Solutions to Help People Implement DNSSEC

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(a Parsons Company)

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DNSSEC-Tools: Tools to Help People "Do DNSSEC"

- Zone Administration Tools
- Authoritative Domain Name Server Tools
- Recursive Domain Name Server Tools
- Application/Script Writers
- End Users (DNSSEC Native Applications)
- DNS Error Checking Tools
- DNSSEC Management Tools

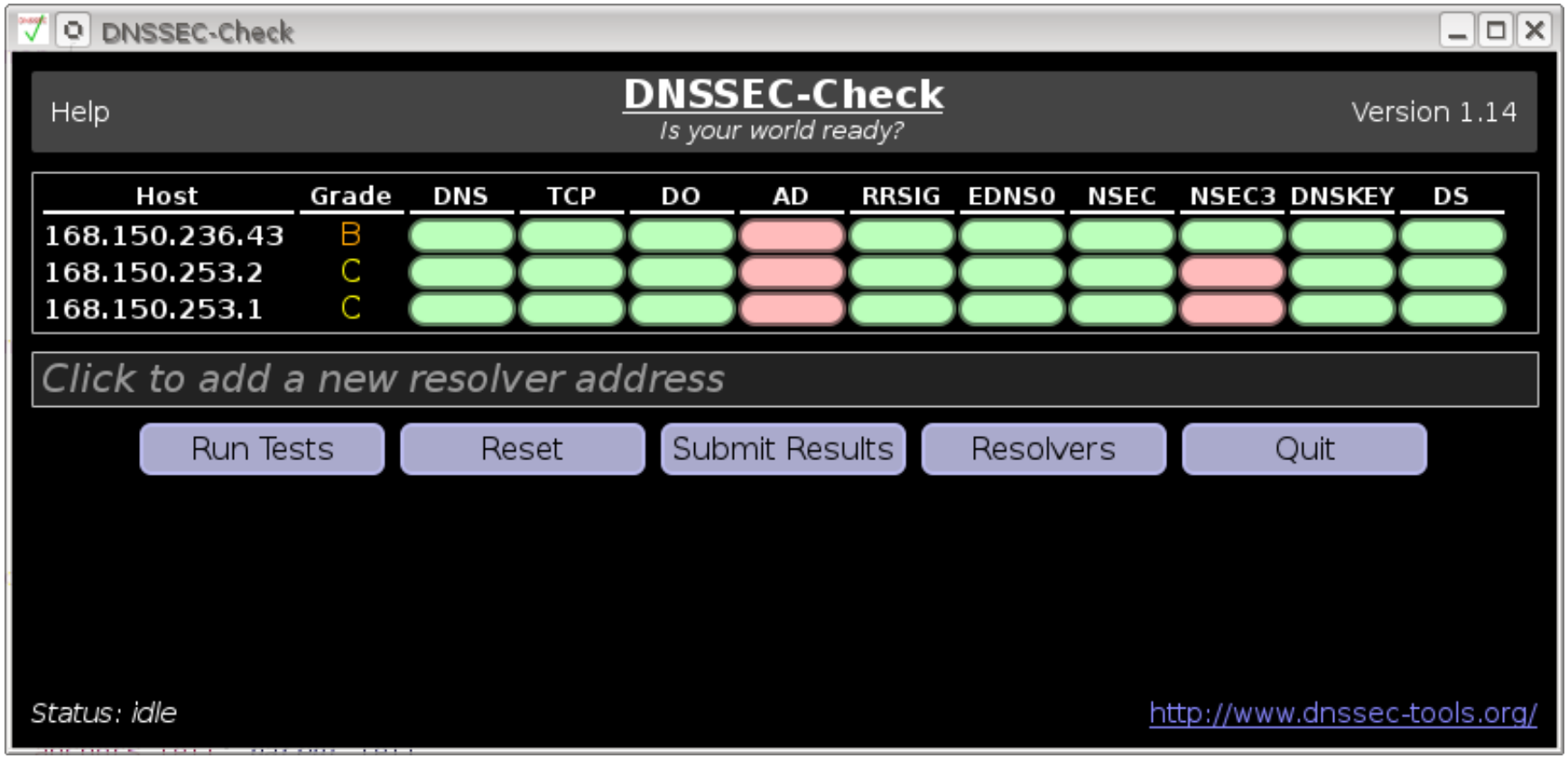
DNSSEC-Tools: Tools to Help People "Do DNSSEC"

Automating & Visualizing DNSSEC

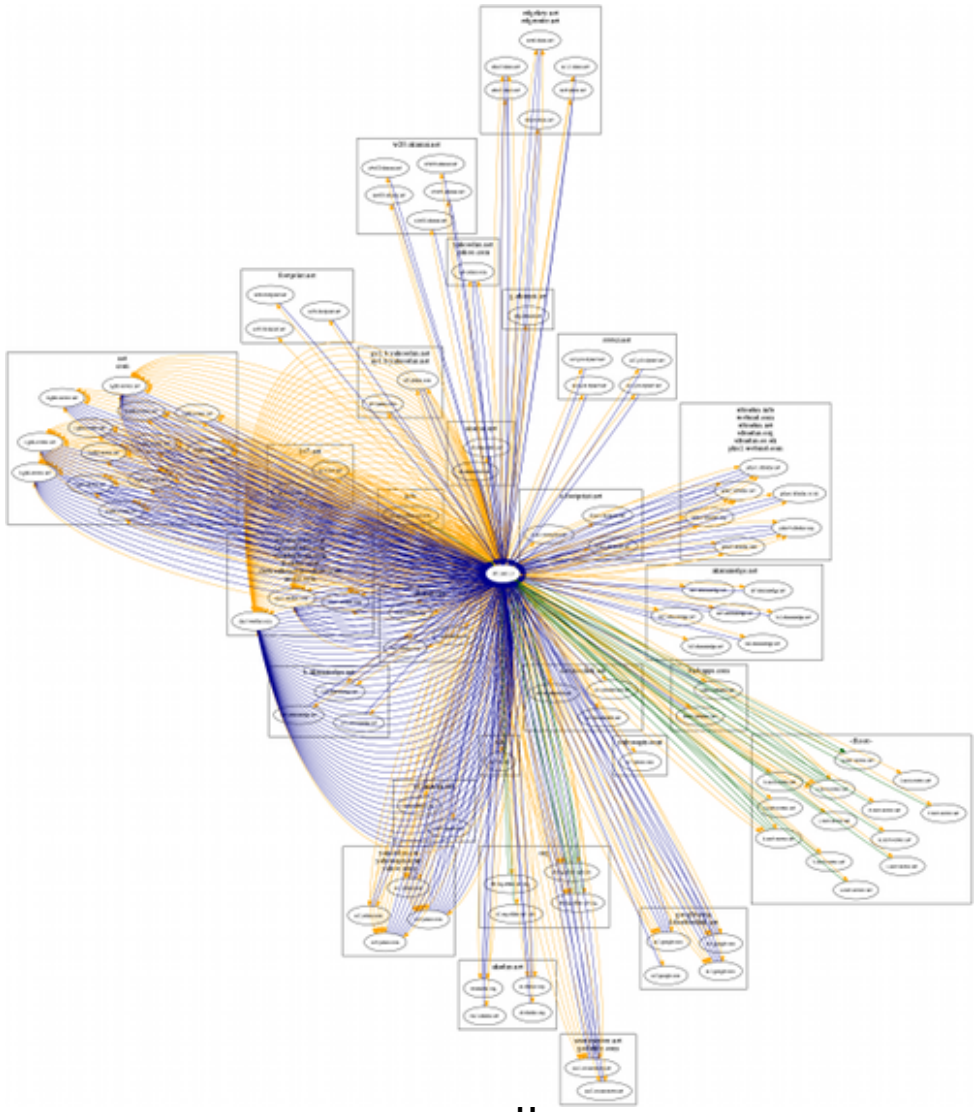
- Tools for end-users including several mobile platforms
  - DNSSEC is available on Android & some other small platforms (e.g. cell phones)
- Tools for network and name server providers & operators
  - Automated key management & monitoring

Help Us Measure the World!

