Top 5 Ways Into A Data Center

*without being destructive

Ryan Jones, Spiderlabs/Trustwave

OR

Good job! You spent a million dollars on your network security and pissed me off. So I walked into your data center and stole all your hardware.

Agenda

A little about me

- The Top Physical Ways to Breach a Data Center
 - The top 5
 - Real world examples
 - Fixes

Q&A

A Little About Me

Ryan Jones

Employment History:

- Sr. Security Consultant, Trustwave Spiderlabs
- Team Lead, Security Services Alternative Technology
- Sr. Security Consultant, IBM Security & Privacy
- Founder, Safe Harbor
- Sr. Security Architect, US West
- Security Admin & Network Design, BuyltNow.com

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Security Accolades

- Created Risk Management and CSO structure for many fortune 500
- Training and Expert Technical Assistance for FBI
- Technical Producer & Cast member for "Tiger Team"
- Co-Creator of Exotic Liability podcast





THE TOP 5

(attempt only with permission – educational use only – don't call me for bail)

The Top 5 – #5

"The walls don't go all the way up"

Drop ceilings are used for decoration, but also hide the entry point

Usually a problem created during building construction

When you have a view like this....



You'll get a view like this....



Top 5 - "The walls don't go all the way up"

- Drop in on what you want
- If you can't go over, try going under



- Be careful what you hold onto
 - Crashing through a ceiling and landing on a desk SUCKS

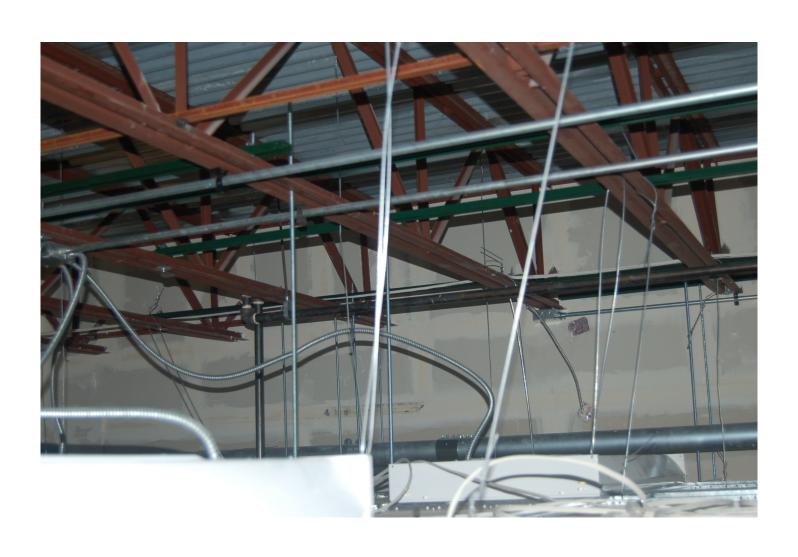
Top 5 – "The walls don't go all the way up"

– HOW TO FIX

 Pick an area that has solid walls to the floor and to the ceiling

• If not possible, dry wall is cheap

This is what it SHOULD look like....



The Top 5 - #4

"Hinge Science"

- Doors (and windows) installed with the hinges on the outside of the data center
- Another common mistake during building construction
- Contractors don't understand security. You do. Pay attention
- Obviously the very expensive biometric access control device is no longer an issue thanks to pliers and a hammer

Top 5 – "Hinge Science"



Top 5 – "Hinge Science"

Some doors are heavier than they look

 Make as little noise as possible when using tools to pop hinges

Glass is very breakable

Make sure you know where the door goes

Top 5 – "Hinge Science"

- HOW TO FIX

- After construction do a walkthrough with the lead contractor
- Leased space work with building management. You are their customer.

The Top 5 - #3

Tailgating

- Not original, not difficult, will work almost everywhere
- Language barriers is not usually a concern
- People want to avoid conflict
- Timing is key. Observation is important

Top 5 - Tailgating

Tailgating

- HOW TO FIX

- User training make sure to empower your employees
- Man traps
- Doors that are not "slow" to close

The Top 5 - #2

" Plates and Pins"

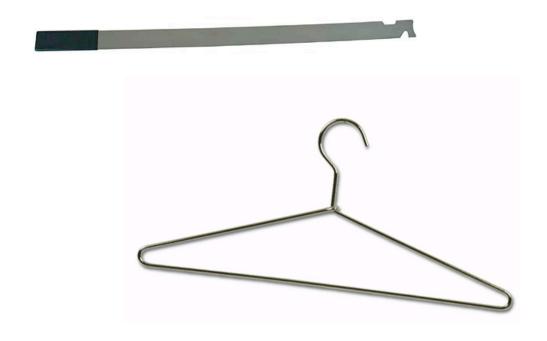
- Unprotected door latch areas
- Large gaps between double doors
- Shimming is way easier than removing a door or lockpicking

Top 5 – "Plates and Pins



Top 5 – "Plates and Pins"

Common tools





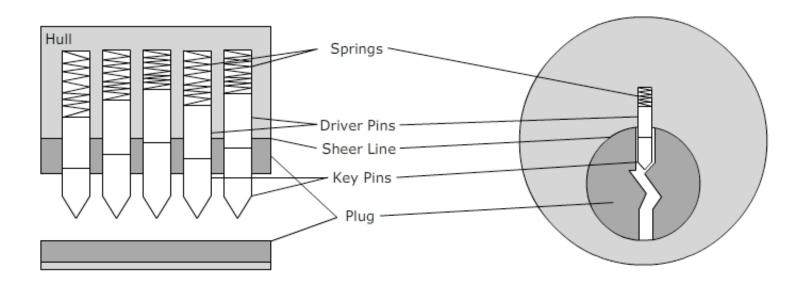
Top 5 – "Plates and Pins"



Top 5 – "Plates and Pins

Locks

Protecting hundreds of thousands of dollars with a THREE dollar lock



Top 5 – "Plates and Pins"

Lock picks are cheap and easy to get ahold of

 Plenty of learning available online and in books/videos

A little bit of practice goes a long way

Top 5 – "Plates and Pins"

- HOW TO FIX
 - Metal plates over gaps between double doors
 - Metal plates covering latchways
 - High security locks and cores
 - Biometric devices

The Top 5 - #1

"Something You're Not"

 Social engineering requires a little bit of research and a fair amount of confidence

People want to believe other people

— What cover story is most believable for the target?

Top 5 – "Something you're not"

Be aware

 Sometimes you will get stuck in a lie that you have to stick with

- Be prepared to learn on the fly
 - Google and smartphones are your friend
 - Manuals are good

Top 5 – "Something you're not"

- HOW TO FIX
 - Train your users and employees
 - Stick with procedure
 - Proper identification
 - Don't be afraid to validate what someone is saying

Top 5 Ways into a Data Center

THANK YOU!!

Q&A