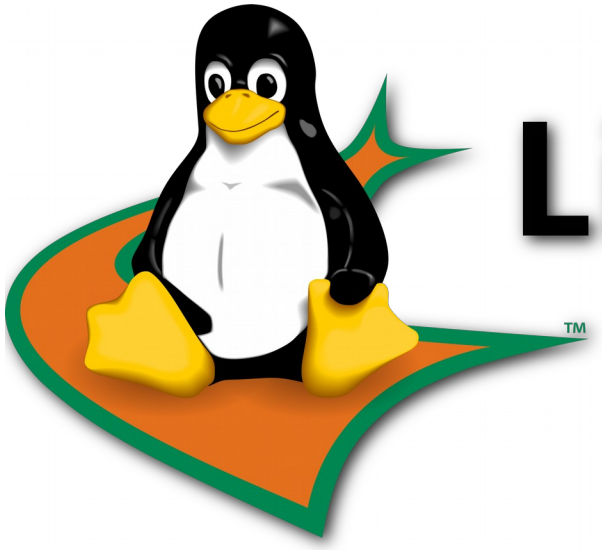
CryptoParty!



Linux Users Group @ UT DALLAS

CryptoParty!

Hang out with us in IRC!

http://lug.utdallas.edu/chat

or

irc.oftc.net #utdlug

What is Encryption?

Unencrypted vs Encrypted

```
<p>Come find out how you can get set up in the cloud quickly and easily so that you h
ave more time to build your project and have fun!</p>

<p>Members of LUG will host a one hour discussion on Git + GitHub and spinning up clo
ud infrastructure on AWS, Google, etc.</p>

<p>Other possible topics include DevOps tools like Vagrant and Ansible, or setting up
 quick solutions on embedded systems.</p>

  <hr />

  <h1>Amazon Web Services Meeting</h1>
  <h3 id="tuesday-march-25-2014--700-pm-in-ti-auditorium-ecss">Tuesday March 25, 2014
 / 7:00 pm in TI Auditorium (ECSS)</h3>

<p><img src="/images/aws.png" alt="Amazon Web Services" /></p>

<p>Interested in Cloud Computing? Want to learn how to deploy your own virtual server
, or host your data in the cloud?</p>

<p>The Linux Users Group @ UTD coordinated with local Amazon reps to host a technical
 introduction to AWS, demonstrating its many services and abilities.</p>

<h4 id="update">Update:</h4>

<p>Here is <a href="https://www.youtube.com/watch?v=KEus17RV1T8">the video stream fro
m this event</a>.</p>

<p>Additionally, the slides are <a href="https://github.com/utdlug/lug-site/blob/mast
er/public/res/aws.pptx?raw=true">available for download</a>.</p>

  <hr />



      </section>
    </div>
    <!--[if !IE]><script>fixScale(document);</script><!--<![endif]-->
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</html>

16:30:06.627428 IP 129.110.92.80.80 > 10.21.37.24.50268: Flags [F.], seq 9526, ack 82
, win 227, options [nop,nop,TS val 303183305 ecr 3447533], length 0
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.%..P.\...d.    N*..........
..5..4..
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....q.c..2.SkY......h..Q.6..Y.c.R
P...m.....KjH.....".D..$...*...b..L................YG....w..o{.......E.hvf......g...
/S^..O.O..0j|...k..l....4......=...0......@.d...k.(=..%TU.g."......|0D...."...v...BC
......:......F;w... c)......,.#.K.1e..;........C..].\6+?..H.3GX.[>.`..n...$.b.......
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...S.a......<.N1p..
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/D.....t..u.&...`....0` .........9.E7.qR...|..Jb.f.L.h.....5    .9.ha.\.o..'..n.`9.,
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.b].^=uC:.Ed...T.S..4.B@vE......f.G......q}.~H.c..@!.0...RB..X.Y..v:.N...../.Y9.j./g
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7P.)$..`....{........l......7.P.h....%.2~..$.....yCN...._aO...)J..6...#4..ZeV.(.`+..
..      ..n.-....`.~b.8./..W.\.}"P...bU....i.V~.....0.Ag.......1n....S..f8}.hT.+.?t.
.[%akS.BI..I..B...7.^.....G.=....y.6.rZT...
16:30:09.430040 IP 129.110.92.80.443 > 10.21.37.24.46180: Flags [F.], seq 16052, ack
 784, win 235, options [nop,nop,TS val 303184006 ecr 3450336], length 0
E..4..@.=.JK.n\P
.%....d....Z-.y..........
..8..4..
16:30:09.431916 IP 129.110.92.80.443 > 10.21.37.24.46180: Flags [.], ack 785, win 23
5, options [nop,nop,TS val 303184006 ecr 3450338], length 0
E..4..@.=.JJ.n\P
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```

Dark Math Magic

$$m^{ed} = m^{1+h\varphi(n)} = m\left(m^{\varphi(n)}\right)^h \equiv m(1)^h \equiv m \pmod{n}$$

What is Encryption?

- **Prime numbers are easy to generate**
  - But it is hard to find a prime factorization
- **Modulus is one-way math**

Private key decrypts and signs

Public key encrypts and verifies

OpenPGP

The world needs a message encryption standard

- Sign Emails
- Encrypt Files
- Share public keys
- Manage private keys

GnuPG

Linux needs an implementation

GnuPG

Installing is easy

```
sudo apt-get install gnupg2 gnupg-agent
sudo apt-get install pinentry-gtk2
```

GnuPG

- Generate a private/public key pair
- Encrypt a file
- Decrypt the file
- Export your public key
- Encrypt an email

Other cool stuff

- Encrypt text messages with SMSSecure
- Encrypt chat messages with Signal
- Encrypt a folder with EncFS
- Encrypt your website with letsencrypt
- Encrypt your online presence with HTTPS Everywhere


ENCRYPT ALL THE THINGS!!!