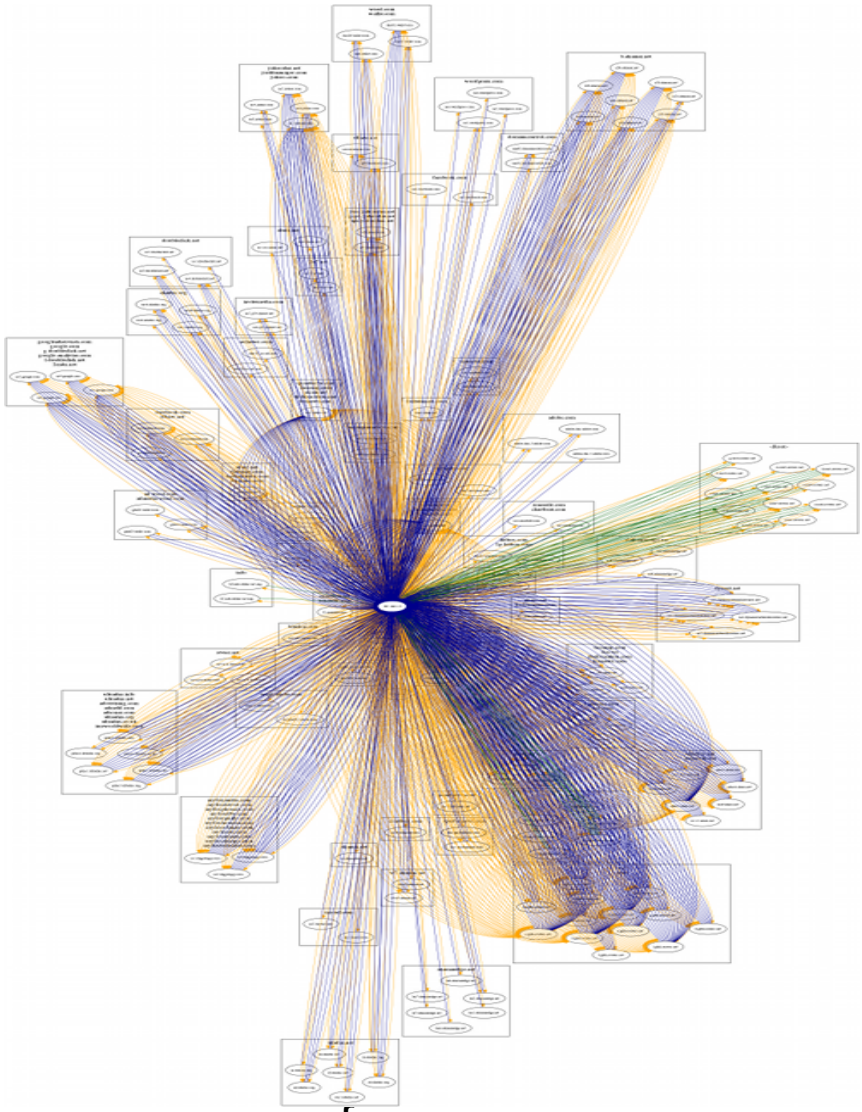
Available for Windows, Linux, OS X and Android



