Security For Data Facilities
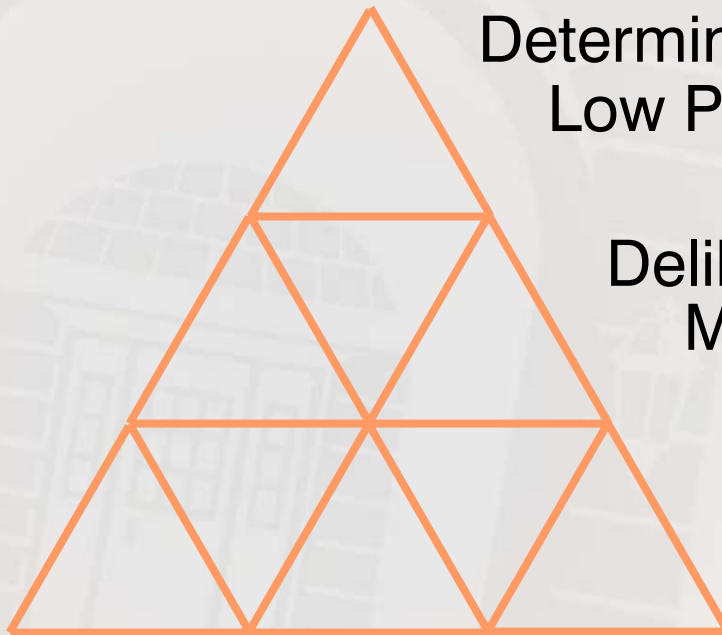
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Chairman

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Key Goal

What is the key goal of a datacenter security program?

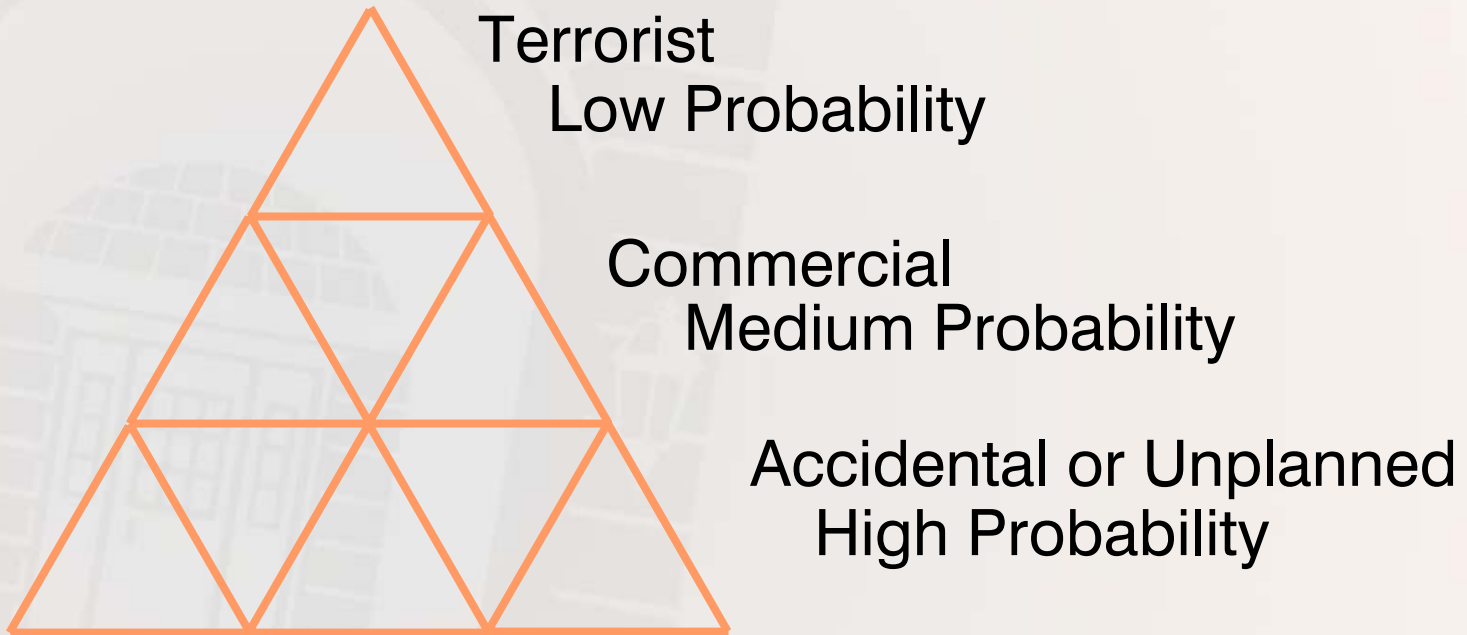**Provide an environment that allows the datacenter to achieve the up-time requirement.**

