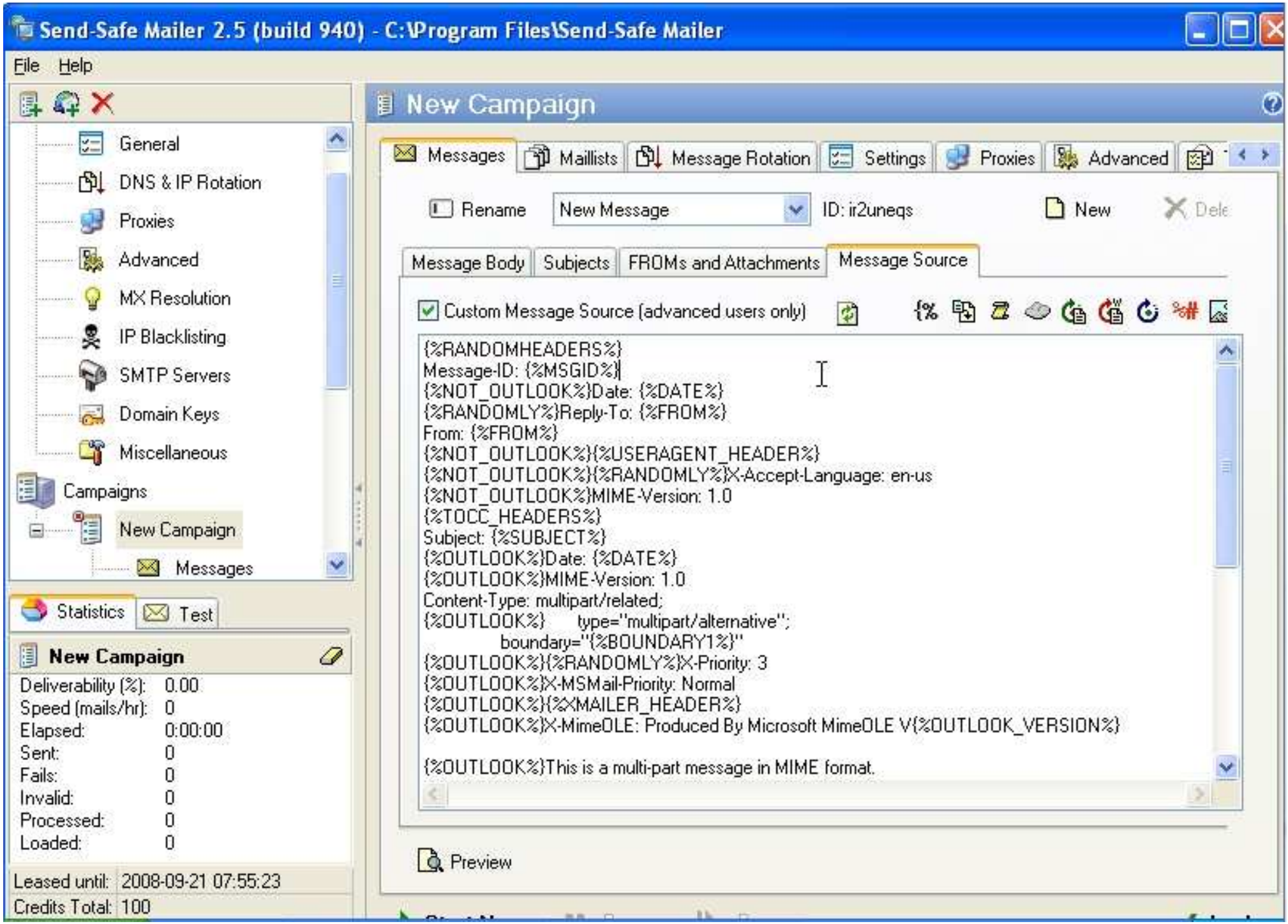

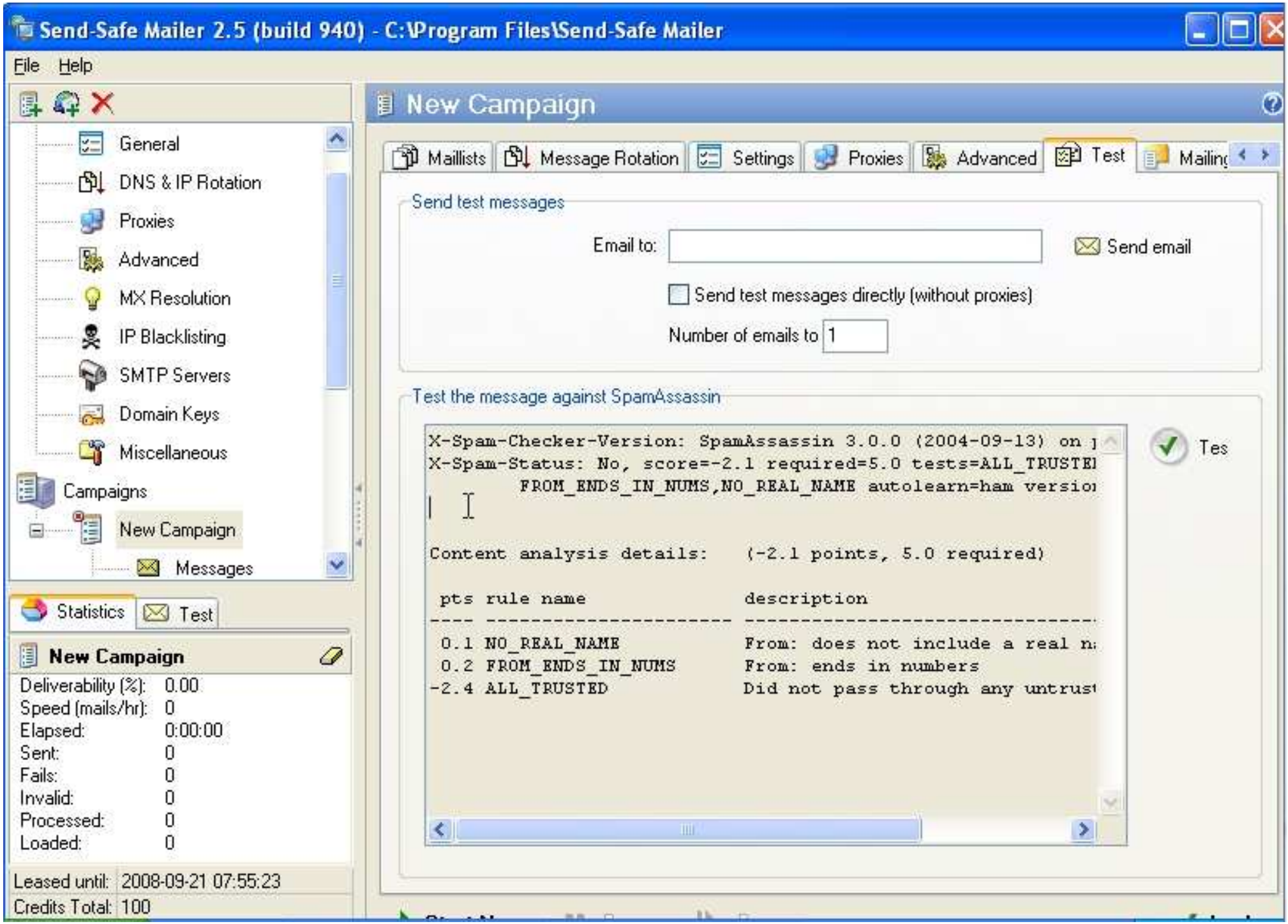

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Fazit

- Spam als (grober) Indikator für Botnetz-Aktivität
- „Professionalisierung“
  - Aufgaben (Captcha-Brechen)
  - Tools (Spamtools)
- Missbrauch legitimer Infrastruktur zum Spam-Versand
- Viel „Kreativität“
- Hybride Kommunikation der Bots (zentral und P2P)

E-Mail Sicherheit – aktuelle Entwicklungen und Trends

Vielen Dank für Ihre Aufmerksamkeit!

Fragen?

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