1 address = multiple DNS lookups

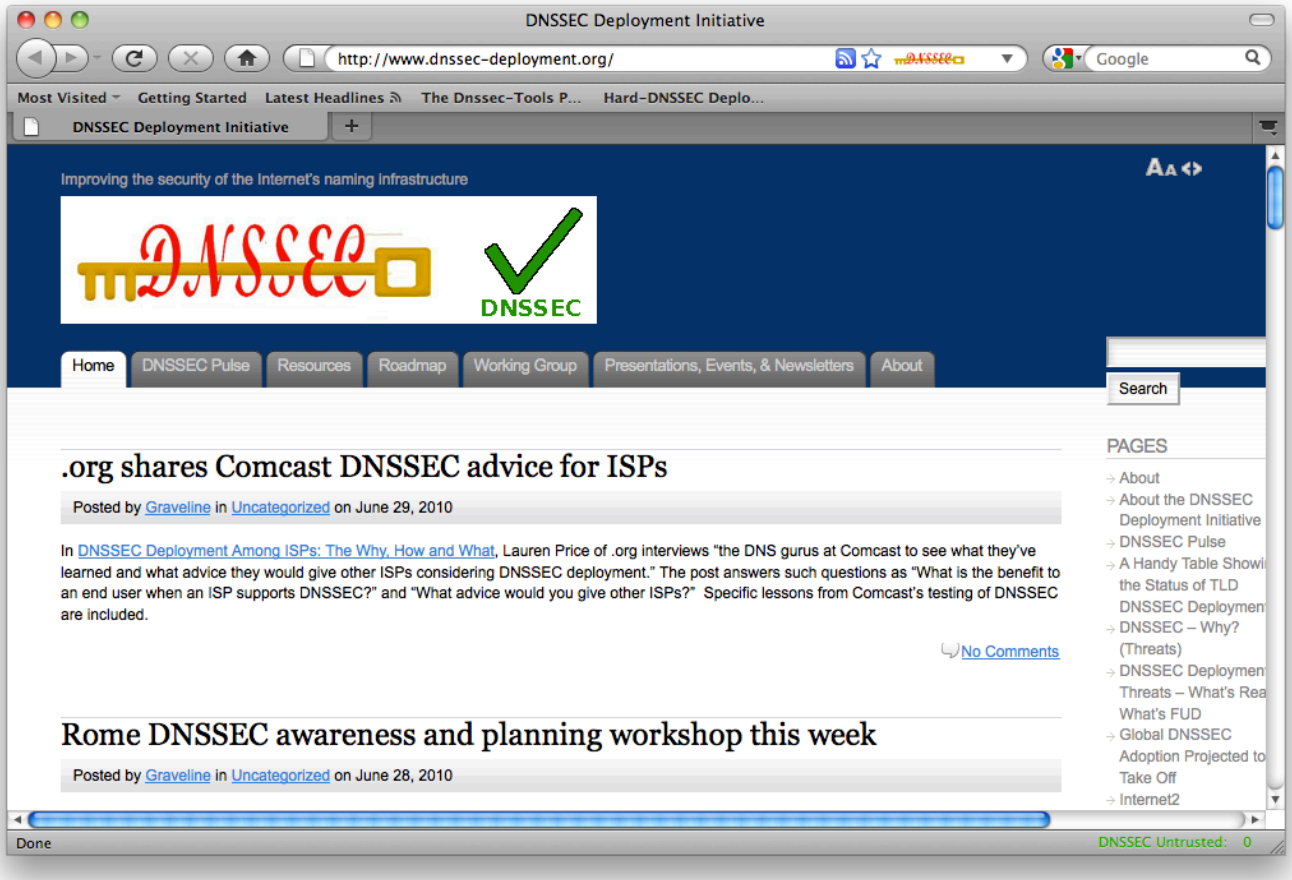


www.weather.com

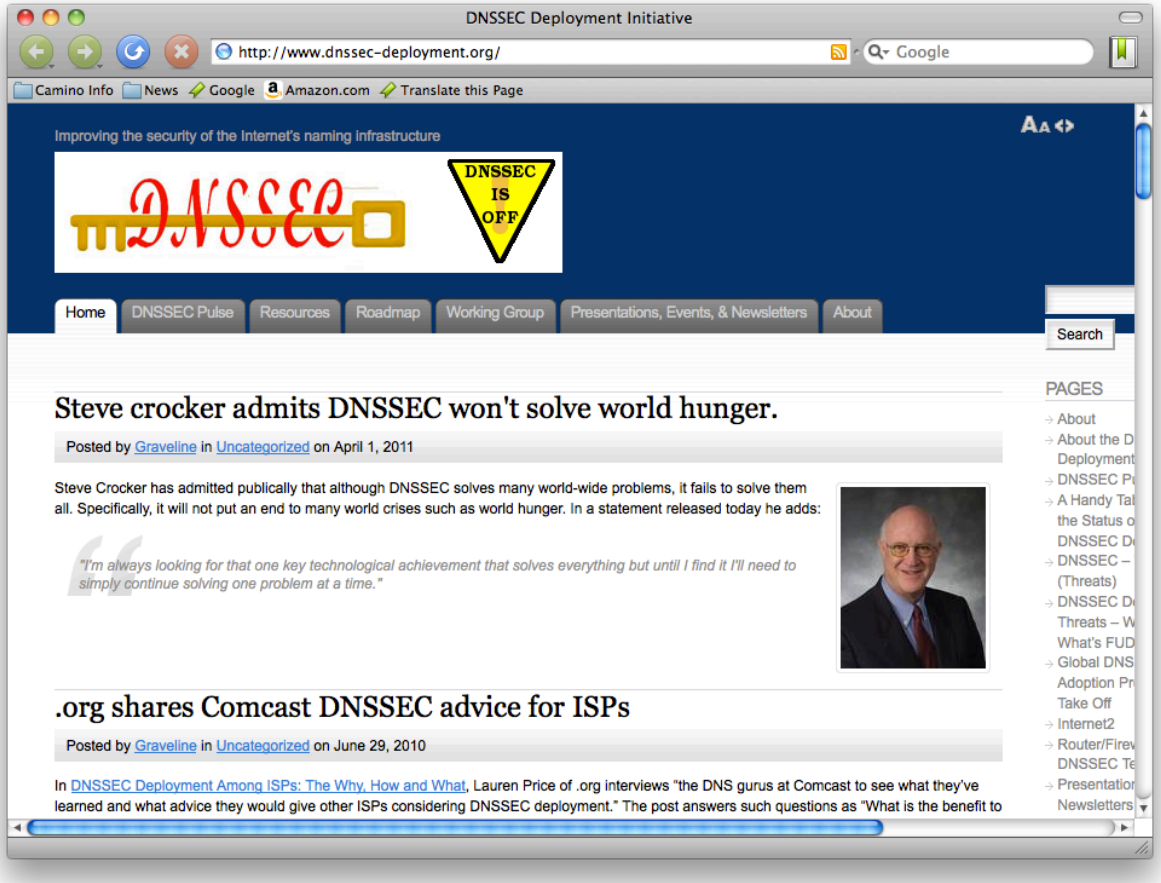


www.foxnews.com