Threats
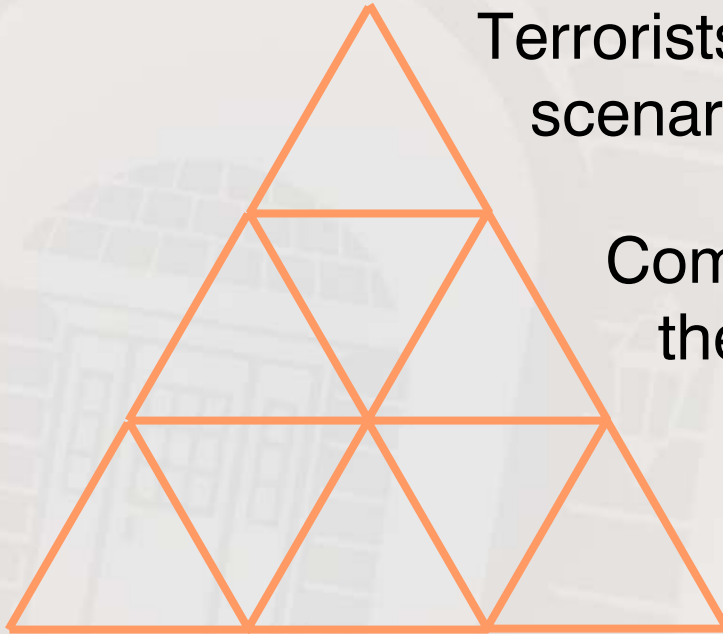
Determined
   Low Probability

Deliberate and/or Opportunistic
   Medium Probability

Inadvertent or Dumb
   High Probability

Threats

Terrorist
Low Probability

Commercial
Medium Probability

Accidental or Unplanned
High Probability

Threats

Terrorists will pick the worst case scenarios or greatest notoriety.

Commercial incidents are based on the advantage to the perpetrator.

Accidents and unplanned events are totally random.

Criticality

How does criticality fit into this model?

(Probability) (Criticality) = Risk Value

Mitigating Measures

- Most mitigation measures impact more than one threat.

- The most efficient plan will use a set of mitigation measures that is composed of multiple physical and operational components.

- The same barriers can stop a truck with a bomb and the run-away vehicle.

Outside the Site

- External sources of potential problems include:
    - Highways and Rail Lines
    - Chemical / Industrial Facilities
    - Airports
    - Terrorist Targets
- Weapons of Mass Destruction (WMD)
- Water and Power

Site Perimeter

- Distance is security.
- Fencing – What if your datacenter is on a floor of a multi-tenant high rise building?
- Vehicle Access
    - Employees – 24x7 parking safety and security
    - Deliveries
    - Service
- **Construction – Don't forget Construction!**

The Environment

- Low staffing
- Parking at night
- Lighting
- Paths
- Landscaping
  – Moats – Vertical Discrepancies – Barriers

Building Perimeter

- Encompass all services
- Lobby for employees and visitors
- Loading dock(s)
- Emergency exits
- Temporary construction openings

Levels of Control

- Lobby, Offices, Control, Mechanical, & Data Floor

- Levels of access

- Audit trails of access and video audit trail

- Accountability

Design of the Building

- UBC and 101 Life Safety Code
- "Play" Security
- Dead end corridors
- Double doors
  - High and or wide openings
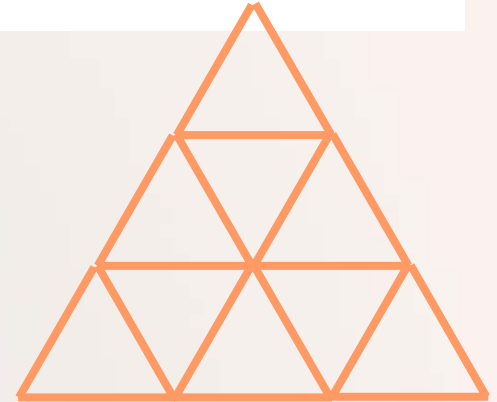 - People versus equipment – Frequency of use
- Who needs to go where?

Security Control

- Security Management (1 person)
- Control Room for Security (5 people)
- Rovers (5 people)
- Lobby Staffing (2 people)

13 people to secure a site that may only have 25 full-time employees and 100K sq. ft. of data floor and 100K sq. ft. of mechanical space.

Plan, Design, Execute

- Plan for the logical threats
- Design proactively
- Execute consistent approaches
- Review and test your security program

Provide an environment

that allows the datacenter to achieve the up-time requirement.