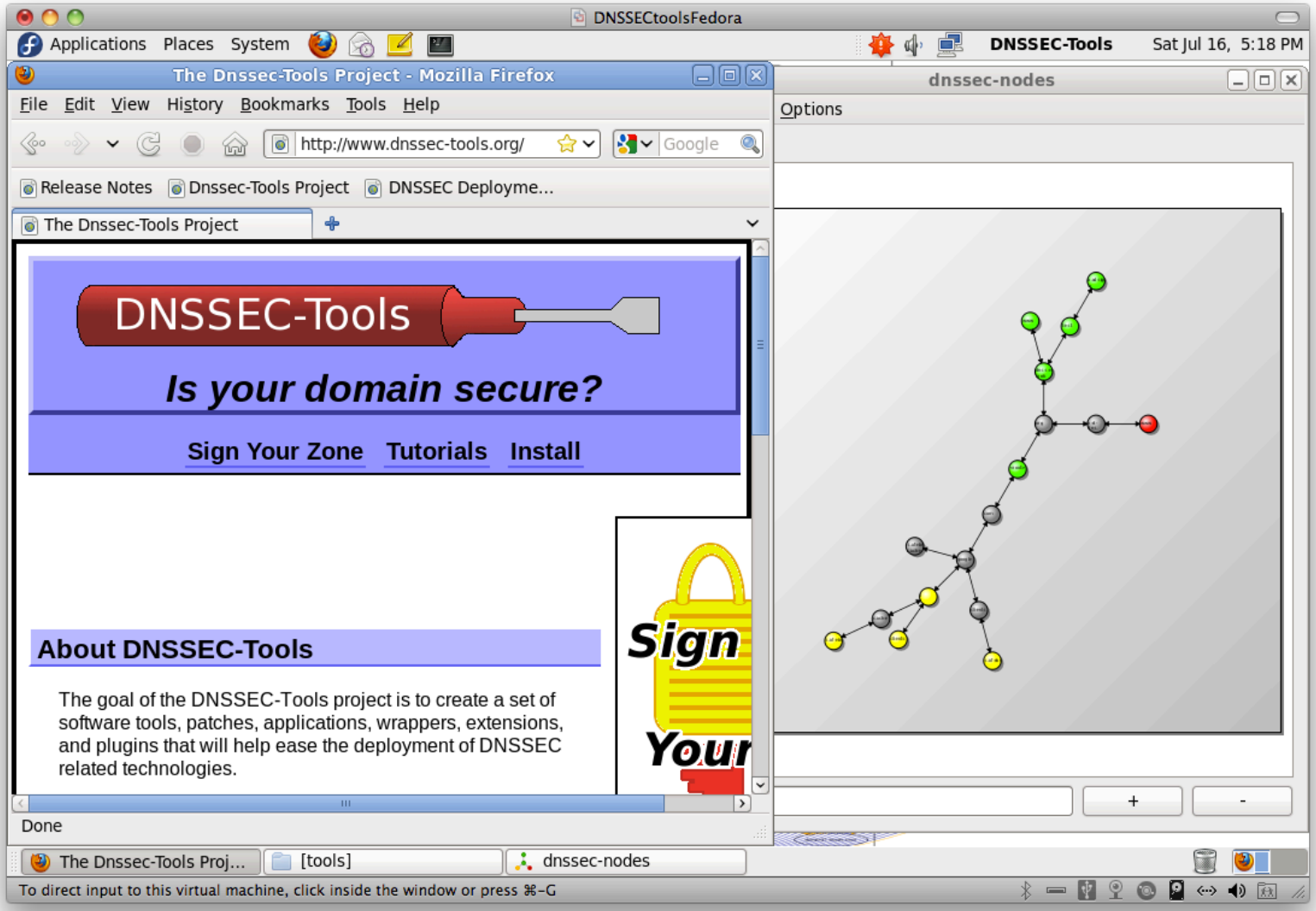
Valid Web Site Content



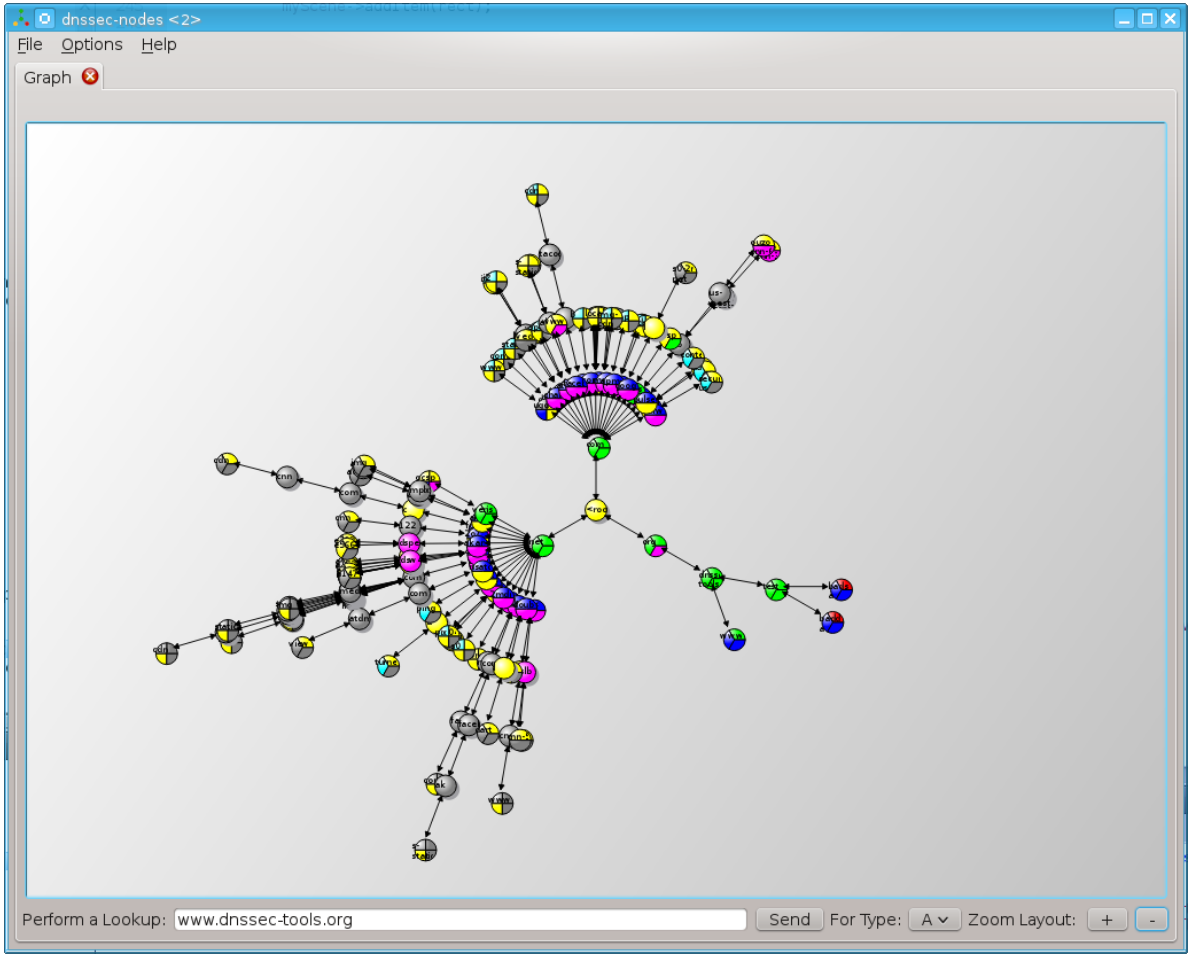
INVALID Web Site Content From DNS Based Attack



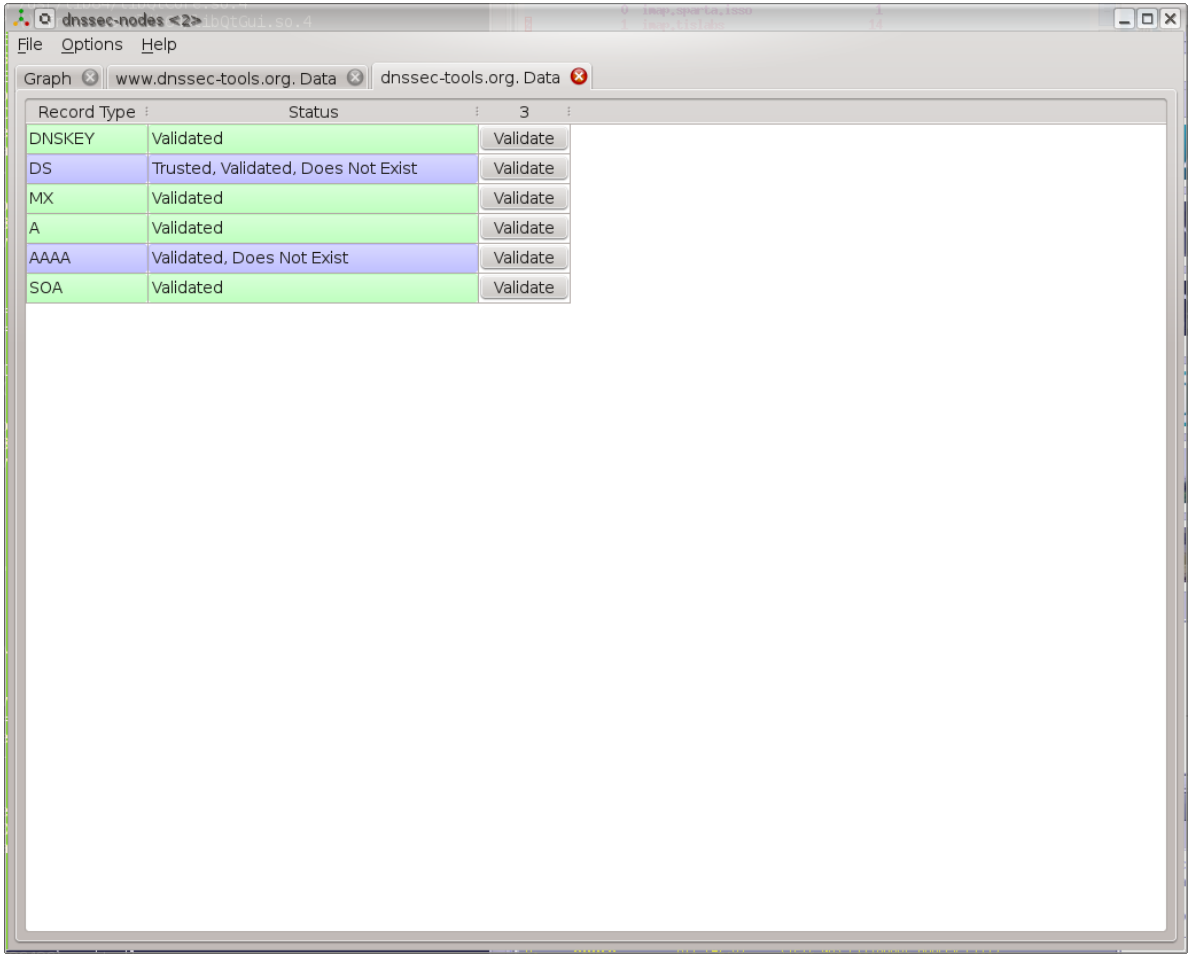
“Seeing” DNSSEC Better



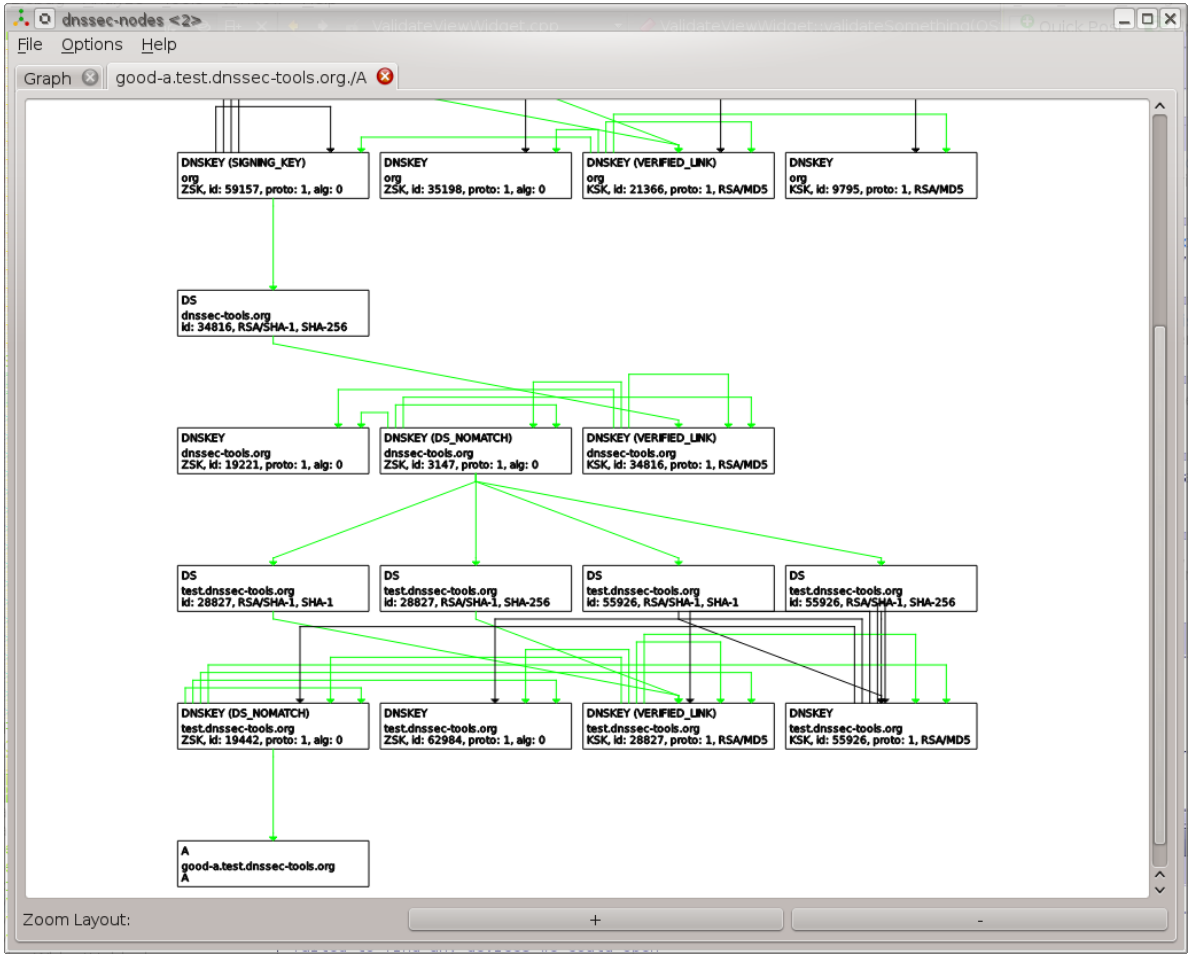
DNSSEC Nodes - Graph



DNSSEC Nodes – Node Details



DNSSEC Nodes – Validate Map



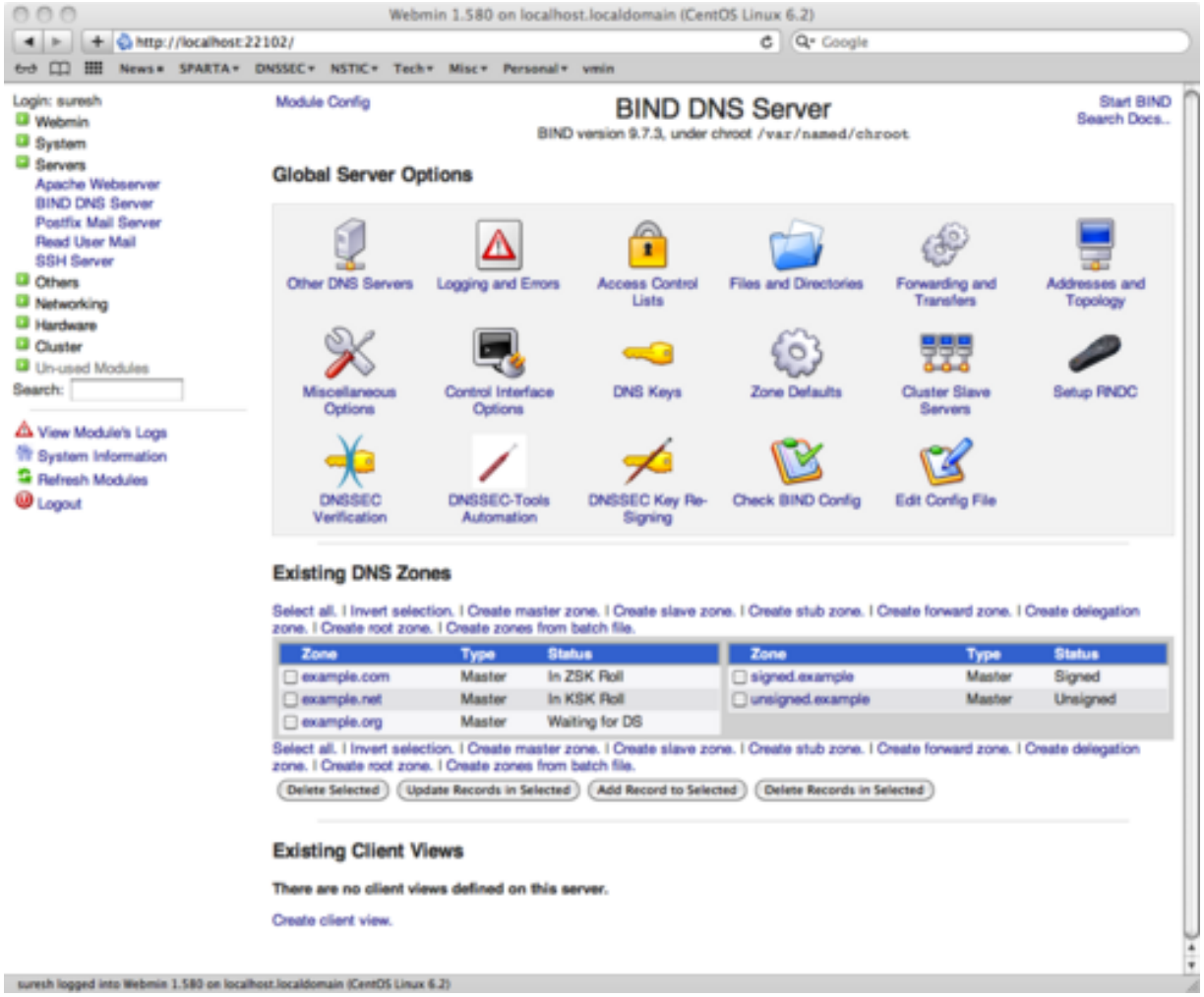
DNSSEC-Tools: Tools for Using DNSSEC

- Zone Administration Tools
- Authoritative Domain Name Server Tools
- Recursive Domain Name Server Tools
- Application/Script Writers
- End Users (DNSSEC Native Applications)
- DNS Error Checking Tools
- DNSSEC Management Tools

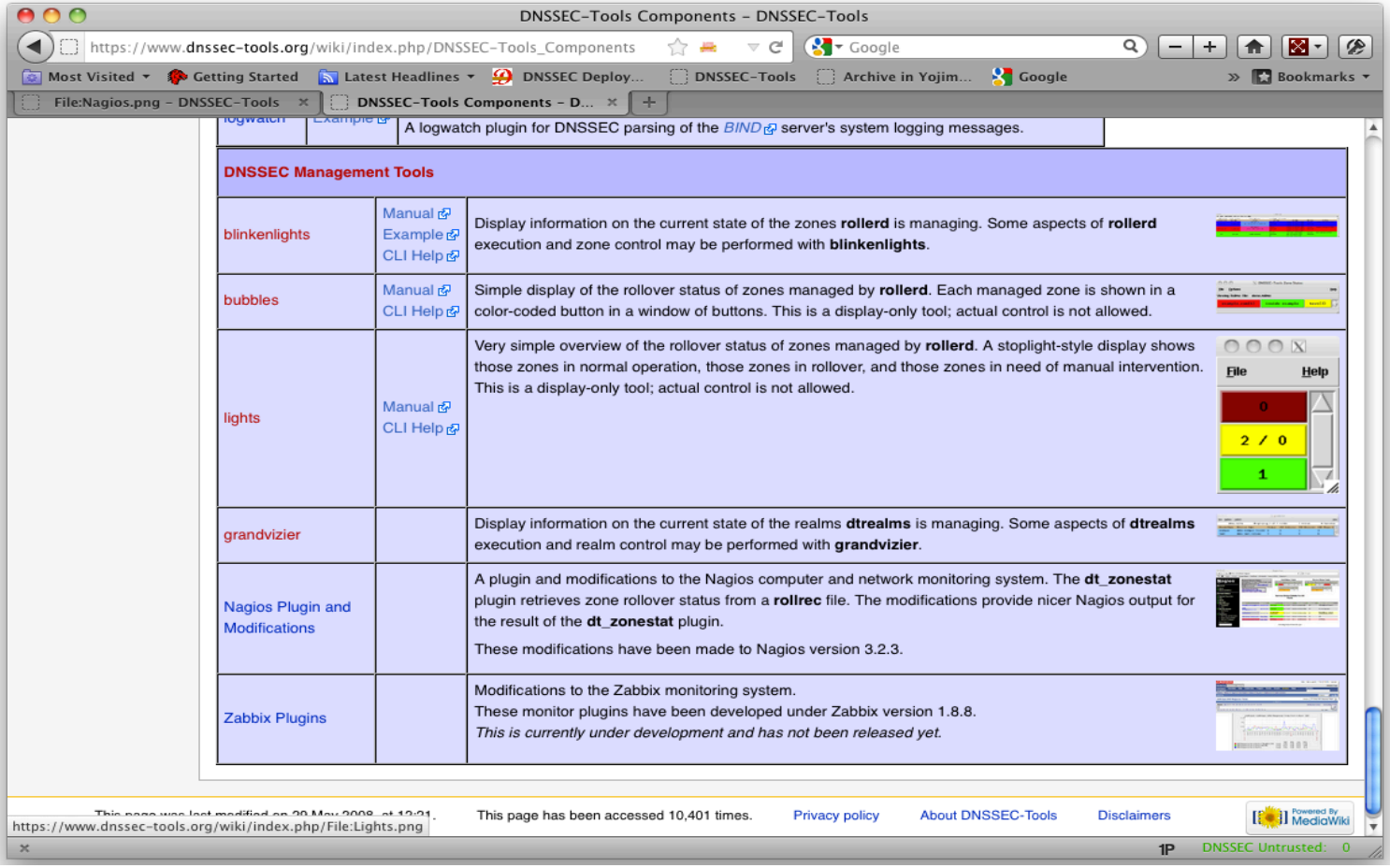
DNSSEC-Tools: Webmin Integration

- DNSSEC status displayed in the zone listing
- Manage Rollover operations using rollerd
- Migration to DNSSEC-Tools
- Configuring Global DNSSEC-Tools related options
- Currently shipping in Webmin for CENTOS 6.x

DNSSEC-Tools: Webmin Integration

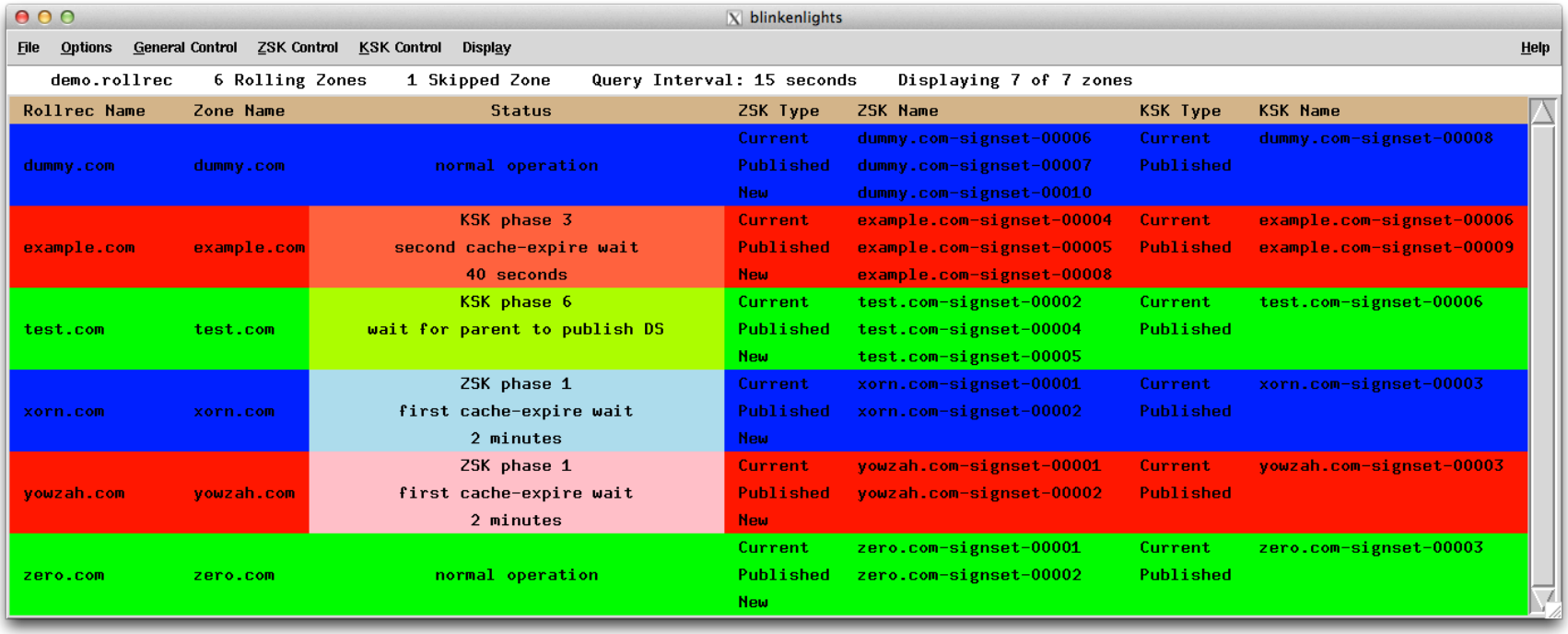


DNSSEC-Tools: DNSSEC Management Tools



Blinkenlights

Visualizing Key Rollover



Blinkenlights

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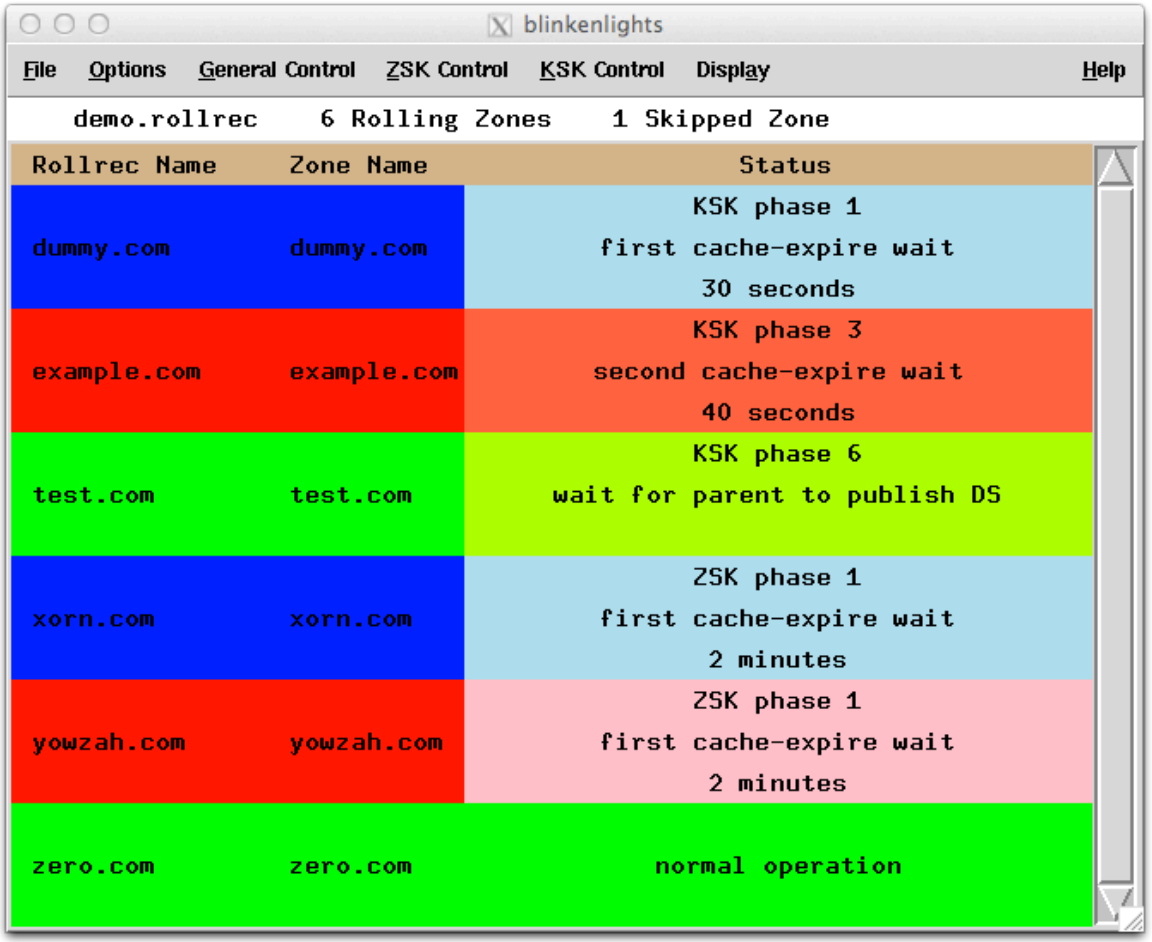
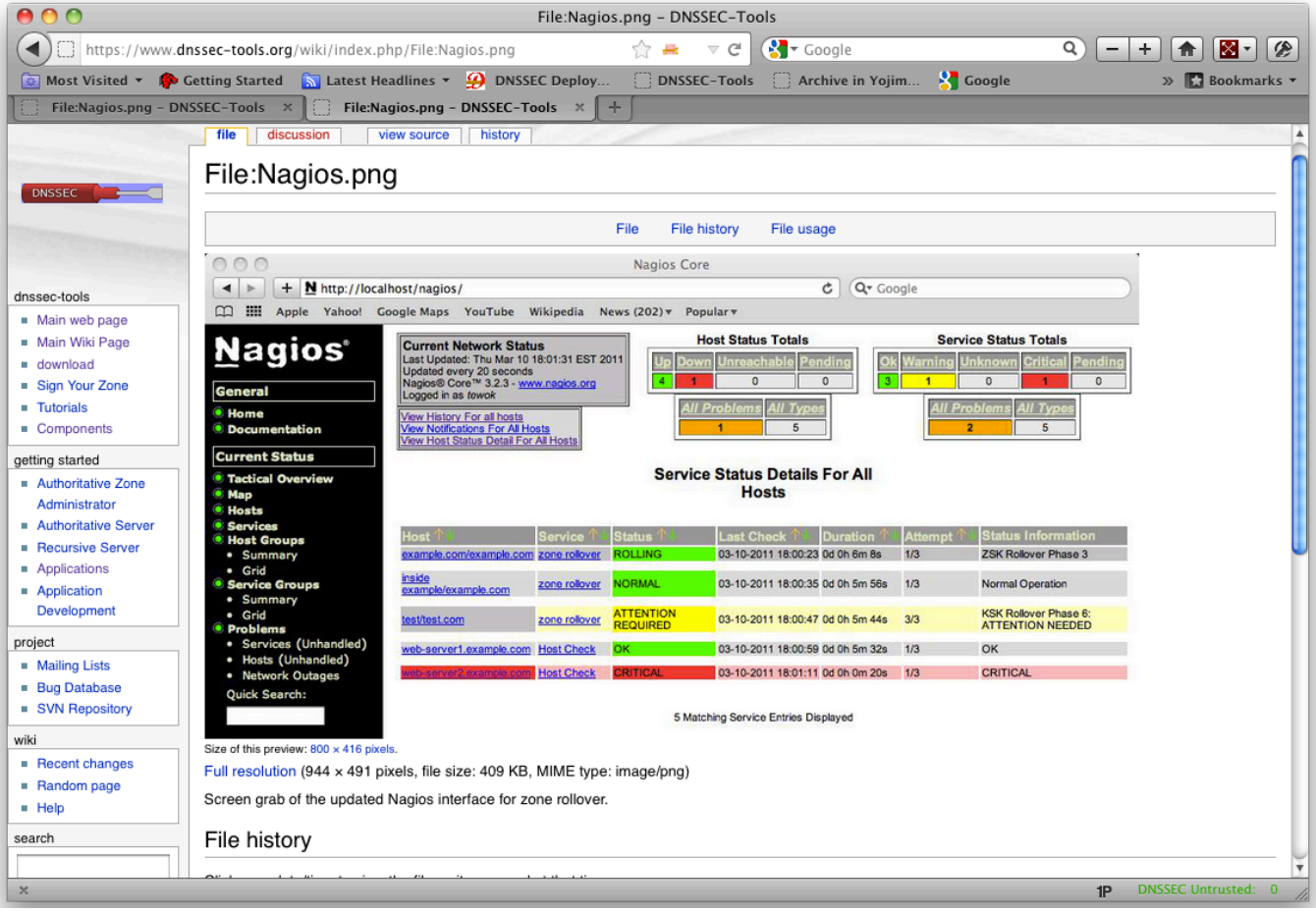
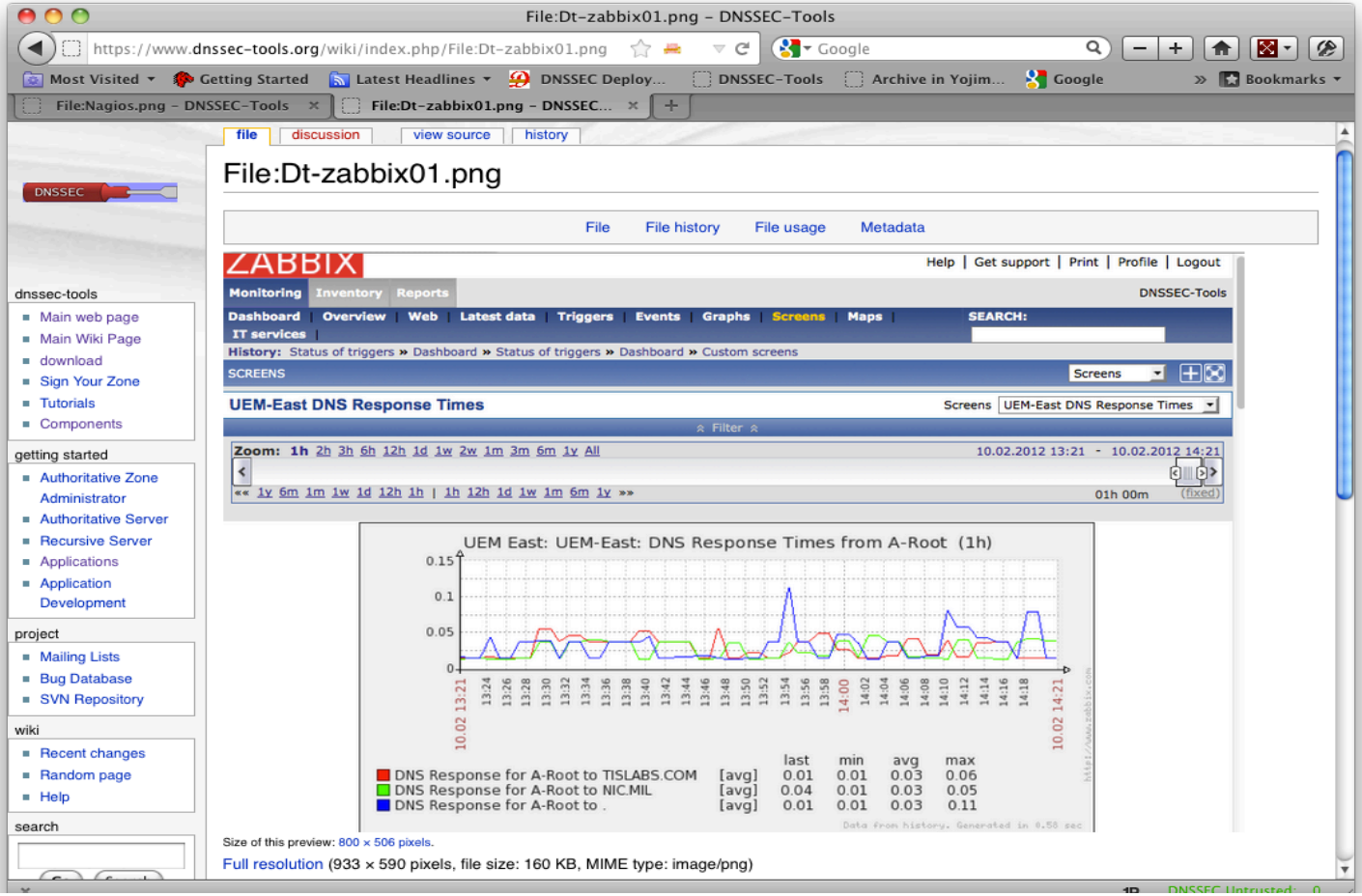


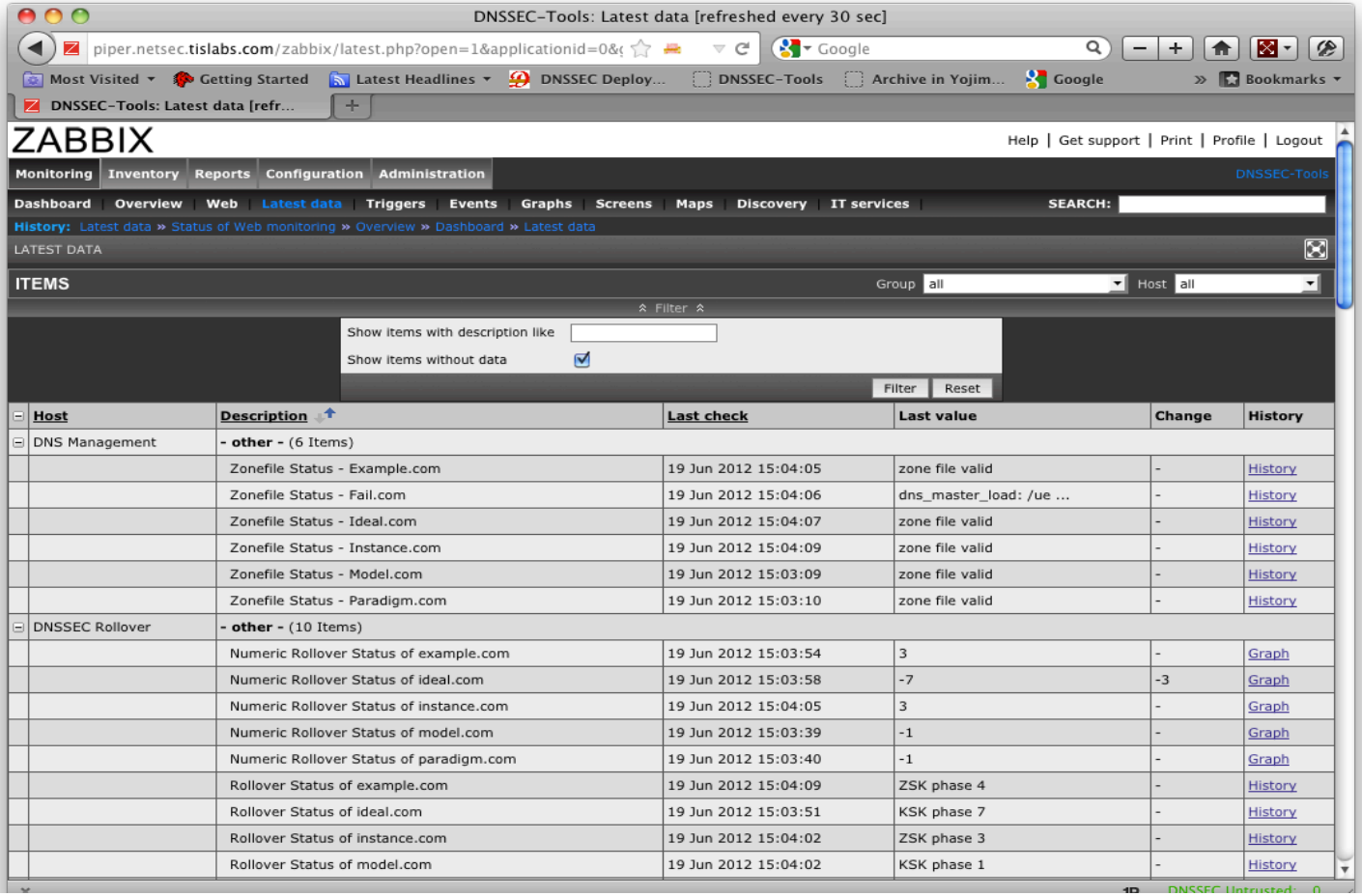
DNSSEC-Tools: Plug-In for Nagios



DNSSEC-Tools: Plug-In for ZABBIX



DNSSEC-Tools: Plug-In for ZABBIX



Host	Description	Last check	Last value	Change	History
DNS Management	- other - (6 Items)				
	Zonefile Status - Example.com	19 Jun 2012 15:04:05	zone file valid	-	History
	Zonefile Status - Fail.com	19 Jun 2012 15:04:06	dns_master_load: /ue ...	-	History
	Zonefile Status - Ideal.com	19 Jun 2012 15:04:07	zone file valid	-	History
	Zonefile Status - Instance.com	19 Jun 2012 15:04:09	zone file valid	-	History
	Zonefile Status - Model.com	19 Jun 2012 15:03:09	zone file valid	-	History
	Zonefile Status - Paradigm.com	19 Jun 2012 15:03:10	zone file valid	-	History
DNSSEC Rollover	- other - (10 Items)				
	Numeric Rollover Status of example.com	19 Jun 2012 15:03:54	3	-	Graph
	Numeric Rollover Status of ideal.com	19 Jun 2012 15:03:58	-7	-3	Graph
	Numeric Rollover Status of instance.com	19 Jun 2012 15:04:05	3	-	Graph
	Numeric Rollover Status of model.com	19 Jun 2012 15:03:39	-1	-	Graph
	Numeric Rollover Status of paradigm.com	19 Jun 2012 15:03:40	-1	-	Graph
	Rollover Status of example.com	19 Jun 2012 15:04:09	ZSK phase 4	-	History
	Rollover Status of ideal.com	19 Jun 2012 15:03:51	KSK phase 7	-	History
	Rollover Status of instance.com	19 Jun 2012 15:04:02	ZSK phase 3	-	History
	Rollover Status of model.com	19 Jun 2012 15:04:02	KSK phase 1	-	History

DNSSEC-Tools:
New Release
Available NOW
at:
https://www.dnssec-tools.org/

Most Important Question:

What will help YOU implement DNSSEC??

Please Tell Us:
users@dnssec-tools.org

Donuts
DNSSEC-Tools
Libval
Rollerd
Zonesigner